Remedial Investigation/ Focused Feasibility Study Report

Batavia Former MGP Site
NYSDEC Site Number 819019
11 Evans Street
Batavia, New York

July 2019

0333-015-001

Prepared For:

R&J Enterprises of Batavia, LLC

Prepared By:

TurnKey Environmental Restoration, LLC

In Association With:

Benchmark Environmental Engineering & Science, PLLC

2558 Hamburg Turnpike, Suite 300, Buffalo, New York 14218 | phone: (716) 856-0599 | fax: (716) 856-0583

REMEDIAL INVESTIGATION/ FOCUSED FEASIBILITY STUDY

BATAVIA FORMER MGP SITE
NYSDEC SITE 819019
11 EVANS STREET
BATAVIA, NEW YORK

July 2019 0333-015-001

Prepared for:

R&J Enterprises of Batavia, LLC

Prepared by:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716)856-0635

In Association With:
Benchmark Environmental Engineering & Science, PLLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716)856-0599

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Batavia Former MGP Site
NYSDEC Site No. 819019

Table of Contents

Table of Contents

Table of Contents

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Batavia Former MGP Site
NYSDEC Site No. 819019

Table of Contents

LIST OF TABLES

LIST OF FIGURES

Table of Contents

APPENDICES

Certification

I, Thomas H. Forbes, certify that I am currently a NYS registered professional engineer and that this July 2019 Remedial Investigation/Focused Feasibility Study (RI/FFS) Report for the Batavia Former MGP Site (819019) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plans and any DER-approved modifications.

7-18-19

Date

1.0 INTRODUCTION

This Remedial Investigation and Focused Feasibility Study (RI/FFS) report has been prepared for the Batavia Former MGP Site (Site No. 819019), located at 11 Evans Street in Batavia, New York (see Figure 1). An Order on Consent, dated March 5, 2014, was executed between New York State Department of Environmental Conservation (NYSDEC) and the Site owner, R&J Enterprises of Batavia, LLC (R&J), regarding actions to be taken at the Site due to its listing on the New York State Inactive Hazardous Waste Registry (Registry). R&J was not responsible for the contaminants at the Site, but is completing this RI/FFS under the terms of the Consent Order.

The RI/FS Work Plan was submitted to the NYSDEC on April 21, 2014 by Conestoga-Rovers & Associates. The NYSDEC requested modifications to the RI/FS Work Plan in a letter dated June 17, 2014. After discussions concerning the requested modifications and a recent change in the New York Brownfield Cleanup Program (BCP) regulations, it was agreed that R&J would like fulfill its obligations under the existing Consent Order (e.g., complete RI/FFS) and then apply for entry of the Site into the BCP to complete any remedial activities. TurnKey Environmental Restoration, LLC (TurnKey) prepared a Remedial Investigation Work Plan (RIWP) dated March 30, 2016 (Ref. 1) to fulfill the Consent Order requirements, which was approved by NYSDEC in a letter dated April 6, 2016.

TurnKey, in association with Benchmark Environmental Engineering & Science, PLLC (Benchmark) implemented the remedial investigation (RI) activities and has prepared this RI/FFS report on behalf of the property owner, R&J. The RI activities were completed in general accordance with the RIWP and associated April 6, 2016 NYSDEC RIWP approval letter. Deviations from the Work Plan are identified in Section 2.0.

This RI/FFS report describes and presents the findings of: the previous investigations completed by NYSDEC in September/October 2011 (documented in Final Site Characterization Report (Ref. 2)); soil vapor intrusion work completed by TurnKey in March 2015 (Ref. 3); and, the April 2016 RI field investigation activities (to fulfill the Consent Order obligations) and includes a remedial alternatives evaluation based on the previously collected data and RI data.

NYSDEC will issue a Record of Decision (ROD) for the Site upon approval of this RI/FFS. Upon issuance of the ROD, the existing Consent Order requirements for the Site

will be considered fulfilled, and R&J intends to apply for entry in to the BCP to complete the remediation.

1.1 Background

The Site is approximately 1.16 acres in size and is currently developed with an asphalt parking lot and a 2,800-square foot, single story structure used for commercial purposes (see Figure 2). The single story structure is the shell of a former manufactured gas plant (MGP) gas holder and has been renovated for commercial use. R&J purchased the property similar to its current configuration in 2001.

The Batavia Gas Light Company (BGLC) occupied the Site as far back as June 1855 and constructed the original gasholder (total capacity of 13,500 cubic feet). In 1878, a new gasholder was constructed under a new business entity named Batavia Gas and Electric Company (BGEC). This new gasholder was almost triple the size of the original at 35,000 cubic feet. Less than 10 years later, BGEC constructed new gas works infrastructure and began manufacturing gas from crude petroleum. In 1890, Consolidated Gas and Electric Company acquired the assets of BGEC.

Sometime between 1906 and 1912, the MGP was not longer in operation and the Site became occupied by Roberts Brothers flouring mills. Other Site occupants from 1912 through 1931 have also included Lang's Bakery, Genesee County, Granger & Co. Wholesale grocery, and Batavia Motor Lines, Inc.

1.2 Previous Investigations

A summary of the previous investigations at the Site are presented below. The primary concern identified for the Site is coal tar. Coal tar contains both volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) and is often present as non-aqueous phase liquid (NAPL).

For purposes of discussion, the previous investigation analytical sample results will be compared to the following criteria.

Subsurface Soil:

Soil Cleanup Objectives (SCOs) per 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-1 to 375-4 &

375-6, effective December 14, 2006. Specifically, the Commercial Soil Cleanup Objectives (CSCOs) are the Soil Cleanup Objectives that are most applicable to the current and future use of the Site and are considered to be the most applicable health risk-based comparative criteria.

Groundwater

Class GA Groundwater Quality Standards and Guidance Values (GWQS/GVs) per NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended April 2000.

Soil Vapor Intrusion

Decision matrices 1 and 2 per New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (SVI Guidance).

1.2.1 December 2012 – NYSDEC Site Characterization

Shaw Environmental & Infrastructure Engineering of New York, P.C. (Shaw) completed the Site Characterization (SC) work in accordance with the Work Authorization D006132-23 with NYSDEC. The SC activities consisted of:

- Ten (10) soil borings (SB-1 through SB-10) of which four (4) were converted to groundwater monitoring wells (MW-1 through MW-4);
- Five (5) exploratory test pits (TP-1 through TP-5); and
- Installation of three (3) soil gas implants (SVP-1 through SVP-3) to facilitate collection of soil gas samples.

Soil, soil vapor, ambient air, and groundwater samples were collected and submitted for laboratory analysis. Based on the findings of the SC, the Site was listed in the Registry of Inactive Hazardous Waste Disposal Sites (Registry) in New York State as a Class 2 site (Site Number 819019). An Order on Consent, dated March 5, 2014, was executed between NYSDEC and the Site owner, R&J.

Coal tar was reportedly observed within monitoring well, MW-1, installed within soil boring SB-8, indicating the potential presence of non-aqueous phase liquid (NAPL) in the

subsurface (see Figure 3). This location is adjacent to the former tar house structure. Based on the review of the soil boring/well log for SB-8/MW-1, coal tar may be present in the subsurface from approximately 5 to 10 fbgs. The monitoring well screen for MW-1, spans for 5 to 20 fbgs, which intersects the potential depth in which the coal tar was present.

Table 1 is a summary of the 11 soil/fill samples sent for laboratory analysis. Table 2 is a summary of the 3 groundwater samples sent for laboratory analysis. Table 3 is a summary of the 3 soil vapor and 1 ambient air samples sent for laboratory analysis.

Soil/Fill Sample Results

In addition to the coal tar, impacted soil/fill exceeding their respective CSCOs were identified at the following locations.

- SB-4, 25 to 26 fbgs, arsenic
- SB-8, 10 to 14 fbgs, benzene and SVOCs
- SB-9, 5 to 10 fbgs, SVOCs

We note that naphthalene, a common constituent of coal tar, was reported on both the VOC and SVOC analytical compound lists used by the Spectrum Analytical, Inc. during the SC. For purposes of the data discussion herein, naphthalene (considered to be a SVOC and polycyclic aromatic hydrocarbon (PAH)) will be discussed as a SVOC. However, the analytical results summary of the SC data provided on Tables 1 and 2, provided the naphthalene results as initially reported.

The arsenic detected at SB-4 (see Figure 3) is not considered a concern. The sample was collected from native soil at a depth of 25 to 26 fbgs and the detected concentration of 16.9 mg/kg slightly exceeds its CSCO of 16 mg/kg.

Elevated levels of benzene and SVOCs were identified at SB-8, 10 to 14 fbgs. This sample interval is below the depth at which coal tar may be present in the subsurface and is in the vicinity of the former tar house structure. This sample interval is potentially a combination of fill (10 to 11 fbgs) and native soil (11 to 14 fbgs) and is from below the groundwater table. The water level noted on the boring log is 6 fbgs and the water levels measured at the other Site well locations are approximately 8 fbgs. Therefore, the elevated concentrations detected may be due to NAPL present in the groundwater.

A few SVOCs were detected at SB-9 in a fill material sample from 5 to 10 fbgs exceeding their respective CSCOs. This location is in the vicinity of a former oil underground storage tank (UST).

Groundwater Sample Results

Groundwater was not collected from MW-1 due to the presence of NAPL identified during well development.

Low-level VOCs above their respective GWQS/GVs were detected in groundwater samples collected from MW-2, installed at SB-9, in the vicinity of the former oil UST and MW-3 installed at SB-5 in the eastern central portion of the Site.

Based on the SC, groundwater impacts appear to be limited to the area directly around the former tar house structure and historic oil UST.

Soil Vapor Sample Results

Soil vapor results indicated that VOCs were present in the subsurface based on the results of the three (3) samples collected in the northern portion of the Site (see Table 3). No indoor or sub-slab air samples were collected as part of the SC work. A soil vapor intrusion (SVI) assessment was completed within the on-site building in March 2015, as discussed in Section 1.2.3.

1.2.2 December 2014 – Interim Remedial Measure Work Plan

In December 2014, Conestoga-Rovers & Associates prepared an Interim Remedial Measure Work Plan (IRMWP, Ref. 4) for the Site on behalf of R&J which was approved by NYSDEC by letter dated January 6, 2015. The IRMWP discusses the activities planned for the implementation of the IRM, including the delineation, excavation and off-site disposal of grossly contaminated soil at the Site associated with the former operations.

The full scope of work outlined in the IRMWP was not implemented. As discussed in Section 1.0, R&J has had discussions with NYSDEC regarding implementing work necessary to fulfill the existing Consent Order and transitioning the Site into the BCP to complete the necessary remedial action, as R&J was not responsible for the discharge of the contaminants present at the Site. The following tasks from the IRMWP were deemed necessary by the NYSDEC to fulfill Consent Order and were implemented.

- Soil Vapor Intrusion Evaluation (see Section 1.2.3);
- Ground penetrating radar (GPR) survey (see Section 2.1); and
- Installation and sampling of five (5) soil borings and monitoring wells (see Section 2.2 and 2.3, respectively).

1.2.3 March 2015 Soil Vapor Intrusion Assessment

In March 2015, a soil vapor intrusion (SVI) assessment was conducted within the office building (former gas holder). In accordance with SVI Guidance sampling protocols, two (2) sub-slab air samples and two (2) interior air samples were collected from within the office building; and one (1) outdoor ambient air sample were collected for VOC analysis via EPA TO-15 (see Figure 3). Tables 4 and 5 summarize the analytical results associated with the SVI assessment.

The majority of VOCs were reported by the laboratory as non-detect or as estimated values below the laboratory method detection limit. Low-level detections of several VOCs were detected in the sub-slab, indoor, and outdoor air samples. The data sets were compared to SVI Guidance, NYSDOH Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes (Ref. 5), NYSDEC DAR-1, Guidelines for the Control of Toxic Ambient Air Contaminants (Ref. 6), and Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs). The results do not demonstrate a sub-slab source of VOCs impacting indoor air quality. Based on this assessment, no air quality concerns were identified at the Site, soil vapor intrusion into the office building was not evident, and no further action is recommended.

In a letter dated June 19, 2015, NYSDEC and NYSDOH concurred with the SVI assessment and concluded that no further action was necessary to evaluate the potential for SVI to occur.

1.3 Remedial Investigation/Focused Feasibility Study Report Outline

This report contains ten sections:

- Section 1.0 provides the Site background and summarizes previous environmental investigations.
- Section 2.0 presents the investigation approach, including deviations from the RI/FFS Work Plan.
- Section 3.0 describes the Site physical characteristics of the Site and surrounding land use as they pertain to the investigation findings.
- Section 4.0 presents the investigation results by media.
- Section 5.0 describes the fate and transport of detected chemical constituents of concern (COCs).

- Section 6.0 presents the qualitative risk assessment based on the RI data.
- Section 7.0 summarizes the findings of the RI.
- Section 8.0 presents the Remedial Alternatives Evaluation for the Site.
- Section 9.0 describes the institutional and engineering controls to be implemented for the Site.
- Section 10.0 provides a list of references cited in this report.

2.0 REMEDIAL INVESTIGATION

RI field activities were completed during the period of April 9 through April 27, 2016 in general accordance with the NYSDEC-approved RIWP. Investigation activities, including any deviations from the RIWP, are described below.

2.1 Ground Penetrating Radar

On April 9th, a GPR survey was completed throughout the Site and off-site portion of the parking lot to the northwest associated with 32 Ellicott Street, which is owned by R&J. The purpose of the GPR survey was to locate and identify any underground utilities and/or underground structures that are present, specifically:

- subsurface structures that may be related to the product observed in MW-1;
- the extent of the void space identified at former TP-3;
- a historic oil underground storage tank (UST) in the southeast portion of the Site in an effort to locate the extent of the tank grave or associated features; and,
- to identify whether historic underground piping associated with the former MGP is present.

The Site was surveyed with a Mala Easy Locator system which can locate metallic and non-metallic objects. The depth of the survey was approximately 5 fbgs and data was collected along traverse lines spaced approximately 2 feet apart. The traverse lines were orientated in the north-south and east-west directions across the Site.

The GPR survey identified three (3) anomalous areas as shown on Figure 4. Anomaly 1 was identified as an area of debris and possible piping on the western portion of the Site in the vicinity of the former petroleum gas works holder. The anomaly was approximately 20 feet (east-west) by 30 feet (north-south) and present at a depth of 3 to 4 fbgs. Previous investigation location SB-5 was located in the approximate center of this anomaly. The soil boring log for this location indicated the subsurface consisted of gravel subbase, sand, silt, cobbles, and fine to coarse gravel (a mix of subsurface conditions). No odors or PID measurements were noted. Soil from 5 to 10 ft consisted of brown sandy silt to silty sand. No elevated PID readings or odors were noted. There does not appear to be evidence of debris or impacts for potential piping that would warrant further investigation.

Anomaly 2 was identified as a change in soil type on the south-central portion of the Site in the vicinity of the former purifier house. The anomaly was approximately 30 feet

(northwest-southeast) by 15 feet (northeast-southwest) and present at a depth of 1 to 4 fbgs. This anomaly is located in the vicinity of the former coal house. It is possible the change in soil type is due to backfill material used in the general vicinity of this former structure. This finding does not warrant further investigation.

Anomaly 3 is identified as an area of debris northwest at an off-site location within the parking lot near Evans Street. The anomaly was approximately 5 feet (east-west) by 4 feet (north-south) and present at a depth of 1.5 fbgs. RI investigation location TKMW-9 was completed just south of Anomaly 3. The subsurface conditions consisted of sand and silty sand. No elevated PID readings or odors were noted. This finding does not warrant further investigation.

The GPR survey did not identify subsurface structures that may be related to the product observed at MW-1; the extent of void space in the vicinity of TP-3; or the tank grave or associated features of the former oil UST. Anomalies that were identified do not warrant further investigation as discussed.

2.2 Soil/Fill Investigation

On April 13, 2016, five (5) soil borings were completed at the locations of the five (5) monitoring wells that were installed (see Section 2.3). Soil borings were advanced using direct push methodology via hydraulic hammer on a track-mounted rig. Soil samples were collected with a macrocore sampler which contained a 2-inch outer diameter by 48-inch long acetate liner. A new acetate liner was used for each 4-foot sample run.

The soil/fill samples retrieved from the borings allowed for visual, olfactory, photoionization detector (PID) assessment of subsurface conditions by TurnKey's Project Geologist. The soil borings (TKMW-5 through TKMW-9) were completed to a depth of approximately 16 fbgs, with the exception of TKMW-5 and TKMW-6, which were extended to a depth of 20 fbgs. Figure 4 identifies the approximate locations of the five (5) soil borings locations. Boring Logs describing the soil types, samples collected, and other observations are presented in Appendix A.

One (1) soil/fill sample was selected from each of the five (5) soil borings completed. The soil/fill sample selection was based on the area of the soil boring exhibiting the highest PID measurements. The selected soil/fill samples were placed in pre-cleaned laboratory provided sample jars, cooled to 4ºC in the field, and transported under chain-of-custody

command to TestAmerica for analysis. Table 5 is a summary of the soil/fill samples submitted, sample depths, and analysis performed.

2.3 Groundwater Investigation

Five (5) new groundwater monitoring wells (TKMW-5 through TKMW-9) were installed at the locations shown on Figure 4, in addition to the four (4) existing monitoring well (MW-1 through MW-4) that were installed as part of the SC.

After the completion of the soil borings discussed in Section 2.2, the rig used was equipped with a built-in rotary spindle to utilize 4 ¼ inch hollow stem augers to facilitate the well installation. The augers were advanced to a depth of 15 fbgs and the monitoring well were installed to that depth. The monitoring wells were constructed with 2-inch inside diameter flush-threaded PVC pipe. The well screens were 10 feet in length and were installed to straddle the water table as groundwater was present at approximately 7 to 8 fbgs. The annulus space between the borehole and well was backfilled with sand to approximately 1 foot over the top of the well screen and capped with an approximate 3-foot bentonite chip seal. The monitoring wells were completed with lockable J-plug, and a steel flush mounted road box. The monitoring well construction details are presented on the Soil Boring Logs in Appendix A.

2.3.1 Groundwater Well Development

The newly installed monitoring wells were developed prior to sampling to remove residual sediments and ensure hydraulic connection within the water-bearing zone. As stated in the RI/FFS Work Plan, no wells were developed within 48 hours of installation. Development of the monitoring wells was completed with dedicated disposable polyethylene bailers via surge and purge methodology. Field parameters were measured periodically during well development (see Groundwater Field Forms for well development in Appendix B). Stability was defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements; or a minimum of three well volumes. A minimum of 10 wells volumes were removed from each well during development in order to reduce the suspended sediment and turbidity. Development water from the monitoring wells was containerized and staged on-site. Pending the results of the groundwater sample analysis, the water will be discharged to ground surface at the Site or properly disposed.

2.3.2 Groundwater Well Sample Collection

Prior to sample collection, static water levels were measured and recorded for the five (5) newly installed wells. The monitoring wells were purged and sampled using a down-hole pump and dedicated tubing following low-flow/minimal drawdown purge and sample collection procedures. Field measurements for pH, specific conductance, temperature, turbidity, and water level as well as visual and olfactory field observations were periodically recorded and monitored for stabilization. The water quality measurements at the time of purging and sampling were recorded (see Groundwater Field Forms for well sampling in Appendix B). The groundwater samples from the newly installed wells were placed in pre-cleaned laboratory provided sample containers with appropriate preservatives, as required, cooled to 4ºC in the field, and transported under chain-of-custody command to TestAmerica for analysis. Table 5 is a summary of the groundwater samples submitted and analysis performed.

2.3.3 Field Specific Quality Assurance/Quality Control Sampling

In addition to the soil/fill and groundwater samples described above, field-specific quality assurance/quality control (QA/QC) samples were collected and analyzed to ensure the reliability of the generated data as described in the QAPP and to support the required third-party data usability assessment effort. Site-specific QA/QC samples included matrix spikes, matrix spike duplicates, blind duplicates, and trip blanks.

2.4 Decontamination & Investigation-Derived Waste Management

Every attempt was made to utilize dedicated sampling equipment during the RI, however, non-dedicated equipment was required and/or used (e.g., macrocore sampler) and was decontaminated with a non-phosphate detergent (i.e., Alconox®) and potable water mixture, rinsed with distilled water, and air-dried before each use.

RI generated drilling spoils, decontamination water and groundwater development water were containerized and staged on-site. Pending the results of the analytical samples, the soil/fill and water may be reused, discharged to the ground surface at the Site, or properly disposed. IDW will be reused, recycled, and/or disposed off-Site, in accordance with the approved remedial activities.

2.5 Deviations from RI/FS Work Plan

There were no significant deviations from the RIWP, as submitted, for the implementation of the RI. However, the location of soil boring/monitoring well, TKMW-9, was moved approximately 3 to 5 feet south of the proposed location due to the presence of a storm sewer line.

3.0 SITE PHYSICAL CHARACTERISTICS

The physical characteristics of the Site observed during the RI are described in the following sections.

3.1 Site Topography and Drainage

The Site is generally flat lying and primarily covered with hardscape (see Figure 2). There is one (1) round, single-story commercial structure at the Site used as a doctor's office. The structure is the shell of the former MGP gas holder and has been renovated for commercial use. The majority of the Site surface is covered by the commercial structure, asphalt parking areas, and/or concrete walkways. There is limited vegetative cover along the eastern and southern portions of the Site as well as a gravel driveway along the southern portion of the Site.

Precipitation (i.e., rain or melting snow) on the majority of the Site moves via sheet flow to on-site storm water catch basins, to Evans Street, or to the vegetated areas along the eastern and southern portions of the Site. Precipitation on the vegetated areas along the eastern and southern portions of the Site infiltrates into the subsurface or ponds at the surface until it evaporates/infiltrates.

3.2 Geology and Hydrogeology

3.2.1 Bedrock

Based on the Geologic Map of New York, Niagara Sheet (Ref. 7), the Site is situated over the Marcellus Formation, Oatka Creek Shale Member of the Middle Devonian Period Hamilton Group. The Oatka Creek Shale is described as dark gray to black organic-rich shale and present beneath the Site at depths of 30 fbgs. The RI activities completed did not investigate bedrock depth or type. However, one (1) soil boring (SB-5) completed as part of the SC was extended to 30.2 fbgs and the soil description at that depth was listed as fractured shale.

3.2.2 Overburden

The Site is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief and gentle slopes toward Lake Ontario, except in the immediate vicinity of major drainage ways.

According to the Soil Survey of Genesee County (Ref. 8), the native soils present in the vicinity of the Site are Palmyra gravelly loam, which are described as nearly level soil occupying the tops of large outwash terraces. The deposits are generally 30 to 70 feet thick consisting mainly of gravel and partly of sand.

Based on the RI activities and the previous soil boring completed as part of the SC, subsurface lithology is described as follows.

Fill materials consisting of varying amounts of brick, coal fragments, wood, silt, sand gravel and clay were present below the asphalt or vegetative cover to depths of 4 to 10 fbgs. The deeper fill materials (approximately 10 feet) were present in the northeastern portion of the Site in the vicinity of the former tar house and former petroleum gas works building. No fill appeared to be present along the western portion of the Site, the soil present below the asphalt cover was either silty clay (TKMW-8) in the southwestern corner or sand (TKMW-9) in the northwestern corner of the parking lot.

Native soil underlying the fill material generally consists of a sandy silt, sand with lesser and varying amounts of silt, and a sand with silt and gravel. The sandy silt was encountered at depths ranging from 4 to 10 fbgs, the sand with lesser and varying amounts of silt were encountered at depths ranging from 4 to 15 fbgs, and the sand with silt and gravel were encountered at depths of 9 to 16 fbgs. Refusal was encountered at one (1) RI soil boring, TKMW-9 at approximately 15.5 fbgs.

3.2.3 Hydrogeology

Groundwater elevation data was collected during the RI, which included water levels measurements on May 23, 2016 from the five (5) newly installed monitoring wells and three (3) previously installed wells (MW-2, -3, and -4). Monitoring well, MW-1 could not be located and it was presumed to be located underneath a solid waste dumpster present in the vicinity.

Depths to groundwater ranged from approximately 6.9 fbgs (TKMW-8) to 8.3 fbgs (TKMW-6). The depth to groundwater is consistent with those identified during the SC.

Groundwater flow direction appears to be easterly in the western and northeastern portion of the Site and southernly in the central and southern portion of the Site as shown on Figure 5 - Groundwater Isopotential Map, with a very low hydraulic gradient, as discussed in Section 5.5. We note that a groundwater measurement could not be obtained from MW-1 due to the presence of the LNAPL in the well which can affect groundwater elevations due to its presence.

3.3 Climate

Batavia's weather is typical of western New York and has a cold continental climate, with moisture from Lake Erie causing increased precipitation. Average annual precipitation is reportedly 35.4 inches and snowfall is 74 inches (Ref. 9). Annual average high temperature is 58.1 degrees Fahrenheit and the annual average low temperature is 39.6 degrees Fahrenheit, with an average temperature of 48.9 degrees Fahrenheit (Ref. 9). The ground and lakes typically remain frozen from late December to March. Winds are generally from the southwest (240 degrees) with a mean velocity of 10 miles per hour (Ref. 9).

3.4 Population and Land Use

The City of Batavia, encompassing 5.2 square miles, has an estimated population of 15,274 persons (Ref. 10), a decrease of 2.4% from the 2010 U.S. census. Based on these data, the average population density in the City is 2,940 people per square mile. Batavia is primarily zoned residential with commercial use and community services mixed in along major roads. The Site is located in an area of the City zoned commercial. The Site is surrounded by other commercial properties, community services, and storage warehouse facilities.

3.5 Utilities and Groundwater Use

The Site is connected to the major public and private utilities, including water, sanitary and storm water sewers (City of Batavia, Bureau of Water & Wastewater), electric (National Grid), and natural gas (National Fuel Gas Corporation).

Groundwater at the Site is assigned Class "GA" by 6NYCRR Part 701.15. However, Site groundwater is not used as a potable water source.

3.6 Wetlands and Floodplains

The NYSDEC Environmental Resource Mapper (Ref. 11) shows that State wetlands do not exist on the subject property. A State wetlands is present approximately 0.6 miles southwest of the Site. The National Wetlands Inventory (Ref. 12) shows that Federal wetlands do not exist on the subject property. A federal wetland is present approximately 0.3 miles southwest of the Site. Tonawanda Creek is located approximately 0.1 miles northwest of the Site. The FEMA Flood Map (Ref. 13) indicates that the Site is in a Zone A4, which is an area inundated by 100 year flooding, for which no base flood zone elevation have been established.

4.0 INVESTIGATION RESULTS BY MEDIA

The nature and extent of contamination at the Site was further characterized using soil and groundwater samples collected and analyzed as part of the RI. As described in Section 1.2, soil, groundwater, and soil vapor intrusion samples collected during previous investigations were used to supplement this RI. Sampling protocols and methodologies for samples collected during the RI investigation were performed in accordance with the Quality Assurance Project Plan (QAPP) which was included as Appendix B of the IRMWP.

The soil and groundwater samples collected during the RI sampling events were submitted for analyses under chain-of-custody to TestAmerica Laboratories, Inc. (TestAmerica) located in Amherst, New York. Analytical services were performed in accordance with the most current SW-846 analytical methods and protocols. Appendix C contains analytical reports for samples analyzed from the RI investigation. Analytical data discussed in this section includes results from prior investigations as well as the RI data collected by TurnKey personnel. Tabulated analytical results, which have been validated, are shown only for those parameters for which a value greater than the laboratory method detection limit was detected at a minimum of one (1) sample location.

Figure 3 shows the sampling locations for soil and groundwater samples collected during historic investigations and Figure 6 shows both the historic and RI investigations.

The analytical summary tables from the previous investigations discussed in this section are included as Tables 1 through 4B. Table 5 summarizes the sampling and analysis program of the RI. Tables 6 and 7 summarize the RI soil and groundwater analytical results, respectively. The Data Usability Summary Report (DUSR) for the RI soil and groundwater data is included in Appendix D.

For discussion purposes, analytical results for the RI were compared with the following Standards, Criteria, and Guidance values (SCGs).

Subsurface Soil:

Soil Cleanup Objectives (SCOs) per 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-1 to 375-4 & 375-6, effective December 14, 2006.

Specifically, the Restricted Commercial Soil Cleanup Objectives (CSCOs) are the Soil Cleanup Objectives that are most applicable to the current existing use of the Site and are considered to be the most applicable health risk-based comparative criteria.

Groundwater

Class GA Groundwater Quality Standards and Guidance Values (GWQS/GVs) per NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended April 2000.

Soil Vapor Intrusion

The SVI work completed as part of previous investigations were compared to:

- New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) Decision Matrices;
- *NYSDOH, Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes,* revised November 14, 2005; and
- Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) criteria for air contaminants.

Sample results compared to the above criteria are described below according to media and contaminant class.

4.1 Soil/Fill

Table 6 compares the RI soil/fill data to a range of health risk-based SCOs as published in 6NYCRR Part 375, including Unrestricted SCOs (USCOs) and CSCOs. The previous investigation soil/fill data tables included on Table 1 also compared the results to the USCOs and CSCOs.

4.1.1 Surface Soil/Fill

No surface soil/fill samples were collected as part of the RI or from the previous SC, as the majority of the Site is covered by building, asphalt parking or concrete walkways. The small amount of existing surface soil that is present is covered with topsoil and vegetation along the eastern and southern portions of the Site.

4.1.2 Subsurface Soil/Fill

Five (5) subsurface soil/fill samples (excluding QA/QC samples) were collected and analyzed as part of the RI and eleven (11) subsurface soil samples were collected as part of historic SC as shown on Figure 3. Table 6 summarizes the results of the RI subsurface soil/fill samples and Table 1 summarizes the results of the SC subsurface soil/fill samples. The results are discussed below as they compare to their respective Part 375 CSCOs.

4.1.2.1 Volatile Organic Compounds

The majority of the analyzed VOCs were reported as non-detectable or as an estimated concentration (J qualifier) due to the concentration reported being below the reporting limit. No VOCs were detected above their respective CSCO in the five (5) samples submitted as part of the RI (see Table 6).

Acetone was detected in two sample locations, SB-1, 5 to 10 ft and SB-9, 5 to 10 ft above its Protection of Groundwater SCO.

Benzene (150 milligram per kilogram (mg/kg)) was detected above its respective CSCOs at one (1) SC investigation location, SB-8, 10 to 14 fbgs in addition to six other VOC which were detected above their respective Protection of Groundwater SCO. [Naphthalene was also detected in this sample, but as discussed earlier is considered to be a SVOC.]

SB-8 was completed in the vicinity of the former Tar House in the northern portion of the Site, along the northern property line. Elevated benzene levels detected at SB-8 are likely associated with the NAPL present at this location starting at a depth of approximately 5 fbgs. The depth to groundwater on the drilling log was noted to be approximately 6 fbgs. As discussed in Section 4.2, NAPL was detected at monitoring well, MW-1, installed at this location.

4.1.2.2 Semi-Volatile Organic Compounds

SVOCs were detected above their respective CSCOs at two (2) of the five (5) samples analyzed as part of the RI and at three (3) of the eleven (11) samples analyzed as part of the SC. Investigation locations with SVOC CSCO exceedances were as follows:

- TKMW-6, 8 to 10 fbgs: benzo(a)pyrene (total SVOCs detected 89 mg/kg; total PAHs detected 82 mg/kg)
- TKMW-7, 2 to 5 fbgs: five (5) compounds (total SVOCs detected 644 mg/kg; total PAHs detected 637.5 mg/kg)

- SB-7, 9 to 12 fbgs: benzo(a)pyrene (total SVOCs and total PAHs detected 22 mg/kg)
- SB-8, 10 to 14 fbgs: 14 compounds (total SVOCs detected 17,429 mg/kg; total PAHs detected 14,269 mg/kg)
- SB-9, 5 to 10 fbgs: five (5) compounds (total SVOCs detected 118 mg/kg; total PAHs detected 113 mg/kg)

RI soil boring TKMW-6 was installed in the southeastern portion of the Site, along the eastern property line. One SVOC (benzo(a)pyrene, 3.2 mg/kg) was detected in the soil/fill in TKMW-6 (8-10 fbgs) above its respective CSCO and four PAHs were detected above their respective Protection of Groundwater SCO.

RI soil boring TKMW-7 was installed in the southern-central portion of the Site, along the southern property line. Seven (7) individual SVOCs, which are all PAHs, were detected in the soil/fill in TKMW-7 (2-5 fbgs) above their respective CSCOs and/or Protection of Groundwater SCOs. The elevated PAHs (greater than 500 ppm total PAHs) detected in the soil/fill sample interval from 2 to 5 fbgs were likely associated with the fill material present in the sample interval which was noted to be mostly brick and coal fines. TKMW-7 was completed adjacent (west) of former TP-5 completed during the SC. Fill material encountered at TP-5 consisted of sand, silt, gravel, brick, concrete, coal slag, and wood, similar to material identified at TP-4, located 45 feet to the east of TP-5.

SC soil boring SB-7 was installed along the southeastern side of the Site building, a former gas holder. One SVOC (benzo(a)pyrene, 2.5 mg/kg) was detected above its CSCO and three (3) compounds were detected above their respective Protection of Groundwater SCOs in the 9 to 12 fbgs interval, but at concentrations well below 500 mg/kg total PAHs

SC soil boring SB-8 was completed in the vicinity of the former tar house in the northern portion of the Site, along the northern property line. Twenty (20) individual SVOCs, which are predominantly PAHs, were detected in the soil/fill in SB-8 (10-14 fbgs) above their respective CSCOs and/or Protection of Groundwater SCOs. The elevated PAHs, (greater than 500 ppm total PAHs) detected at SB-8 (10-14 fbgs) were likely associated with the NAPL at this location starting at a depth of approximately 5 fbgs. The depth to groundwater on the drilling log was noted to be approximately 6 fbgs. As discussed in Section 4.2, NAPL was detected in the monitoring well installed at this location.

SC soil boring SB-9 was installed in the southwestern corner of the Site in the vicinity of the former oil UST. Six (6) individual SVOCs, which are PAHs, were detected in the soil/fill in SB-9 (5-10 fbgs) above their respective CSCOs and/or Protection of Groundwater SCOs, but at concentrations well below 500 mg/kg total PAHs. During the SC, test pit TP-1 was completed adjacent to SB-9. At a depth of 6 fbgs, black soil, strong product odors, and PID measurements of 399 ppm were observed within TP-1 at a depth of 6 to 7 fbgs. This is likely contamination associated with the former UST that was reportedly present in this area of the Site.

4.1.2.3 Metals

Metal analytes were detected above MDLs in the five (5) samples analyzed as part of the RI and in the eleven (11) samples analyzed as part of the SC. Of the analytes detected, arsenic was detected at one (1) location TKMW-7, 2 to 5 fbgs at a concentrations (16.1 mg/kg) slightly above its CSCO (16 mg/kg). The sample interval from TKMW-7, 2 to 5 fbgs, contained coal fines, which may be the cause of the elevated arsenic. The arsenic CSCO exceedance was in the duplicate sample collected at this location, compared to the actual sample which had an arsenic concentration of 14.7 mg/kg which is below its CSCO.

Arsenic was also detected at SB-4, 25 to 26 fbgs (16.9 mg/kg) slightly above its CSCO. Nickel was also detected at this sample location above its respective Protection of Groundwater SCO. The sample interval at SB-4, 25 to 26 fbgs was of native soil collected 1 foot above equipment refusal (presumed to be associated with the top of bedrock) and associated with natural conditions.

4.1.2.4 Pesticides

No pesticide analysis was completed as part of the RI because the results of the previous SC did not identify pesticides as a concern. Four (4) samples were collected and submitted for pesticides as part of the SC. One (1) compound, endosulfan sulfate was detected at one (1) sample location, SB-9, 5 to 10 fbgs, at a concentration below its USCO.

4.1.2.5 PCBs

No PCBs analysis was completed as part of the RI because the results of the previous SC did not identify PCBs as a concern. Four (4) samples were collected and submitted as part of the SC for PCBs. PCBs were not detected above MDLs in those four (4) samples.

4.2 Groundwater

Groundwater samples were collected from the five (5) new monitoring wells during the RI in April 2016. The analytical data from the SC for MW-2, -3 and -4 was collected in September 2011. The analytical results for detected constituents from the RI are summarized on Table 7 and the groundwater sample results from the SC are summarized on Table 2. During the SC, MW-1 was not sampled due to the presence of NAPL. A discussion of the results is presented below.

4.2.1 Volatile Organic Compounds

VOCs were detected above their respective GWQS/GVs in two (2) of the five (5) groundwater samples submitted during the RI for analysis and in two (2) of the three (3) submitted during the SC for analysis. Investigation locations with GWQS/GV exceedances were as follows:

- TKMW-5: benzene (total VOCs detected 5.7 micrograms per liter (ug/l))
- TKMW-6: four (4) compounds (total VOCs detected 288 ug/l)
- MW-02: four (4) compounds (total VOCs detected 69 ug/l)
- MW-03: benzene (total VOCs detected 4 ug/l)

TKMW-5 is located along the eastern property line of the Site. Benzene (1.4 ug/l) was detected at this location with a slight exceedance of its GWQS/GVs of 1 ug/l. The other four (4) VOCs detected were below their respective GWQS/GVs or do not have a GWQS/GVs. This location is downgradient of the former gas holders and former tar house.

TKMW-6 is also located along the eastern property line of the Site. Benzene (25 ug/l), ethylbenzene (11 ug/l), isopropylbenezene (8.9 ug/l) and total xylene (21 ug/l) were detected above their respective GWQS/GVs. This location is also downgradient of the former gas holders and former tar house.

MW-2 is located in the southeast corner of the Site, along the property line. Three (3) VOCs, 1,2,4-trimethylbenzene (25 ug/l), 1,3,5-trimetylbenzene (9 ug/l), and total xylene (6.3 ug/l) were detected above their respective GWQS/GVs. The other four (4) VOCs detected were below their respective GWQS/GVs. Total VOCs detected in the groundwater were approximately 69 ug/l. This location is also downgradient of the former gas holders and former tar house, and in the vicinity of a former oil UST.

MW-3 is located in the eastern-central portion of the Site. Benzene (2.6 ug/l) was detected at this location with a slight exceedance of its GWQS/GVs. This location is in the vicinity of the former petroleum gas holder and downgradient of the former tar house.

4.2.2 Semi-Volatile Organic Compounds

SVOCs were detected above their respective GWQS/GVs in one (1) of the five (5) groundwater samples analyzed as part of the RI. No SVOCs exceedances of the GWQS/GVs were identified in the three (3) groundwater samples collected and analyzed as part of the SC.

Naphthalene was detected in the sample collected from TKMW-6 (320 ug/l) above its respective GWQS/GVs of 10 ug/l. This location is in the southeastern portion of the Site along the property line. MW-2 is south and downgradient of TKMW-6 by approximately 35 feet where the naphthalene concentration decreases two orders of magnitude (320 ug/l to 6 mg/l) to below its respective GWQS/GV.

4.2.3 Metals

Metal analytes were detected above MDLs in the five (5) samples analyzed as part of the RI and in the three (3) samples analyzed as part of the SC. Of the analytes detected four (4) analytes were detected above their respective GWQS/GVs: iron (6 well locations), magnesium (2 well locations), manganese (7 well locations), and sodium (8 well locations). Monitoring well TKMW-9, the upgradient monitoring well location, also had elevated levels of these four (4) analytes. It is not uncommon to encounter elevated levels of these naturally-occurring elements in groundwater, especially in urban environments.

4.2.4 Pesticides

No pesticide analysis was completed as part of the RI. Three (3) groundwater samples were collected and submitted as part of the SC for pesticides and were not detected above MDLs in those samples.

4.2.5 PCBs

No PCBs analysis was completed as part of the RI. Three (3) groundwater samples were collected and submitted as part of the SC for PCBs and were not detected above MDLs in those samples.

4.2.6 Field Parameters

As indicated on Table 7, the pH of the groundwater was in the range of at 6.9 to 7.3 SU (i.e., neutral). Other field parameters were within typical ranges for overburden groundwater in the Western New York area. We note that the turbidity at TKMW-9 was outside the preferred range for groundwater sampling (less than 50 NTUs), however the elevated turbidity at this location did not appear to have an impact on the VOC, SVOC or metal results.

4.3 Soil Vapor Intrusion

As discussed in Section 1.2.2 soil vapor samples were collected from three (3) locations (SVP-1 through SVP-3) in the norther portion of the Site, near the existing on-site office building (former gas holder) and former Tar House in October 2011. Soil vapor results indicated that VOCs were present in the subsurface. No indoor or outdoor air samples were collected as part of the SC work.

A soil vapor intrusion (SVI) assessment was completed within the on-site office building in March 2015, as discussed in Section 1.2.3. Two (2) sub-slab vapor samples and two (2) interior air samples were collected from within the office building, and one (1) outdoor ambient air sample was collect for background. The samples were analyzed for VOC analysis via EPA TO-15. Tables 4A and 4B contain a summary of the analytical results and Figure 3 identifies locations of the sample collected as part of the SVI assessment.

The majority of VOCs were reported by the laboratory as non-detect or as estimated values below the laboratory method detection limit. Low-level detections of several VOCs were detected in the sub-slab vapor, indoor air, and outdoor air samples. The data sets were compared to NYSDOH SVI Guidance (Ref. 15), NYSDOH Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes (Ref. 5), NYSDEC DAR-1, Guidelines for the Control of Toxic Ambient Air Contaminants (Ref. 6), and Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs). The results did not demonstrate a sub-slab source of VOCs impacting indoor air quality. Based on this assessment, no air quality concerns were identified at the Site, soil vapor intrusion into the office building was not evident, and no further action is recommended.

In a letter dated June 19, 2015, NYSDEC and NYSDOH concurred with the SVI assessment and concluded that no further action was necessary to evaluate the potential for SVI to occur. SVI is not considered to be a concern within the existing Site building.

4.4 Summary of Previous Investigations and RI Findings

The following is a summary of the Historic Investigations and RI findings.

Surface Soils:

No samples were collected from surface soils as the majority of the Site is covered by building, asphalt parking or concrete walkways. The small amount of existing surface soil that is present is covered with topsoil and vegetation along the eastern and southern portions of the Site.

Subsurface Soils:

One (1) VOC, benzene (150 mg/kg) was detected above its respective CSCO at one (1) location, SB-8, 10 to 14 fbgs. SB-8 was completed in the vicinity of the former tar house in the northern portion of the Site, along the northern property line, where NAPL was identified in the subsurface. With the exception of benzene in the area of SB-8, VOCs are not considered to be a concern in subsurface soils at the Site.

SVOCs were detected above their respective CSCOs and/or Protection of Groundwater SCOs at five (5) sample locations, which were generally well below 500 mg/kg total PAHs with the exception of locations TKMW-7 and SB-8.

- TKMW-7 was installed in the southern-central portion of the Site, along the southern property line. The sample was a fill material sample from 2 to 5 fbgs which was noted to be mostly brick and coal fines. Similar fill materials were also noted at TP-4 and TP-5, completed during the SC.
- SB-8 was completed in the vicinity of the former tar house in the northern portion of the Site, along the northern property line, where NAPL was identified in the subsurface. Naphthalene detected at a concentration of 3,800 mg/kg.
- Although total SVOCs concentrations at SB-9 were below 500 ppm, the findings at adjacent TP-1 indicated the presence of black soil, strong product odors, and PID measurements of 399 ppm at approximately 6 to 7 fbgs. The

test pit was terminated at 7 fbgs. This is likely contamination associated with the former UST that was reportedly present in this area of the Site.

Arsenic was the only metal analyte detected at a concentration slight above its CSCO at two (2) locations, TKMW-7, 2 to 5 fbgs and SB-4, 25 to 26 fbgs. The sample interval from TKMW-7, 2 to 5 fbgs, contained coal fines and is likely the cause of the elevated arsenic. The sample interval at SB-4, 25 to 26 fbgs was of native soil collected 1 foot above equipment refusal (presumed to be associated with the top of bedrock) and associated with natural conditions. Metals are not considered to be a concern for subsurface soils at the Site.

One (1) pesticide, was detected at one (1) sample location, SB-9 5 to 10 fbgs, above MDLs but below its USCO. Pesticides are not considered a concern for the Site.

PCBs were not detected above MDLs and are not considered a concern for the Site.

Groundwater:

VOCs were detected above their respective GWQS/GVs at four (4) locations, MW-02, MW-03, TKMW-5, and TKMW-6.

MW-02: Three (3) VOCs were detected above their respective GWQS/GVs at this location and the total VOCs concentration is approximately 56 ug/l. This location is also downgradient of the former gas holders and former tar house, and in the vicinity of a former oil UST.

MW-03: Benzene (2.6 ug/l) was the only VOC detected at this location with a slight exceedance of its GWQS/GVs. This location is in the vicinity of the former petroleum gas holder.

TKMW-5: Benzene (1.4 ug/l) was the only VOC detected at this location with a slight exceedance of its GWQS/GVs and the total VOCs concentration is approximately 5.7 ug/l. This location is downgradient of the former gas holders and former tar house.

TKMW-6: Four (4) VOCs were detected above their respective GWQS/GVs at this location and the total VOCs concentration is approximately 288 ug/l. This location is downgradient of the former gas holders and former tar house.

VOCs, while present, are not considered a significant concern for the Site groundwater given their relatively low concentrations detected and publically-supplied drinking water system on-Site and the surrounding area.

Naphthalene was the only SVOC detected above their respective GWQS/GVs at one (1) location (TKMW-6) in the groundwater samples collected from the Site. With the exception of the NAPL present at MW-1 and naphthalene at TKMW-6, SVOCs in groundwater are not considered a concern at the Site given their relatively low concentrations detected and publically-supplied drinking water system on-Site and surrounding area.

Three (3) metal analytes were detected above their respective GWQS/GVs in the groundwater at the Site, iron, magnesium, and sodium. It is not uncommon to encounter elevated levels of iron, magnesium, and sodium in groundwater. Magnesium and sodium are common to road salt used on the parking lot and city streets and because the Site and surrounding area are on public water supply, the metal analytes detected are not considered to be of concern at the Site.

Pesticides were not detected above MDLs in the groundwater samples analyzed from the Site. Pesticides are not considered a concern for the Site.

PCBs were not detected above MDLs in the groundwater samples analyzed from the Site. PCBs are not considered a concern for the Site.

Soil Vapor Intrusion:

Low-level detections of several VOCs were detected in the two (2) sub-slab vapor, two (2) indoor air, and one (1) outdoor air samples. The SVI results did not demonstrate a sub-slab source of VOCs impacting indoor air quality. Based on this assessment, soil vapor intrusion into the office building was not evident. In a letter dated June 19, 2015, NYSDEC and NYSDOH concurred with the SVI assessment and concluded that no further action was necessary to evaluate the potential for SVI.

4.5 Data Usability Summary

In accordance with the Quality Assurance Project Plan (QAPP), the laboratory analytical data was independently assessed and, as required, submitted for independent review. Ms. Judy Harry of Data Validation Services located in North Creek, New York performed the data usability summary assessment for the soil/fill and groundwater samples, which involved

a review of the summary form information and sample raw data, and a limited review of associated QC raw data. Specifically, the following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate Recoveries
- Field Duplicate Correlation
- Preparation/Calibration Blanks
- Control Spike/Laboratory Control Samples
- Instrumental IDLs
- Calibration/CRI/CRA Standards
- ICP Interference Check Standards
- ICP Serial Dilution Correlations
- Sample Results Verification

The Data Usability Summary Reports (DUSRs) were conducted using guidance from the USEPA Region 2 validation Standard Operating Procedures, the USEPA National Functional Guidelines for Data Review, as well as professional judgment. Appendix D includes the DUSRs for the soil/fill and groundwater analytical data, which were prepared in accordance with Appendix 2B of NYSDEC's DER-10 guidance. Those items listed above that demonstrated deficiencies are discussed in detail in the DUSR narrative sections. Analytical results were edited or qualified per the DUSR with changes reflected on the summary tables. In general, most sample results are usable either as reported or with minor qualification or edit. The following issues were noted in the DUSR:

- Four (4) SVOCs (3,3-dichlorobenzidine, 3-nitroaniline, 4-chloroaniline, and caprolactum) were rejected in one groundwater sample (TKMW-6) because the matrix spikes produced no recovery.

The findings of the DUSR do not significantly impact the analytical data for the Site. The rejected data were in the one groundwater were not detected above method detection limits or were they detected in other soil/fill and/or groundwater samples at the Site.

4.6 Constituents of Concern (COCs)

Based on previous investigations and the RI findings to date, the Constituents of Concern (COCs) for a commercial reuse and development at the Site are as follows, presented by media:

- Subsurface Soil/Fill: Benzene and SVOCs in the soil/fill present in the vicinity of the former tar house in the northern portion of the Site; elevated SVOCs (greater than 500 mg/kg) detected from 2 to 5 fbgs at TKMW-7, likely associated with fill material present at that location; and black soil, strong product odors, and PID measurements of 399 ppm identified at TP-1 from approximately 6 to 7 fbgs.
- Groundwater: NAPL present in SB-8/MW-1 in the vicinity of the former tar house in the northern portion of the Site.

5.0 FATE AND TRANSPORT OF COCS

The subsurface soil/fill, groundwater and SVI sample analytical results associated with the previous investigations and the RI were incorporated with the physical characterization of the Site to evaluate the fate and transport of COCs in Site media. The mechanisms by which the COCs can migrate to other areas or media are discussed below.

5.1 Fugitive Dust Generation

Volatile and non-volatile chemicals present in subsurface soil/fill can be released to ambient air as a result of fugitive dust generation. Impacted subsurface soil/fill has been identified at the Site and, as such, fugitive dust generation during excavations related to remediation and redevelopment activities is considered a relevant potential short-term migration pathway. Impacted soil/fill above CSCOs are currently covered as the majority of the Site is covered by asphalt, building, concrete walkways, or vegetation that would prevent the suspension of soil/fill particles.

Particulate monitoring in accordance with the approved Community Air Monitoring Plan (CAMP) will be completed during intrusive activities and, if required, dust mitigation measures will be employed during future remediation and redevelopment.

5.2 Volatilization

Volatile chemicals present in soil/fill and groundwater may be released to ambient or indoor air. Volatile chemicals typically have a low organic-carbon partition coefficient (K_{oc}), low molecular weight, and a high Henry's Law constant.

Benzene and naphthalene (typically considered a SVOC) were detected in Site soil/fill above their CSCOs. NAPL (MW-1 only) has been detected in the Site groundwater on the eastern portion of the Site in the vicinity of the former tar house, and VOCs and naphthalene were detected in the groundwater to the southeast.

A SVI study was completed for the existing commercial Site building in the vicinity of the VOC, SVOC, and NAPL detections and it was determined not to be a concern for the building.

Therefore, the release of volatiles from impacted soil/fill, groundwater, and NAPL is not considered relevant in association with vapor intrusion but could be considered relevant

in association with soil excavation and/or remedial activities in which impacted materials are handled.

Volatile organic monitoring in accordance with an approved (CAMP) would be implemented during remedial activities and, if required, mitigation measures will be employed during future remediation and redevelopment to minimize the potential exposure. Therefore, volatilization is considered a relevant but unlikely migration pathway.

5.3 Surface Water Runoff

The potential for soil particle transport due to surface water runoff is low, as the entire Site is currently covered by concrete, asphalt, and buildings, and future redevelopment plans include the same. Any outdoor intrusive activity will incorporate erosion controls that would be implemented in accordance with an approved stormwater pollution prevention plan (SWPPP) or Master Erosion Control Plan (MECP). As such, surface water runoff is not considered a relevant migration pathway.

5.4 Leaching

Leaching refers to chemicals present in soil/fill migrating downward to groundwater as a result of infiltration of precipitation. The Site is predominantly covered by asphalt, building, and concrete walkways that mitigates infiltration of precipitation.

The field findings and analytical results collected from the Site, indicates some VOC and SVOC impact, and NAPL are present at one (1) location, SB-8/MW-1. The soil/fill samples collected from in the vicinity of the NAPL identified have the highest concentrations. As such, leaching is considered a relevant pathway in the limited location where NAPL is present at the Site.

5.5 Groundwater Transport

Groundwater underlying the Site flows southeasterly (see Figure 5) with a calculated average hydraulic gradient of 0.004 to 0.07. SC and RI groundwater analytical results (see Tables 2 and 7) indicate VOCs, naphthalene and limited metal analytes (typical of urban environments) were detected in the groundwater above their respective GWQS.

The Site and surrounding areas are serviced by a municipal (supplied) potable water service (City of Batavia) with no evidence of pumping wells in the area of the Site. VOCs and naphthalene present in the groundwater are limited to the eastern portion of the Site. NAPL is present at one (1) location, MW-1. VOC groundwater concentrations appear to decrease from MW-1, where NAPL is present, through TKMW-6 and MW-02 to the south. As such, transport via groundwater migration is a relevant migration pathway; however, COCs present would not reach receptors at significant exposure point concentrations.

5.6 Exposure Pathways

Based on the analysis of chemical fate and transport provided above, the pathways through which Site COCs could reach receptors at significant exposure point concentrations are: fugitive dust during intrusive activities, volatilization during remedial activities, and leaching.

Remedial activities will be necessary to address the NAPL, which significantly reduce and/or eliminates the potential for leaching on-Site and the associated groundwater contamination. During remediation and/or redevelopment construction activities, the use of proper personal protective equipment (PPE), CAMP and erosion and sediment control strategies will be implemented to mitigate the potential for on- and off-site exposure; and, if necessary, excavation dewatering will be completed in accordance with an approved City of Batavia, Bureau of Water and Sewer temporary discharge permit.

6.0 QUALITATIVE EXPOSURE ASSESSMENT

6.1 Human Health Exposure Assessment

A qualitative exposure assessment consists of characterizing the exposure setting (including the physical environment and potentially exposed human populations), identifying exposure pathways, and evaluating contaminant fate and transport.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five (5) elements:

- Receptor population
- Contaminant source
- Contaminant release and transport mechanism
- Point of exposure
- Route of exposure

An exposure pathway is complete when all five elements of an exposure pathway are documented; a potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway is not documented but could reasonably occur. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway does not exist in the present and will not exist in the future.

6.1.1 Receptor Population

The receptor population includes the people who are or may be exposed to contaminants at a point of exposure. The identification of potential human receptors is based on the characteristics of the Site, the surrounding land uses, and the probable future land uses. The Site is presently used for commercial office space (family medical practice and associated parking) and the surrounding properties include other commercial facilities (offices, bar/restaurant, ice rink) and a fire department.

Under current Site use conditions (i.e., commercial office and remediation) potential receptors would include employees and patrons of the commercial business, construction workers involved in the remediation and/or redevelopment of the Site, and trespassers who may traverse the property during intrusive activities.

Construction workers and employees of the medical office will be comprised of adults, and patrons of the medical office and trespassers would likely be both adolescents and adults. In these instances, exposure frequency is expected to be minimal (short-term). SVI has not been identified as a concern for the building, therefore exposure is not a concern for employees and patrons inside the building.

6.1.2 Contaminant Sources

The source of contamination is defined as either the source of contaminant release to the environment (such as a waste disposal area or point of discharge) or the impacted environmental medium (soil, air, biota, water) at the point of exposure. Section 4.0 discusses the COCs present in unremediated Site media at elevated concentrations. The COCs present in Site media at elevated concentrations are generally limited to VOCs, SVOCs and NAPL present in the vicinity of the former Tar House in the northern portion of the Site. The low-level groundwater contamination present in the vicinity of the former Tar House and to the southeast are likely due to the NAPL present. Although VOCs have been identified at the Site, SVI has not been identified as a concern for the Site building.

6.1.3 Contaminant Release and Transport Mechanisms

Contaminant release and transport mechanisms carry contaminants from the source to points where people may be exposed, and are specific to the type of contaminant and site use. For the non-volatile COCs present in Site soil/fill, contaminant release and transport mechanisms will generally be limited to fugitive dust migration, direct contact during future planned intrusive work/remedial activities since the Site is predominantly covered by hardscape (building/asphalt/concrete, and leaching. For the volatile COCs in the unsaturated zone, the contaminant release and transport mechanism is limited to volatilization during intrusive remedial activities and future Site redevelopment. Although volatile COCs have been identified at the Site, SVI has not been identified as a concern for the Site building.

6.1.4 Point of Exposure

The point of exposure is a location where actual or potential human contact with a contaminated medium may occur. Based on the limited exceedances of CSCOs in soil/fill for benzene and SVOCs, the point of exposure is defined as those areas that will remain after planned remedial activities. For both the current and future use scenarios, groundwater is not considered a relevant mechanism for exposure due to groundwater management procedures during intrusive activities; the availability of a municipal potable water source; and the requirement for an Environmental Easement that will restrict the use of Site groundwater.

6.1.5 Route of Exposure

The route of exposure is the manner in which a contaminant actually enters or contacts the body (i.e., ingestion, inhalation, dermal absorption). Based on the types of receptors and points of exposure identified above, potential routes of exposure are listed below:

Current Use Scenario

- Construction Worker (short-term) – Skin contact, incidental ingestion, inhalation of vapor or fugitive dust from COCs present in the impacted subsurface soil/fill, groundwater and NAPL.
- Site Employee/Site Visitor/Trespasser (short-term) – inhalation of fugitive dusts from excavation activities completed in areas of the Site impacted with COCs.

Future Use Scenario (Unremediated)

- Construction Worker (short-term) – Skin contact, incidental ingestion, inhalation of vapor or fugitive dust from COCs present in the impacted subsurface soil/fill, groundwater and NAPL.
- Site Employee/Site Visitor/Trespasser (short-term) – inhalation of fugitive dusts from excavation activities completed in areas of the Site impacted with COCs.

6.1.6 Exposure Assessment Summary

Based on the above assessment of potential exposure receptors, sources, transport mechanisms, exposure points, and routes of exposure, potential exposure pathways exist if the Site is left unremediated or without proper controls.

Construction workers or maintenance workers contact, incidental ingestion, inhalation of vapor or fugitive dust from COCs present in the impacted subsurface could occur. These

potential exposure routes could be mitigated through the use of proper PPE and control measures during excavation activities and/or servicing of utilities.

Site employees, site visitors, and/or trespassers inhalation of fugitive dust impacted with COCs from excavation activities could occur. This potential exposure route could be mitigated through the use of control measures during excavation activities and/or servicing of utilities.

6.2 Potential Ecological Assessments

The historical use of the Site has eliminated the majority of native species. The Site is located in a mainly commercial area of downtown Batavia, currently used for commercial purposes and the majority of the Site is covered in hardscape (asphalt, building, and concrete walkways), providing no wildlife habitat or food value.

There are no significant natural communities within ½-mile of the Site according to the NYSDEC's Environmental Resource Mapper (ERM), with the exception a federal wetland located approximately 0.3 miles southwest and Tonawanda Creek located approximately 0.1 miles northwest of the Site.

The Site is used commercially as a doctor office, which is consistent with surrounding property use and zoning. The existing buildings, asphalt/ concrete, and maintained ornamental landscaping substantially limit availability of suitable cover type for reestablishment of biota. Based on the Fish and Wildlife Resource Impact Analysis Decision Key included as Appendix E (NYSDEC DER-10 Appendix 3C), no FWRIA is warranted.

7.0 REMEDIAL ALTERNATIVE EVALUATION

This section of the RI/FFS involves an assessment of remedial alternatives to address remedial action at the Site or media as necessary to assure that it is protective of human health and the environment under the current and reasonably anticipated future use scenario (commercial use), and that measures are put in place to mitigate potential use of the Site consistent with the anticipated future use.

7.1 Land Use Evaluation

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated land use be factored into the evaluation. The regulations identify 16 criteria that must be considered. These criteria and the resultant outcome for the Batavia Former MGP Site are presented in Appendix F. As indicated, Appendix F supports continued commercial use and commercial redevelopment as the reasonably anticipated future use of the Site, consistent with past use. Accordingly, remedial alternatives to remediate the Site to restricted commercial end use are identified and evaluated herein.

In addition to the evaluation of alternatives to remediate to the likely end use of the Site, commercial use, NYSDEC regulation and policy calls for evaluation of more restrictive end-use scenarios. This will include an unrestricted use scenario (considered under 6NYCRR Part 375-2.8 to be representative of cleanup to pre-disposal conditions). Per NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (Ref. 14), evaluation of a "no-action" alternative is also required to provide a baseline for comparison against other alternatives. These alternatives are discussed in greater detail in later in this report.

7.2 Development of Remedial Action Objectives and General Response Actions

The development of an appropriate remedial approach begins with definition of site-specific Remedial Action Objectives (RAOs) to address human health and ecological risk or other significant environmental issues identified in the Remedial Investigation. General Response Actions (GRAs) are then developed as potential means to achieve the RAOs.

7.3 Remedial Action Objectives

The remedial actions for the Batavia Former MGP Site must satisfy Remedial Action Objectives (RAOs). RAOs are site-specific statements that convey the goals for minimizing substantial risks to public health and the environment. For the Site, appropriate RAOs have been defined as:

Soil/Fill RAOs

- Remove, treat, or mitigate contaminated soil/fill to the degree possible to protect public health and the environment and prevent further degradation of on-site and off-site groundwater quality.
- Prevent ingestion/direct contact with contaminated soil/fill.
- Prevent migration of contaminants that may further result in groundwater or surface water contamination.
- Prevent inhalation of or exposure to contaminants volatilizing from contaminated soil/fill.

Groundwater RAOs

- Prevent ingestion of groundwater containing contaminant levels exceeding NYSDEC Class GA GWQS/GVs or with visual/olfactory evidence of impact.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- Prevent degradation of on-site and off-site water quality.

7.4 General Response Actions

General Response Actions (GRAs) are broad classes of actions that are developed to achieve the RAOs and form the foundation for the identification and screening of remedial technologies and alternatives.

The GRAs available to address the RAOs for soil/fill include:

- Institutional controls (e.g., Site Management Plan, Environmental Easement)
- Engineering controls (e.g., cover system)
- Treatment (e.g., in-situ or ex-situ)
- Excavation and off-site disposal

The GRAs available to address the RAOs for groundwater include:

- Monitored natural attenuation
- Institutional controls
- Engineering controls (e.g., pump-and-treat)
- Treatment (e.g., in-situ or ex-situ)

Although several GRAs may be considered for addressing groundwater impacted by VOCs, NAPL, and naphthalene, the focused nature of the groundwater impact, the absence of off-site concerns, and the relatively low levels of the detected compounds (less than 1 mg/l) suggest that treatment or removal of the source of the groundwater contamination which will reduce VOC concentrations is the most feasible means to address this issue, followed by monitored natural attenuation. Accordingly, the GRA applicable for groundwater impacted by low level petroleum-VOCs and naphthalene is to address the source (COC-contaminated soil and NAPL) present in the vicinity of SB-8/MW-01, followed by monitored natural attenuation.

7.5 Standards, Criteria and Guidance

According to DER-10 Section 1.3(b)71, standards, criteria, and guidance (SCGs) refers to: "*standards and criteria that are generally applicable, consistently applied, and officially promulgated, that are either directly applicable or not directly applicable but are relevant and appropriate, unless good cause exists why conformity should be dispensed with, and with consideration being given to guidance determined, after the exercise of scientific and engineering judgment, to be applicable. This term incorporates both the CERCLA concept of 'applicable or relevant and appropriate requirements' (ARARs) and the USEPA's 'to be considered' (TBCs) category of non-enforceable criteria or guidance. For purposes of this Guidance, 'soil SCGs' means the soil cleanup objectives and supplemental soil cleanup objectives identified in 6NYCRR 375-6.8 and the Commissioner Policy on Soil Cleanup Guidance (CP-51).*"

Additional discussions concerning the specific chemical-, action-, and location-specific SCGs that may be applicable, relevant, or appropriate to remedy selection for the Site are presented below. In each case, the identified SCGs are generally limited to regulations or technical guidance in lieu of the environmental laws from which they are authorized, as the laws are typically less prescriptive in nature and inherently considered in the regulatory and

guidance evaluations. Table 8 summarizes the SCGs by media that may be applicable or relevant and appropriate to the Site.

7.5.1 Chemical-Specific SCGs

Chemical-specific SCGs are usually health- or risk-based concentrations in environmental media (e.g., air, soil, water), or methodologies that when applied to site-specific conditions, result in the establishment of concentrations of a chemical that may be found in, or discharged to, the ambient environment. The determination of potential chemical-specific SCGs for a site is based on the nature and extent of contamination; potential migration pathways and release mechanisms for site contaminants; reasonably anticipated future site use; and likelihood that exposure to site contaminants will occur.

The RI and previous investigation sampling events included the collection and analysis of subsurface soil/fill, sub-slab vapor and indoor air, groundwater, and soil vapor samples.

7.5.2 Location-Specific SCGs

Location-specific SCGs are restrictions placed on the concentration of hazardous substances or the conduct of activities solely because they are in a specific location. Some examples of these unique locations include floodplains, wetlands, historic places, and sensitive ecosystems or habitats. The location of the site is a fundamental determinant of its impact on human health and the environment.

7.5.3 Action-Specific SCGs

Action-specific SCGs are restrictions placed on particular treatment or disposal technologies. Examples of action-specific SCGs are effluent discharge limits and hazardous waste manifest requirements.

7.6 Evaluation of Remedial Alternatives

NYSDEC's Environmental Remediation Program calls for remedy evaluation in accordance with DER-10 - Technical Guidance for Site Investigation and Remediation (Ref. 14). Specifically, the guidance states "When proposing an appropriate remedy, the person responsible for conducting the investigation and/or remediation should identify and develop a remedial action that is based on the following criteria..:"

- **Overall Protection of Public Health and the Environment**. This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
- **Compliance with Standards, Criteria, and Guidance (SCGs)**. Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.
- **Long-Term Effectiveness and Permanence**. This criterion evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: (i) the magnitude of the remaining risks (i.e., will there be any significant threats, exposure pathways, or risks to the community and environment from the remaining wastes or treated residuals), (ii) the adequacy of the engineering and institutional controls intended to limit the risk, (iii) the reliability of these controls, and (iv) the ability of the remedy to continue to meet RAOs in the future.
- **Reduction of Toxicity, Mobility or Volume with Treatment**. This criterion evaluates the remedy's ability to reduce the toxicity, mobility, or volume of site contamination. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the site.
- **Short-Term Effectiveness**. Short-term effectiveness is an evaluation of the potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during construction and/or implementation. This includes a discussion of how the identified adverse impacts and health risks to the community or workers at the site will be controlled, and the effectiveness of the controls. This criterion also includes a discussion of engineering controls that will be used to mitigate short term impacts (i.e., dust control measures), and an estimate of the length of time needed to achieve the remedial objectives.
- **Implementability**. The implementability criterion evaluates the technical and administrative feasibility of implementing the remedy. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.
- **Cost**. Capital, operation, maintenance, and monitoring costs are estimated for the remedy and presented on a present worth basis.
- **Community Acceptance**. This criterion evaluates the public's comments, concerns, and overall perception of the remedy. Remedial alternatives are not

typically evaluated against this criterion in the context of the feasibility study; assessment of a proposed remedy for community acceptance is performed during the public comment period on the proposed remedial action plan.

7.7 Alternatives Evaluation

In addition to the evaluation of alternatives to remediate to commercial use (i.e., the likely end use of the Site), NYSDEC regulation and policy calls for evaluation of more restrictive end-use scenarios, such as an unrestricted use scenario (considered under 6NYCRR Part 375 to be representative of cleanup to pre-disposal conditions), and a scenario less restrictive than the reasonably anticipated future use. Per NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, evaluation of a "no action" alternative is also required to provide a baseline for comparison against other alternatives. The alternatives evaluated below include:

- Alternative 1: No Action
- Alternative 2: Unrestricted Use Cleanup
- Alternative 3: Restricted Commercial Use Cleanup

7.8 Volume, Nature, and Extent of Contamination

Estimation of the volume, nature, and extent of media that may require remediation to satisfy the RAOs or that needs to be quantified to facilitate evaluation of remedial alternatives is presented in this section. For the unrestricted use scenario, the cleanup goal would be to achieve USCOs. For the reasonably anticipated future use scenario, the cleanup goal would be to achieve CSCOs. The volume and extent of media requiring cleanup under these scenarios is presented in Sections 7.8.1 and 7.8.2. In all instances, these volume estimates (and associated cost estimates presented later in this AAR) are projected based on data collected and observations made during the previous SC and RI activities.

7.8.1 Comparison to Unrestricted SCOs

Exceedances of the USCOs were noted in discrete soil/fill samples collected, primarily for benzene, PAHs, and arsenic. Figure 7 shows the approximate aerial extent of USCO exceedances (15,700 square feet) that defines the unrestricted use cleanup approach. The depth of impact varies across these five areas and ranged from fill material present below the asphalt parking lot to 26 fbgs.

The locations, parameter(s), and estimated impacted depth at each of the five areas are as follows:

- SB-1, Acetone: 5 feet – 481 cubic yards (CY)
- SB-4, Arsenic: 15 feet – 1,055 CY
- SB-7 & SB-8, NAPL, benzene and PAHs: 13 feet – 2,528 CY
- TKMW-6 & SB-9, PAHs: 15 feet – 1,589 CY
- TKMW-7, PAHs and Arsenic: 6 feet – 255 CY

Therefore, the volume of impacted soil/fill requiring remediation under the unrestricted use scenario is approximately 5,961 CY.

7.8.2 Comparison to Commercial Use SCOs

The soil/fill data indicates three (3) areas that would require remedial action under a restricted commercial use cleanup scenario in addition to the use of a DER-10 compliant cover system at the Site. The three (3) areas are as follows, as shown on Figure 8:

SB-8/MW-1: Subsurface conditions identified in this area indicated the presence of NAPL and grossly impacted soil/fill and is considered a source area that should be addressed. Remedial action in this area would involve addressing the NAPL and grossly impacted source area materials from approximately 5 to 15 fbgs. The volume of soil/fill to be addressed is estimated at 500 CY.

TP-1/SB-9/TKMW-6: Subsurface conditions identified in this area indicate the presence of grossly impacted soil/fill which is considered a source area that should be addressed. Remedial action in this area would involve addressing the grossly impacted materials, NAPLs, visual waste material, PAHs greater than 500 mg/kg, and nuisance conditions from approximately 7 to 15 fbgs. The volume of soil/fill to be addressed is estimated at 445 CY.

TKMW-7: Subsurface conditions consist of fill material below the topsoil in this area to a depth of 5 to 6 fbgs that contain total PAHs at a concentration of 637.5 mg/kg that should be addressed. Remedial action in this area would involve addressing the

fill material greater than 500 mg/kg total PAHs from approximately ground surface to 6 fbgs. The volume of soil/fill to be addressed is estimated at 90 CY.

Remedial actions under restricted commercial use cleanup scenario would involve removal or treatment of NAPL and grossly impacted source area materials in the three (3) areas discussed above and the use of a DER-10 compliant cover system across the Site.

Therefore, the volume of impacted soil/fill requiring remediation under the commercial use scenario is approximately 1,035 CY.

7.8.3 Groundwater Impacts

Petroleum-VOCs, naphthalene, and metals were detected above GWQS. The metals detected (iron, magnesium, manganese, and sodium) are not considered to be a concern as discussed in Section 4.2.

The petroleum-VOCs and naphthalene present are likely associated with migration from the source area at SB-8/MW-1 and are well below 1 mg/l in concentration and not considered to be significant. Treatment or removal of the source area and natural attenuation will further reduce the groundwater contamination present at the Site.

7.8.4 Soil Vapor Intrusion

Based on the site-specific data soil vapor intrusion is not a concern.

7.9 Alternative 1: No Further Action

The "no further action" alternative is defined as taking no additional measures to address soil or groundwater at the Site.

Overall Protection of Public Health and the Environment – The Site is not protective of human health and the environment, due to the presence of contamination remaining on-site above SCGs; and the absence of institutional controls to prevent more restrictive forms of future site use (e.g., unrestricted, residential, and restricted residential) or the export of Site soils to uncontrolled off-site locations. Accordingly, the no action alternative is not protective of public health and does not satisfy the RAOs.

Compliance with SCGs – Under the current and reasonably anticipated future use scenario (commercial use), the contamination detected in soil/fill and groundwater does not comply with applicable SCGs.

Long-Term Effectiveness and Permanence – The no action alternative involves no remedial activities, equipment, institutional controls, or facilities subject to maintenance, and provides no long-term effectiveness or permanence toward achieving the RAOs.

Reduction of Toxicity, Mobility, or Volume with Treatment – The no action alternative does not reduce the toxicity, mobility, or volume of contamination beyond natural degradation/attenuation and, therefore, is not protective of public health and does not satisfy the RAOs.

Short-Term Effectiveness – There would be no short-term adverse impacts and risks to the community, workers, or the environment attributable to implementation of the no further action alternative.

Implementability – No technical or administrative implementability issues are associated with the no further action alternative.

Cost – There are no capital or long-term operation, maintenance, or monitoring costs associated with the no further action alternative.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities, including a public comment period for the RI/FFS Report.

7.10 Alternative 2: Unrestricted Use Cleanup

An Unrestricted Use Cleanup alternative would necessitate remediation of soil/fill where concentrations exceed the USCO per 6NYCRR Part 375. For unrestricted use scenarios, excavation and off-site disposal of impacted soil/fill is generally regarded as the

most applicable remedial measure because long-term engineering and institutional controls cannot be used to supplement the remedy. As such, the unrestricted use alternative assumes that those areas that exceed USCOs would be excavated and disposed at an off-site commercial solid waste landfill. Therefore, as described in Section 7.8.1, an estimated 5,195 CY of soil/fill would be excavated to achieve USCOs. In order to access impacted material at depth, the asphalt parking lot within these five areas would need to be removed and the existing site building may require shoring for excavation activities in the vicinity of SB-7 and SB-8/MW-1.

It is anticipated that the excavation activities in the vicinity of SB-8/MW-1 would remove the NAPL (source area) present at the Site as it have not been identified at other areas of the Site. Removal of the source area would also further improve the groundwater quality at the Site, which would continue to attenuate under natural conditions.

Overall Protection of Public Health and the Environment – The Unrestricted Use Cleanup would be protective of public health under any reuse scenario. However, this alternative would permanently use and displace approximately 5,961 CY of valuable landfill airspace, causing ancillary environmental issues due to reduced landfill capacity, and require excavating, transporting, and placing 5,961 CY of clean soil from an off-site borrow source to backfill the excavation, also contributing to significant detrimental off-site environmental issues. The unrestricted use alternative would achieve the corresponding Part 375 SCOs, which are designed to be protective of public health under any reuse scenario.

Compliance with SCGs – The Unrestricted Use Cleanup would need to be performed in accordance with applicable, relevant, and appropriate SCGs. Soil excavation activities would necessitate preparation of and adherence to a CAMP in accordance with Appendices 1A and 1B of DER-10.

Long-Term Effectiveness and Permanence – The Unrestricted Use Cleanup alternative would achieve removal of all residual impacted soil/fill; therefore, no soil/fill exceeding the USCOs would remain on the Site. In addition, groundwater

quality would improve with the removal of the source area. As such, the unrestricted use alternative would provide long-term effectiveness and permanence.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – Through removal of all impacted soil/fill, the unrestricted use alternative would reduce the toxicity, mobility, and volume of Site contamination permanently and significantly. However, since this alternative transfers Site soil/fill from one environment to another, an overall reduction of toxicity and volume would not occur. Mobility of soluble constituents would be reduced in the commercial landfill with a liner, cover system, and leachate collection. Removal of the source area and natural attenuation would improve the groundwater quality reducing the contamination present.

Short-Term Impacts and Effectiveness – The principal advantage of a large-scale excavation to achieve USCOs is reliability of effectiveness in the long-term. In the short-term, there would be significant increase in exposure of impacted soil/fill to on-site workers and the community under this alternative. Excavation activities would be completed over an approximate one month period, and backfilling/asphalt repair would take approximately one to two weeks. Commercial construction equipment would be used, a health and safety plan would be followed, and community air monitoring would be completed during excavation activities. However, primary disadvantages include: increased truck traffic during excavation and backfill; noise; and, air emissions, including fugitive dust and odors. This action would result in potential storm water impacts at the borrow source(s) and on-site; diesel fuel consumption on the order of 1,500 gallons (assuming 30 miles round trip to a local landfill; 8 miles per gallon) to transport the 400 truckloads of impacted soil/fill, with several thousands of gallons also consumed by construction equipment. The USEPA's estimated CO_2 generation rate for diesel engines is approximately 22.2 pounds per gallon of diesel consumed. Accordingly, this alternative would produce over 33,000 pounds of greenhouse gas. Therefore, this alternative represents a significant adverse effect in the short-term; however, the RAOs would be achieved once the soil/fill is removed from

the Site, which would remove the source of groundwater contamination and improve groundwater quality.

Implementability – Excavating to depths of 13 to 15 fbgs in sandy soil, poses several technical implementability concerns. Sloughing of excavation walls could occur and shoring/stabilizing excavation sidewalls may be necessary. Groundwater handling, treatment, and/or discharge/disposal would be required. Given the volume of soil/fill required for removal, a high volume of truck traffic in the City of Batavia would be needed to transport the impacted soil/fill off-site.

Cost-Effectiveness – The capital cost of implementing the unrestricted use alternative is estimated at $1.57 million with a total operation, maintenance and monitoring estimate of $40,000. Table 9 provides a detailed breakdown of these costs.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities.

7.11 Alternative 3 – Restricted Commercial Use Cleanup

Under Alternative 3, the Site would be cleaned up to facilitate the current and reasonably anticipated continued future commercial use including:

- In-situ stabilization (ISS) of soil/fill/NAPL present in the source area. A treatability study/pre-design investigation will be completed prior to implementation of the ISS to determine proper stabilization mixture/methods and the extent of area to be treated.
- Excavation and off-site disposal of soil/fill present at in the source area at TP-1/SB-9/TKMW-6.
- Excavation and off-site disposal of soil/fill with concentrations of total PAHs greater than 500 mg/kg in the area of TKMW-7.
- Use of a DER-10 compliant cover system to prevent exposure to remaining subsurface contamination.
- Managing impacted water encountered during remedial activities.

- Engineering Controls:
  - Maintaining existing cover system consisting of the building foundation and asphalt parking lot. Asphalt cover removed for future development must be replaced by 6 inches of concrete or asphalt (including sub-base material), or a minimum of 1 foot of clean soil/gravel meeting CSCOs.
- Institutional Controls:
  - Implementing a Site Management Plan (SMP) including an Environmental Easement, EC/IC Plan, Site Monitoring Plan, Excavation Work Plan, O&M Plan, Site use limitations, and groundwater use restrictions.

The following criteria will be used for determining the limits of the excavation remedial element:

- Grossly contaminated soil/fill, as defined by 6 NYCRR Part 375-1.2(u);
- Presence of NAPLs;
- Soil/fill with visual waste material or NAPL;
- Soil/fill containing total PAHs exceeding 500 mg/kg;
- Soil which exceed the protection of groundwater soil cleanup objectives (PGWSCOs) as defined by 6NYCRR Part 375-6.8 for those contaminants found in the site groundwater above standards; and
- Soil/fill that creates a nuisance condition as defined by the Commissioner Policy CP-51 Section G.

The following criteria will be used for determining the limits of the ISS treatment remedial element:

- Grossly contaminated soil/fill, as defined by 6 NYCRR Part 375-1.2(u);
- Presence of NAPLs;
- Soil/fill containing total PAHs exceeding 500 mg/kg;

Specific details of the remediation will be provided in the Remedial Action Work Plan (RAWP) which will be submitted to the Department for review and approval.

Overall Protection of Public Health and the Environment – This alternative will meet NYSDEC requirements for a commercial use cleanup and is protective of public health and the environment. As discussed in Section 1, R&J would like to fulfill its obligations under the existing Consent Order (e.g., complete RI/FFS) and apply for

entry of the Site into the BCP to complete any remedial activities. R&J was not responsible for the discharge of the contamination present and subject to the RI/FFS.

The RAOs for the Site would be satisfied through the planned extent of remedial activities listed above including source area soil/fill treatment and/or removal; cover system installation; management of water encountered during remedial actions; maintaining the existing cover systems; and, the use of ICs to prevent potential future exposure and limit the future use to commercial purposes. Groundwater quality will be monitored over time in accordance with the SMP. Accordingly, the Commercial Use Cleanup alternative is protective of public health and fully satisfies the soil and groundwater RAOs.

Compliance with SCGs – The planned commercial use remedial activities comply with the SCGs for a restricted use commercial cleanup, as the source areas of contamination (SB-8/MW-1 and TP-1/SB-9/TKMW-6) and fill material with greater than 500 mg/kg total PAHs (TKMW-7) will be addressed. Addressing these areas will allow groundwater quality conditions to naturally restore to the extent practical and the use of a DER-10 compliant cover system will prevent exposure to remaining contamination in the subsurface.

The commercial use cleanup will require a SMP that will include an EC/IC Plan that describes the procedures for the implementation and management of all EC/ICs at the Site; a Site Monitoring Plan that describes the measures for evaluating the performance and effectiveness of the remedy to reduce, mitigate or prevent exposure to contamination at the Site, including cover system maintenance; an Excavation Work Plan to address any impacted soil/fill encountered during post-development intrusive and/or maintenance activities; a Sampling Plan to monitor groundwater; and a Site-wide inspection program to assure that the EC/ICs placed on the Site have not been altered and remain effective.

Long-Term Effectiveness and Permanence – Treatment and/or removal of source area soil/fill, installation of additional cover system as needed and maintenance of the

existing cover systems will prevent direct contact with soil/fill exceeding CSCOs and address the source of the groundwater contamination at the Site. A SMP will address any impacted soil/fill encountered during future Site intrusive/maintenance activities, and provides a mechanism to assure that the EC/ICs placed on the Site have not been altered and remain effective. Furthermore, an Environmental Easement for the Site will be filed with Genesee County, which will limit future Site use to commercial uses, restrict groundwater use, and reference the Department-approved SMP. As such, this alternative will provide long-term effectiveness and permanence.

Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment – This alternative will reduce the toxicity, mobility, and volume of source area contamination by addressing soil/fill/NAPL present in the vicinity of SB-8/MW-1 and TP-1/SB-9. Treatment and/or removal of the source areas will also address the source of the groundwater contamination present at the Site which will further improve groundwater quality. Installation of additional cover system and maintenance of the existing cover system will prevent direct contact with soil/fill exceeding CSCOs. The SMP will include an Excavation Work Plan to address any impacted soil/fill encountered during future Site intrusive/maintenance activities and a Site-wide inspection program to assure that the EC/ICs placed on the Site have not been altered and remain effective. Accordingly, this alternative satisfies this criterion.

Short-Term Impacts and Effectiveness – The short-term adverse impacts and risks to the community, workers, and environment will be controlled during implementation of the remedy. During intrusive remedial activities, including soil/fill treatment/excavation, backfilling, and handling of contaminated soil/fill, could potentially cause adverse short-term effects. Community air monitoring for vapors, dust particulates, and odors will be performed during intrusive activities to assure conformance with community air monitoring action levels. The potential for chemical exposure and physical injury are reduced through safe work practices; proper personal protection equipment (PPE); environmental monitoring; establishment of work zones and Site control; and appropriate decontamination procedures. The planned remedial activities will be completed within one construction season and performed in

accordance with a Department-approved Work Plan, including a HASP and CAMP. This alternative achieves the RAOs for the Site.

Implementability – No technical or action-specific administrative implementability issues are associated with the Commercial Use Cleanup alternative.

Cost – The capital cost of implementing a Commercial Use alternative is estimated at $323,000 with a total operation, maintenance and monitoring estimate of $40,000. The total cost of this alternative is approximately $363,000. Table 10 presents the capital and O&M cost estimate.

Community Acceptance – Community acceptance will be evaluated based on comments received from the public in response to Fact Sheets and other planned citizen participation activities.

7.12 Comparison of Remedial Alternatives

The previous sections describe remedial alternatives for the Batavia Former MGP Site and evaluate these alternatives against the screening criteria. Table 11 provides a comparison of the alternatives by media to identify remedial measures that will achieve the RAOs for the Site.

7.13 Recommended Remedial Alternative

Based on the alternatives analysis evaluation, *Alternative 3 – Commercial Use Cleanup* is the recommended final remedial approach for the Batavia Former MGP Site. This alternative is fully protective of public health and the environment; significantly less disruptive to the Site and community; consistent with current and future land use; and represents a more cost-effective approach than other alternatives while fully satisfying the RAOs. The recommended remedial alternative would involve:

- A treatability study/pre-design investigation will be completed prior to implementation of the ISS to determine proper stabilization mixture/methods and the extent of area to be treated.
- Treatment via in-situ stabilization of soil/fill/NAPL present in the source area, SB-8/MW-1 from depths of approximately 5 to 15 fbgs.

- Excavation and off-site disposal of soil/fill present in the source area TP-1/SB-9/TKMW-6 to a depth of approximately 7 to 15 fbgs
- Excavation and off-site disposal of fill material with total PAHs greater than 500 mg/kg present in the area of TKMW-7 from approximately ground surface to 6 fbgs.
- Managing impacted water encountered during remedial activities.
- Use of a DER-10 compliant cover system across the Site. Areas void of hardscape along the perimeter of the Site will either be covered with additional hardscape or sampled to determine if upper 1 foot is compliant with a restricted commercial use cover system.
- Engineering Controls:
  - Maintaining cover system consisting of the building foundation and asphalt parking lot. Asphalt cover removed for future development must be replaced by 6 inches of concrete or asphalt (including sub-base material), or a minimum of 1 foot of clean soil/gravel meeting CSCOs.

- Institutional Controls:
  - Implementing a Site Management Plan (SMP) including an Environmental Easement, EC/IC Plan, Site Monitoring Plan, Excavation Work Plan, O&M Plan, Site use limitations, and groundwater use restrictions.

This remedy is fully protective of public health and the environment; is advantageous over other remedies when evaluated against the remedy selection criteria; fully satisfies the RAOs for the Site; and comports with the current commercial use at the Site. The components and details of the remaining tasks will be more fully described in an RAWP.

8.0 POST-REMEDIAL REQUIREMENTS

8.1 Final Engineering Report

Following completion of the remedial measures, a Final Engineering Report (FER) will be submitted to the NYSDEC. The FER will include the following information and documentation, consistent with the NYSDEC regulations contained in 6NYCRR Part 375-1.6(c):

- Background and Site description.
- Summary of the Site remedy that satisfied the RAOs for the Site.
- Certification by a Professional Engineer to satisfy the requirements outlined in 6NYCRR Part 375-1.6(c)(4).
- Description of engineering and institutional controls at the Site.
- Site map showing the areas remediated.
- Documentation of imported materials.
- Documentation of materials disposed off-site.
- Copies of daily inspection reports and, if applicable, problem identification and corrective measure reports.
- Air monitoring data and reports.
- Photo documentation of remedial activities.
- Text describing the remedial activities performed; a description of any deviations from the Work Plan and associated corrective measures taken; and other pertinent information necessary to document that the site activities were carried out in accordance with this Work Plan.
- Analytical data packages and DUSRs.

8.2 Site Management Plan

The SMP for the Batavia Former MGP Site will be prepared and submitted concurrent with the FER. The purpose of the SMP is to assure that proper procedures are in place to provide for long-term protection of public health and the environment after remedial construction is complete. The SMP is comprised of four main components:

- Engineering and Institutional Control Plan
- Site Monitoring Plan
- Operation and Maintenance Plan
- Inspections, Reporting, and Certifications

8.2.1 Engineering and Institutional Control Plan

An institutional control in the form of an Environmental Easement will be necessary to limit future use of the Site to restricted commercial applications and prevent groundwater use for potable purposes or as industrial process water without prior approval from NYSDOH or an authorized county health department.

The Engineering and Institutional Control (EC/IC) Plan will include a complete description of all institutional and/or engineering controls employed at the Site, including the mechanisms that will be used to continually implement, maintain, monitor, and enforce such controls. The EC/IC Plan will include:

- A description of all EC/ICs on the Site.
- The basic implementation and intended role of each EC/IC.
- A description of the key components of the ICs set forth in the Environmental Easement.
- A description of the features to be evaluated during each required inspection and periodic review, including the EC/IC certification, reporting, and Site monitoring.
- A description of plans and procedures to be followed for maintenance of the cover system as required.
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the Site remedy, as determined by the NYSDEC.

8.2.2 Site Monitoring Plan

The Site Monitoring Plan will describe the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, including:

- Sampling and analysis of all appropriate media (e.g., groundwater).
- Assessing compliance with applicable NYSDEC SCGs, particularly ambient groundwater standards and Part 375 RRSCOs for soil.

- Assessing achievement of the remedial performance criteria.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.
- Preparing the necessary reports for the various monitoring activities.

To address these issues adequately, this Site Monitoring Plan will provide information on:

- Sampling locations, protocol, and frequency.
- Information on all designed monitoring systems (e.g., well logs).
- Analytical sampling program requirements.
- Reporting requirements.
- Quality assurance/quality control (QA/QC) requirements.
- Inspection and maintenance requirements for monitoring wells.
- Monitoring well decommissioning procedures.
- Annual inspection and periodic certification.

Annual groundwater monitoring to assess overall reduction in contamination on-site will be conducted for the first 5 years. The frequency thereafter will be discussed with the NYSDEC. Trends in contaminant levels in groundwater in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals.

8.2.3 Operation and Maintenance Plan

An Operation & Maintenance (O&M) Plan governing maintenance of the cover system will:

- Include the O&M activities necessary to allow individuals unfamiliar with the Site to maintain the cover systems
- Include an O&M contingency plan.
- Evaluate Site information periodically to confirm that the remedy continues to be effective for the protection of public health and the environment. If necessary, the O&M Plan will be updated to reflect changes in Site conditions or the manner in which the cover system is maintained.

8.2.4 Inspections, Reporting, and Certifications

Site-wide inspections will be conducted annually or as otherwise approved by the NYSDEC. All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in a Periodic Review Report (PRR).

The PRR will be submitted to the NYSDEC annually (or as otherwise approved) beginning 18 months after the Certificate of Completion or equivalent document is issued. The PRR will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. The PRR will include:

- Identification, assessment, and certification of all EC/ICs required by the remedy for the Site.
- Results of the required annual Site inspections and severe condition inspections, if applicable.
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format.
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (e.g., groundwater), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format.
- A Site evaluation that includes the following:
  - The compliance of the remedy with the requirements of the site-specific RAWP, and/or Decision Document.
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications.
  - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Site Monitoring Plan for the media being monitored.

- Recommendations regarding any necessary changes to the remedy and/or Site Monitoring Plan.
- The overall performance and effectiveness of the remedy.

The signed EC/IC Certification will be included in the PRR. For each institutional or engineering control identified for the Site, a Professional Engineer licensed to practice in New York State will certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the EC/ICs required by the remedial program was performed under my direction.
- The EC/ICs employed at this Site are unchanged from the date the control was put in place, or last approved by the NYSDEC.
- Nothing has occurred that would impair the ability of the control to protect the public health and environment.
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control.
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control.
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document.
- Use of the Site is compliant with the Environmental Easement.
- The EC systems are effective and performing as designed.
- 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.
- The information presented in this report is accurate and complete.

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Plan will be submitted to the NYSDEC for approval. This Plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Plan until it is approved by the NYSDEC.

9.0 RI/FFS SUMMARY AND CONCLUSIONS

Based on the data and analyses presented in the preceding sections, we offer the following summary and conclusions:

- NAPL was present in SB-8/MW-01 in the vicinity of the former tar house in the northern portion of the Site and is the likely cause of the VOCs and SVOCs contamination in soil/fill and groundwater.
- VOCs (specifically benzene) and SVOCs are present in the soil/fill at SB-8 (vicinity of the former tar house in the northern portion of the Site, see Figure 6) at concentrations above their respective CSCOs. This is also the location of the NAPL discussed above.
- Previous findings at TP-1 indicated the presence of black soil, strong product odors, and PID measurements of 399 ppm at approximately 6 to 7 fbgs. This is likely contamination associated with the former UST that was reportedly present in this area of the Site.
- Elevated SVOCs/PAHs (greater than 500 mg/kg) were also detected from 2 to 5 fbgs at TKMW-7. The elevated SVOCs are likely associated with fill material present at TKMW-7, TP-4 and TP-5 to the west and are not associated with impacts from the NAPL identified at SB-8/MW-1.
- Low-level VOCs and SVOCs were detected in the groundwater at the Site. Although not considered a significant concern, the low-level contamination (total concentrations less than 1 mg/L) is likely associated with the NAPL present in the vicinity of the former tar house (see Figure 5) and contamination present in the vicinity of TP-1 in the southeastern corner of the Site. Treatment and/or removal of the source areas at the Site will address the source of groundwater contamination at the Site and improve groundwater quality.
- Based on the previously completed SVI investigation and NYSDOH/NYSDEC concurrence, vapor intrusion is not a concern of the on-site building and will not require further action.
- Given the nature and extent of contamination present in the soil/fill and groundwater, and the long history of commercial/industrial use, it is not reasonably practicable to remediate the property to pre-release (Unrestricted Use) or Restricted-Commercial Use conditions in the upper 15 feet.

Based on the Alternatives Analysis, a Restricted Commercial Use cleanup would achieve the Site's RAOs and is the selected remedy. Additional components of the remedial measures to achieve the selected remedy include:

- A treatability study/pre-design investigation will be completed prior to implementation of the ISS to determine proper stabilization mixture/methods and the extent of area to be treated.
- Treatment via in-situ stabilization of soil/fill/NAPL present in the source area, SB-8/MW-1 from depths of approximately 5 to 15 fbgs.
- Excavation and off-site disposal of soil/fill present in the source area TP-1/SB-9/TKMW-6 to a depth of approximately 7 to 15 fbgs
- Excavation and off-site disposal of fill material with total PAHs greater than 500 mg/kg present in the area of TKMW-7 from approximately ground surface to 6 fbgs.
- Managing impacted water encountered during remedial activities.
- Use of a DER-10 compliant cover system across the Site. Areas void of hardscape along the perimeter of the Site will either be covered with additional hardscape or sampled to determine if the upper 1 foot is compliant with a restricted commercial use cover system.
- Engineering Controls:
    - Maintaining the cover system consisting of the building foundation and asphalt parking lot. Asphalt cover removed for future development must be replaced by 6 inches of concrete or asphalt (including sub-base material), or a minimum of 1 foot of clean soil/gravel meeting CSCOs.
- Institutional Controls:
    - Implementing a Site Management Plan (SMP) including an Environmental Easement, EC/IC Plan, Site Monitoring Plan, Excavation Work Plan, O&M Plan, Site use limitations, and groundwater use restrictions.

10.0 REFERENCES

1. TurnKey Environmental Restoration, LLC. *Remedial Investigation Work Plan, 11 Evans Street, Batavia, NY – Site No. 819019*. March 30, 2016.

2. The Shaw Group Inc. *Site Characterization Report, Batavia Former MGP, 11 Evans Street, Batavia, Genesee County, New York, 14021, Site No. 89019, Contract Work Authorization No. D006132-23*. November 2012.

3. TurnKey Environmental Restoration, LLC. *Former Batavia MGP Site (819019), Subslab/Indoor Air Sampling Report*. May 8, 2015.

4. Connestoga-Rovers & Associates. *Interim Remedial Measures Work Plan, Batavia Former MGP Site, NYSDEC Site No. 819019*. December 2014.

5. New York State Department of Health. *Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in NYS, 1997 – 2003*. November 14, 2005.

6. New York State Department of Environmental Conservation. *DAR-1, Guidelines for the Control of Toxic Ambient Air Contaminants*. November 12, 1997.

7. The University of the State of New York. *Geologic Map of New York, Niagara Sheet*. 1970.

8. United States Department of Agriculture (USDA), Soil Conservation Service. *Soil Survey of Genesee County, New York*. 1969.

9. USClimatedata.com. http://www.usclimatedata.com/climate/batavia/new-york/united-states/usny0090

10. United States Census Data. http://censusreporter.org/profiles/16000US3604715-batavia-ny/

11. New York State Department of Environmental Conservation. *Environmental Resource Mapper*.

12. United States Fish and Wildlife Services. *National Wetlands Inventory, Wetlands Map*.

13. Federal Emergency Management Agency. *Flood Map 3602790001B*. September 16, 1982.

14. New York State Department of Environmental Conservation. *Draft DER-10; Technical Guidance for Site Investigation and Remediation*. December 2002.

15. New York State Department of Health. *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. October 2006 (and subsequent updates).

TABLES

TABLE 1

SUMMARY OF PREVIOUS SITE CHARACTERIZATION SOIL-FILL ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PARAMETER[1]	Unrestricted SCOs [2]	Protection of Groundwater SCOs [3]	Commercial SCOs [3]	SB-1 5-10' 9/6/2011	SB-2 10-15' 9/6/2011	SB-3 10-15' 9/6/2011	SB-4 10-15' 9/7/2011	SB-4 25-26' 9/7/2011	SB-5 10-15' 9/7/2011	SB-6 10-15' 9/7/2011	SB-7 9-12' 9/8/2011	SB-8 10-14' 9/12/2011	SB-9 5-10' 9/12/2011	SB-10 10-15' 9/13/2011
Volatile Organic Compounds (VOCs) - mg/Kg [3]														
1,2,4-Trimethylbenzene	**3.6**	**3.6**	**190**	ND	ND	ND	ND	ND	ND	ND	ND	**140**	0.024	ND
1,3,5-Trimethylbenzene	**8.4**	**8.4**	**190**	ND	ND	ND	ND	ND	ND	ND	ND	**72**	0.0096	ND
4-Isopropyltoluene	**--**	**--**	**--**	ND	ND	ND	0.0016 J	ND	ND	ND	ND	ND	0.0045 J	ND
Acetone	**0.05**	**0.05**	**500**	**0.11 J**	0.017 J	0.0096 J	0.014 J	0.014 J	0.013 J	0.0092 J	0.0091 J	ND	**0.11 J**	0.024 J
Benzene	**0.06**	**0.06**	**44**	ND	ND	ND	ND	ND	0.0031 J	ND	0.0031 J	**150**	ND	ND
Carbon disulfide	**--**	**--**	**--**	ND	ND	0.0027 J	0.0068	ND	0.0014 J	ND	ND	ND	ND	ND
Ethylbenzene	**1**	**1**	**390**	ND	ND	ND	ND	ND	ND	ND	ND	**20**	ND	ND
Isopropylbenzene	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	13	0.0064	ND
n-Butylbenzene	**12**	**12**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	5.6 J	0.0029 J	ND
n-Propylbenzene	**3.9**	**3.9**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	**5.2 J**	0.0043 J	ND
sec-Butylbenzene	**11**	**11**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0031 J	ND
Styrene	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	48	ND	ND
Toluene	**0.7**	**0.7**	**500**	ND	ND	ND	ND	ND	ND	ND	0.0012 J	**140**	ND	ND
Xylene (total)	**0.26**	**1.6**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	**220**	0.0025 J	ND
Semi Volatile Organic Compounds (SVOCs)- mg/kg [4]														
2,4-Dimethylphenol	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	450 EJ	ND	ND
2-Methylphenol (o-Cresol)	**0.33**	**0.33**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	**450 EJ**	ND	ND
4-Methylphenol (p-Cresol)	**0.33**	**0.33**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	**200 DJ**	0.058 J	ND
Bis(2-ethylhexyl)phthalate	**--**	**--**	**--**	ND	0.096 J	0.47	0.045 J	0.046 J	0.063 J	0.24	0.17	ND	0.59 J	ND
Butylbenzylphthalate	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	**--**	**--**	**--**	ND	ND	0.062 J	0.12 J	ND	ND	0.084 J	0.047 J	290 DJ	2.1	0.066 J
Dibenzofuran	**7**	**210**	**350**	ND	ND	ND	0.1 J	ND	ND	0.12 J	0.049 J	**650 D**	1.6	0.065 J
Phenol	**0.33**	**0.33**	**500**	ND	ND	ND	ND	ND	ND	ND	ND	**120 DJ**	ND	ND
Acenaphthene	**20**	**98**	**500**	ND	ND	ND	0.28	ND	0.28	ND	0.12 J	**450 D**	2.2	ND
Acenaphthylene	**100**	**107**	**500**	0.059 J	ND	0.21	0.47	ND	0.046 J	0.082 J	0.59	**630 D**	1.1	0.081 J
Anthracene	**100**	**1000**	**500**	0.049 J	ND	0.097 J	0.27	ND	ND	0.21	0.28	**820 D**	6.1 D	0.15 J
Benzo(a)anthracene	**1**	**1**	**5.6**	0.38	ND	0.57	0.69	ND	ND	0.33	**2.7**	**640 D**	**8.4 D**	0.13 J
Benzo(a)pyrene	**1**	**22**	**1**	0.47	ND	0.52	0.58	ND	ND	0.22	**2.5**	**450 D**	**8 D**	0.11 J
Benzo(b)fluoranthene	**1**	**1.7**	**5.6**	0.59	ND	0.79	0.79	ND	ND	0.29	**2.2**	**530 D**	**9.7 D**	0.12 J
Benzo(g,h,i)perylene	**100**	**1000**	**500**	0.3	ND	0.43	0.4	ND	ND	0.14 J	1.4	**200 DJ**	5.4 D	0.053 J
Benzo(k)fluoranthene	**0.8**	**1.7**	**56**	0.27	ND	0.31	0.34	ND	ND	0.18 J	**1.6**	**190 DJ**	**3.2 D**	0.049 J
Dibenzo(a,h)anthracene	**0.33**	**1000**	**0.56**	0.11 J	ND	0.12 J	0.097 J	ND	ND	0.042 J	**0.35**	**69**	**1.6**	ND
Chrysene	**1**	**1**	**56**	0.32	ND	0.67	0.88	ND	ND	0.3	**2.3**	**520 D**	**7.7 D**	0.13 J
Fluoranthene	**100**	**1000**	**500**	0.37	0.045 J	0.78	2.3	ND	ND	0.73	2.8	**1400 D**	18 D	0.31 J
Fluorene	**30**	**386**	**500**	ND	ND	0.04 J	0.33	ND	ND	ND	0.1 J	**780 D**	2.7	0.098 J
Indeno(1,2,3-cd)pyrene	**0.5**	**8.2**	**5.6**	0.29	ND	0.35	0.34	ND	ND	0.13 J	**1.1**	**190 DJ**	**4.4 D**	0.047 J
Naphthalene	**12**	**12**	**500**	0.26	0.12 J	ND	0.38	ND	ND	ND	0.083 J	**3800 D**	1.4	ND
2-Methylnaphthalene	**--**	**--**	**--**	ND	ND	ND	0.13 J	ND	ND	ND	ND	1000 D	0.63	ND
Phenanthrene	**100**	**1000**	**500**	0.098 J	ND	0.26	2	0.041 J	ND	0.81	0.2	**2400 D**	18 D	0.44
Pyrene	**100**	**1000**	**500**	0.39	ND	0.8	2.2	ND	ND	0.54	3.4 D	**1200 D**	15 D	0.26
Total SVOCs	**--**	**--**	**--**	3.96	0.26	6.48	12.74	0.09	0.39	4.45	21.99	17,429	117.88	2.11
Total PAHs	**--**	**--**	**500**	3.96	0.17	5.95	12.35	0.04	0.33	4.00	21.52	**14,269**	112.90	1.98
Total PCBs- mg/kg [4]														
Total PCBs	**0.1**	**3.2**	**1**	--	--	ND	--	--	--	--	ND	ND	ND	--
Metals- mg/kg														
Aluminum	**--**	**--**	**--**	4840	3140	5070	4260	3880	5270	5730	2280	3350	4900	2420
Antimony	**--**	**--**	**--**	0.65 J	ND	0.3 J	0.47 J	0.73 J	ND	ND	0.43 J	ND	0.75 J	ND
Arsenic	**13**	**16**	**16**	3	6	3.6	4.2	**16.9**	3.8	4.9	7.1	5.1	5.2	2.6
Barium	**350**	**820**	**400**	18	23.3	52.8	54.6	40.2	20.7	38.6	14	23.1	50.1	19.5
Beryllium	**7.2**	**47**	**590**	0.24 B	0.16 B	0.19	0.16	0.34	0.27	0.42	0.097 B	0.16 B	0.2 B	0.11 B
Cadmium	**2.5**	**7.5**	**9.3**	0.26	0.25 J	0.37 J	0.4 J	0.18 J	ND	ND	0.57 J	0.45 J	2.1 J	0.3 J
Calcium	**--**	**--**	**--**	2440	76700	73600	131000	68400	12300	28100	17600	71300	65300	116000
Chromium	**30**	**NS**	**1500**	7.6	6.7	7.7	6.6	7.6	8.7	12.6	3.6	6.5	7.6	4.6
Cobalt	**--**	**--**	**--**	4.1 J	4.1 J	3.8 J	3.8 J	12.4 J	4.5 J	6.3 J	2.3 J	1.7 EJ	4.1 EJ	2.1 EJ
Copper - Total	**50**	**1750**	**270**	19.4	17.3	18.5	14.7	**63.2**	18.8	21.3	9.8	11	22.6	8.6
Iron - Total	**--**	**--**	**--**	10500	9520	10100	7970	18900	11700	14000	8930	6520	27900	6710
Lead - Total	**63**	**450**	**1000**	34.6	6.2	21.6	6.8	15	6.6	8.1	4.1	33.2	31.1	3.9
Magnesium - Total	**--**	**--**	**--**	1850	16900	20200	17200	12900	4980	6940	36400	33100	10500	28100
Manganese - Total	**--**	**--**	**10000**	320	317	315	341	235	286	186	495	208	331	364
Nickel - Total	**30**	**130**	**310**	15.7 J	14.3 J	11.4 J	11 J	**64.3 J**	14.7 J	16.3 J	7.5 J	4.9	12.3 EJ	6.4 EJ
Potassium - Total	**--**	**--**	**--**	545	669	847	900	1140	486	773	747	803	946	733
Selenium - Total	**3.9**	**4**	**1500**	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND
Silver - Total	**2**	**8.3**	**1500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium - Total	**--**	**--**	**--**	70.1	115	310	196	141	137	393	220	247	216	200
Thallium - Total	**--**	**--**	**--**	ND	0.35 B	ND	ND	2	ND	ND	0.23 B	0.5 B	ND	ND
Vanadium - Total	**--**	**--**	**--**	9.2	8.7	10.6	9.3	18.8	11.9	14.6	7.5	7.7	9.7	7.5
Zinc - Total	**109**	**2480**	**10000**	43.2 J	35.9 J	68.4 J	68.9 J	30.2 J	38.8 J	38.4 J	36.1 J	53.4 EJ	**1250 EJ**	17.8 EJ
Mercury - Total	**0.18**	**0.73**	**2.8**	0.017 B	0.012 B	0.02 B	0.018 B	0.034 B	0.049	0.044	0.059	0.035 B	0.037 B	0.0068 B
Cyanide	**27**	**40**	**27**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides and Herbicides- mg/kg [4]														
Endosulfan sulfate	**2.4**	**1000**	**200**	--	--	ND	--	--	--	--	ND	ND	0.0052 J	NA

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Values per NYSDEC Part 375 Restricted-Commercial Soil Cleanup Objectives (SCOs).
4. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs
5. Naphthalene was report on both the VOC and SVOC analytical compound lists used by the Spectrum Analytical, Inc. during the Site Characterization. For purposes of discussion in the RI/FFS report, naphthalene is discussed as a SVOC.

Definitions:

ND = Parameter not detected above laboratory detection limit.
NA = Parameter not analyzed for.
"--" = No value available for the parameter or compound was not analyzed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
B = Analyte was detected in associated method blank.
E = Results exceeded calibration range.
EJ= Concentration exceeded calibration standards in initial analyses. But was not detected in the subsequent dilution. The concentration is estimated.
D= Analysis was performed under a sample dilution.
DJ= Analysis was performed under a sample dilution. The compound was positively identified, but the concentration is below the adjusted reporting limit of dilution.
R= Result was of poor quality and rejected through third party validation.

Bold	= Result exceeds Unrestricted SCOs.
Bold	= Results exceed Protection of Groundwater SCOs.
Bold	= Result exceeds Commercial SCOs.

TABLE 2

SUMMARY OF PREVIOUS SITE CHARACTERIZATION GROUNDWATER ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PARAMETER[1]	NYSDEC T.O.G.S 1.1.1 Groundwater Quality Standard [2]	MW-02	MW-03	MW-04
		10/5/2011	9/29/2011	9/29/2011
Volatile Organic Compounds (VOCs) ug/L				
1,2,4-Trimethylbenzene	**5***	**25**	ND	ND
1,3,5-Trimethylbenzene	**5***	**9**	ND	ND
4-Isopropyltoluene	**5***	2	ND	ND
Acetone	**50**	ND	ND	11 J
Benzene	**1**	0.71 J	**2.6**	ND
Isopropylbenzene	**5***	2.8	ND	ND
m,p-Xylene	**5***	**5.4**	ND	ND
n-Propylbenzene	**5***	2.4	ND	ND
o-Xylene	**5***	0.97 J	ND	ND
sec-Butylbenzene	**5***	0.73 J	ND	ND
Toluene	**5**	0.74 J	ND	ND
Xylene (total)	**5***	6.3	ND	ND
Semi Volatile Organic Compounds (SVOCs) ug/L				
Carbazole	**--**	1.5 J	ND	ND
Fluoranthene	**50**	ND	1.7 J	ND
Naphthalene	**10**	6 J	ND	ND
PCBs ug/L				
		ND	ND	ND
Pesticides ug/L				
		ND	ND	ND
Metals ug/L				
Aluminum	**--**	ND	75.3 B	1120
Arsenic	**25**	4.7	ND	ND
Barium	**1,000**	194 B	261	203
Calcium	**--**	182000	159000	280000
Chromium	**50**	ND	ND	2.3 B
Cobalt	**--**	ND	ND	1.5 B
Copper	**200**	ND	ND	7 B
Iron	**300**	**8460**	**3570**	**3670**
Magnesium	**35,000**	28900	26500	**77300**
Maganese	**300**	**984**	**824**	**399**
Nickel	**100**	0.2 B	ND	5.7 B
Potassium	**--**	13100	21100	25300
Sodium	**20,000**	**100000**	**194000**	**31400**
Vanadium	**--**	ND	ND	5.6
Zinc	**2,000**	ND	ND	20.2
Cyanide	**200**	ND	105	6.4 B

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC T.O.G.S 1.1.1 Groundwater Quality Standard
3. Values reported as micrograms per liter (ug/L) or parts per billion (ppb).
4. The results presented for MW-02 are the higher of the actual sample result or its respective duplicate sample.

Definitions:

ND = Parameter not detected above laboratory detection limit.
NA = Parameter not analyzed for.
"--" = No value available for the parameter.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
B = Analyte was detected in associated method blank.
R= The data was rejected through third party data validation and deemed unusable.
* = The compound is a Principle Organic Contaminant and the class standard of 5 ug/L applies.

Bold = NYSDEC T.O.G.S 1.1.1 Groundwater Quality Standard

TABLE 3

SUMMARY OF PREVIOUS SITE CHARACTERIZATION SOIL VAPOR AND AMBIENT AIR ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / FOUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PARAMETERS	SVP-1	SVP-2	SVP-3	AMBIENT
Volatile Organic Compounds (VOCs) - micrograms per cubic meter (ug/m^3)				
Propene	ND	4.4	0.99 J	1.2
Dichlorodifluoromethane (CFC 12)	2.3 J	1.9	2.1 J	2
Chloromethane	ND	0.27 J	0.49 J	0.38 J
1,3-Butadiene	ND	0.23 NJ	ND	ND
Ethanol	ND	ND	4.4 J	3.4 J
Acetonitrile	ND	7.4	ND	ND
Acrolein	ND	ND	0.93 J	0.69 J
Acetone	ND	19 B	ND	ND
Trichlorofluoromethane	ND	1.1	1.1 J	1.1
2-Propanol (Isopropyl Alcohol)	25	ND	2.3 J	2.2
Trichlorofluoroethane	ND	0.46 J	0.51 J	0.49 J
Carbon Disulfide	ND	1.4 J	1.2 J	ND
Vinyl Acetate	ND	0.83 J	ND	ND
2-Butanone (MEK)	4.1 J	3.8 J	1.4 J	0.69 J
n-Hexane	ND	0.91	0.32 J	0.45 J
Chloroform	ND	0.38 J	0.24 J	ND
Benzene	ND	15	0.32 J	0.85
Carbon Tetrachloride	ND	0.31 J	0.31 J	0.35 J
Cyclohexane	ND	0.42 J	ND	ND
Bromodichloromethane	ND	0.15 NJ	ND	ND
Trichloroethene	ND	ND	0.14 J	ND
n-Heptane	ND	0.57 J	0.26 J	0.26 J
4-Methyl-2-pentanone	ND	0.61 J	ND	ND
Toluene	3 J	8.9	1.8 J	1.8
2-Hexanone	ND	1 NJ	0.34 J	ND
n-Octane	ND	0.32 J	0.27 J	ND
Tetrachloroethene	1.8 J	0.18 J	0.21 J	ND
Ethylbenzene	ND	1.5	0.44 J	0.4 J
m,p-Xylenes	8.5 J	7.3	1.5 J	1.1
Styrene	ND	0.83	ND	ND
o-Xylene	3.6 J	5.5	0.5 J	0.44 J
n-Nonane	4.2 J	0.76	0.53 J	0.45 J
Cumene	ND	0.17 J	ND	ND
alpha-Pinene	ND	0.67	0.18 J	ND
n-Propylbenzene	ND	0.21 J	ND	ND
4-Ethyltoluene	ND	0.54 J	ND	ND
1,3,5-Trimethylbenzene	3.1 J	3.9	0.22 NJ	ND
1,2,4-Trimethylbenzene	11	5.7 NJ	0.67 J	0.55 J
d-Limonene	ND	0.29 NJ	ND	ND
Naphthalene	41	100	ND	ND

Notes:
1. Only those parameters detected above the method detection limits, at a minimum of one location are presented in this table.
2. ND = compound concentration below reporting limit.
3. J = The compound was positively identified, but the concentration is an estimated value.
4. NJ = The result could is tentative in identification and could potentially be a false-positive. The reported value is an estimate.
5. B = Compound was detected in associated method blank.

TABLE 4A

SUMMARY OF 2015 SOIL VAPOR INTRUSION SAMPLE ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

Parameter [1]	NYSDOH Indoor 90th Percentile Comparison (µg/m3) [2]	DAR-1 AGCs (µg/m3) [3]	OSHA PELs (µg/m3) [4]	Sample Location				
				Lobby		Utility Room		Outdoor
				Subslab	Indoor	Subslab	Indoor	
Volatile Organic Compounds (VOCs) - µg/m3								
1,1,2,2-Tetrachloroethane	<0.25	NA	NA	1.3	ND	ND	ND	ND
1,1,1- Trichloroethane	3.1	NA	NA	ND	0.27 J	2.2	ND	ND
1,1-Dichloroethene	<0.25	NA	NA	ND	0.52 J	ND	ND	ND
1,2,4-Trichlorolbenzene	3.4	NA	NA	ND	ND	ND	ND	0.43 J
1,2,4-Trimethylbenzene	9.5	NA	NA	0.93 J	1.2 B	4.1	ND	0.078 J B
1,2-Dichlorobenzene	0.7	200	300,000	ND	1.2 J B	ND	ND	ND
1,2-Dichloroethene, Total	<0.25	63	790,000	ND	1.6	ND	ND	ND
1,3,5-Trimethylbenzene	3.6	NA	NA	ND	0.89 J	1.4	ND	ND
1,4-Dichlorobenzene	1.3	NA	NA	ND	0.21 J B	ND	ND	ND
4-Ethyltoluene	--	NA	NA	0.21 J	0.66 J	1.1	ND	ND
4-Isopropyltoluene	--	NA	NA	ND	ND	1.1	ND	ND
Acetone	110	NA	NA	23	17	25	12	4.1 J
Benzene	15	NA	NA	2.3	0.9	2.6	0.64	0.52 J
Carbon disulfide	--	NA	NA	2.1	ND	2.9	ND	ND
Carbon tetrachloride	0.81	NA	NA	0.37	0.78	0.24 J	0.59	0.52
Chloroethane	<0.25	10,000	2,600,000	0.77 J	2.6	ND	1.9	ND
Chloroform	1.4	NA	NA	0.5 J	ND	ND	0.19 J	ND
Cyclohexane	8.1	NA	NA	12 J	ND	25	ND	ND
Chloromethane	3.3	NA	NA	ND	1.5	0.16 J	1.2	1.2
cis-1,2-Dichloroethene	<0.25	63	790,000	ND	1.6	ND	ND	ND
Cumene	--	NA	NA	0.4 J	0.2 J	0.91 J	ND	ND
Dichlorodifluoromethane	15.0	NA	NA	2.3 J	3.6	2.3 J	3.1	2.9
Ethylbenzene	7.4	NA	NA	1.4	2.3	2.9	0.13 J	0.12 J
Freon 22	--	NA	NA	0.75 J	ND	4.9	ND	1.2 J
Freon TF	--	NA	NA	0.52 J	0.86 J	0.54 J	0.73 J	0.7 J
Hexachlorobutadiene	4.6	NA	NA	ND	ND	ND	ND	0.77 J
Isopropyl alcohol	--	NA	NA	110 E	730 E	11 J	350 E	2.7 J
Methyl Ethyl Ketone	16.0	NA	NA	2.1	1.3 J	5	0.91 J	ND
Methylene Chloride	22.0	NA	NA	1.1 J	0.74 J	1.1 J	ND	0.78 J
Naphthalene	--	NA	NA	ND	1.1 J	ND	ND	ND
n-Butane	--	NA	NA	24	2.8	28.0	2.3	1.3
n-Heptane	19.0	NA	NA	27	0.26 J	55	ND	ND
n-Hexane	18.0	NA	NA	22	0.39 J	49	ND	0.27 J
Styrene	1.3	NA	NA	1	ND	4.2	ND	ND
n-Propylbenzene	1.7	NA	NA	ND	0.49 J	0.99	ND	ND
tert-Butyl alcohol	--	NA	NA	ND	2.4 J	4.3 J	ND	ND
Tetrachloroethene	2.9	NA	NA	9.7	1.4	12	ND	ND
Toluene	58.0	NA	NA	12	39	26	1	0.89
Trichloroethene	0.5	NA	NA	23	ND	ND	ND	ND
Trichlorofluoromethane	17.0	NA	NA	1.2	2	1.2	1.6	1.5
Xylene (total)	--	NA	NA	7.6	11	17	0.24 J	0.51 J
m,p-Xylene	12.0	NA	NA	5.7	8.9 B	13	0.24 J B	0.37 J B
o-Xylene	7.6	NA	NA	1.9	2.8	4.4	ND	0.15 J

Notes:

1. Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.
2. Indoor Air sampling results compared to the NYSDOH Summary of Indoor and Outdoor Levels of Volatile Organic Compounds for Fuel Oil Heated Homes in NYS (Novemeber 2005)
3. NYSDEC Policy DAR-1, Guidelines for the Control of Toxic Ambient Air Contaminants, Annual Guideline Concentration (AGC).
4. Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL).
5. Sampling completed on March 18-19, 2015.

J = Estimated value.
B = Compound was detected in the associated method blank at a concentration that may have contributed to sample result.
E= Result exceeds calibration range.
ND = Compound analyzed but not detected at a concentration above the reporting limit.
'-- = No value set for this
NA= Not applicable

= NYSDOH Matrix 1 compound - carbon tetrachloride, trichloroethene, vinyl chloride (see Table 2)
= NYSDOH Matrix 2 compound - Tetrachloroethene, 1,1,1-trichloroethane, cis-1,2-dichloroethene, and 1,1-dichlrooethene (see Table 2)
= Value exceeds NYSDOH Indoor Air Guidance - 90th percentile (see Note 2).

TABLE 4B

COMPARISON OF 2015 SOIL VAPOR INTRUSION SAMPLE RESULTS VS. NYSDOH MATRICES

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
Lobby														
Subslab	0.37		23		ND		9.7		ND		ND		ND	
Indoor	0.78	I,R	ND	NFA	ND	NFA	1.4	NFA	0.27	NFA	1.6	NFA	0.52	NFA

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
Utility Room														
Subslab	0.24		ND		ND		ND		2.2		ND		ND	
Indoor	0.59	I,R	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA

Notes:
ND = Not Detected
NFA = No further action.
I, R = Take reasonable and practical actions to identify source(s) and reduce exposures.

= NYSDOH Matrix 1 Compounds
= NYSDOH Matrix 2 Compounds

TABLE 5

SUMMARY OF REMEDIAL INVESTIGATION SAMPLING AND ANALYSIS PROGRAM

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

Sample Identifier	Depth Sampled/ Screened (fbgs)	Analysis					Date Sampled	Notes
		TCL VOCs	TCL SVOCs	TAL Metals	TAL Metals (Dissolved)	Total Cyanide		
Subsurface Soil/Fill			*X*					
TKMW-5	9 to 11	X	X	X		X	04/13/2016	
TKMW-6	8 to 10	X	X	X		X	04/13/2016	
TKMW-7	2 to 5	X	X	X		X	04/13/2016	Duplicate
TKMW-8	5.5 to 7.5	X	X	X		X	04/13/2016	MS/MSD
TKMW-9	5 to 7	X	X	X		X	04/13/2016	
Groundwater								
TKMW-5	5 to 15	X	X	X		X	04/27/2016	
TKMW-6	5 to 15	X	X	X		X	04/27/2016	MS/MSD
TKMW-7	5 to 15	X	X	X		X	04/27/2016	
TKMW-8	5 to 15	X	X	X		X	04/27/2016	Duplicate
TKMW-9	5 to 15	X	X	X		X	04/27/2016	

TABLE 6

SUMMARY OF REMEDIAL INVESTIGATION SOIL/FILL SAMPLE ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs[2]	Protection of Groundwater SCOs[2]	Commercial Use SCOs[2]	TKMW-5 (9-11')	TKMW-6 (8-10')	TKMW-7 [4] (2-5')	TKMW-8 (5.5-7.5')	TKMW-9 (5-7')
				04/13/2016				
Volatile Organic Compounds (VOCs) - mg/Kg [3]								
Ethylbenzene	**1**	**1**	**390**	ND	**1.3**	ND	ND	ND
Isopropylbenzene (Cumene)	--	--	--	ND	0.58 J	ND	ND	ND
Methylcyclohexane	--	--	--	ND	29	ND	ND	ND
Methylene chloride	**0.05**	**0.05**	**500**	ND	ND	ND	0.0041 J	0.0033 J
Total Xylenes	**0.26**	**0.26**	**500**	ND	**3.5**	ND	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]								
2-Methylnaphthalene	--	--	--	ND	4.6	ND	ND	ND
Acenaphthene	**20**	**98**	**500**	ND	3.2	4 J	ND	ND
Acenaphthylene	**100**	**107**	**500**	ND	0.88 J	ND	ND	ND
Anthracene	**100**	**1000**	**500**	ND	3.3	10 J	ND	ND
Benzo(a)anthracene	**1**	**1**	**5.6**	0.18 J	**3.5**	**66 J**	ND	ND
Benzo(a)pyrene	**1**	**22**	**1**	0.11 J	**3.2**	**90 J**	ND	ND
Benzo(b)fluoranthene	**1**	**1.7**	**5.6**	0.16 J	**3.4**	**98 J**	ND	ND
Benzo(ghi)perylene	**100**	**1000**	**500**	ND	2.3	66 J	ND	ND
Benzo(k)fluoranthene	**0.8**	**1.7**	**56**	0.091 J	**1.2**	**45 J**	ND	ND
Biphenyl	--	--	--	ND	0.46 J	ND	ND	ND
Carbazole	--	--	--	ND	1.2	4.7 J	ND	ND
Chrysene	**1**	**1**	**56**	0.19 J	**3.3**	**53 J**	ND	ND
Dibenzo(a,h)anthracene	**0.33**	**1000**	**0.56**	ND	ND	**9.8 J**	ND	ND
Dibenzofuran	**7**	**210**	**350**	0.64	1.1	1.8 J	ND	ND
Fluoranthene	**100**	**1000**	**500**	0.22	9.2	53 J	ND	0.068 J
Fluorene	**30**	**386**	**500**	1.4	2.1	2.4 J	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**8.2**	**5.6**	ND	**1.6**	**60 J**	ND	ND
Naphthalene	**12**	**12**	**500**	ND	**23 D**	1.3 J	ND	ND
Nitrobenzene	--	--	--	ND	ND	ND	ND	ND
Phenanthrene	**100**	**1000**	**500**	ND	12	26 J	ND	0.032 J
Pyrene	**100**	**1000**	**500**	0.28	9.8	53 J	ND	0.061 J
Total SVOCs	--	--	--	3.271	89.34	644 J	0	0.161
Total PAHs	--	--	**500**	2.631	82.44	**637.5**	0	0.161
Total Metals - mg/Kg								
Aluminum	--	--	--	5410	6520	6210	9750	16400
Arsenic	**13**	**16**	**16**	3.5	2.9	**16.1**	4.6	5.7
Barium	**350**	**820**	**400**	18.2	18.9	90.7	25.9 J	63.4
Beryllium	**7.2**	**47**	**590**	0.27	0.33	0.59	0.38	0.75
Calcium	--	--	--	96200	1340	39600 J	29500 F2	3520
Chromium	**30**	--	**1500**	8.2	10.4	11	12.4	22.1
Cobalt	--	--	--	4	4.8	6.5	4.9	9
Copper	**50**	**1,720**	**270**	11.2	14.9	38.6 J	14.8	21.1
Iron	--	--	--	9150	12300	12500	13100	21800
Lead	**63**	**450**	**1000**	9.4	7.6	**86.9**	9.9	21.5
Magnesium	--	--	--	11300	2050	8120	4070 J	3830
Manganese	**1600**	**2000**	**10000**	257	208	216	163 F1F2	275
Mercury	**0.18**	**0.73**	**2.8**	ND	ND	0.18	ND	0.03
Nickel	**30**	**130**	**310**	12.4	19.9	17.1	15.7	27.9
Potassium	--	--	--	1860	1890	1200	1470 J	3110
Sodium	--	--	--	220	ND	532	282	456
Vanadium	--	--	--	14.6	20.2	19.3	20.7 F1	37.8
Zinc	**109**	**2480**	**10000**	32.6	42.4	80.7	37.6	65
Cyanide - Total	**27**	**40**	**27**	ND	ND	ND	ND	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.
4. The results presented for TKMW-7, 2 to 5 ft are the higher of the direct sample results or its duplicate.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
^= ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F1 = MS and/or MSD Recovery is outside acceptance limits.
F2 = MS/MSD RPD exceeds control limits
D = Compounds were identified in an analyisis at the secondary dilution factor.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TABLE 7

SUMMARY OF REMEDIAL INVESTIGATION GROUNDWATER SAMPLE ANALYTICAL RESULTS

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT
BATAVAIA FORMER MGP SITE
NYSDEC SITE NO. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PARAMETER [1]	GWQS [2]	TKMW-5	TKMW-6	TKMW-7	TKMW-8 [3]	TKMW-9
Volatile Organic Compounds (VOCs) - ug/L						
Acetone	**50**	3.4 J+	ND	ND	5.7 J+	9.1 J+
Benzene	**1**	**1.4**	**25**	ND	ND	0.76 J
Carbon disulfide	**120**	ND	ND	ND	0.39 J	0.81 J
Cyclohexane	**--**	0.36 J	22 J	ND	ND	ND
Ethylbenzene	**5**	ND	**11**	ND	ND	ND
Isopropylbenzene	**5**	ND	**8.9 J**	ND	ND	ND
Methylcyclohexane	**--**	0.56 J	200 F1	ND	ND	ND
Total Xylene	**5**	ND	**21**	ND	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - ug/L						
2-Methylnaphthalene	**--**	ND	20	ND	ND	ND
Acenaphthene	**20**	7.3 J	7.6	ND	ND	ND
Anthracene	**--**	0.48 J	1.6 J	ND	ND	ND
Benzaldehyde	**--**	ND	ND	0.59 J *	ND	ND
Carbazole	**--**	ND	8.3	ND	ND	ND
Dibenzofuran	**--**	0.56 J	2.7 J	ND	ND	ND
Di-n-butyl phthalate	**50**	ND	ND	ND	0.35 J	0.35 J
Fluoranthene	**50**	ND	1.1 J	ND	ND	ND
Fluorene	**50**	2.5 J	4 J	ND	ND	ND
Napthalene	**10**	ND	**320 J-**	ND	ND	ND
Phenanthrene	**50**	1.8 J	8.9	ND	ND	ND
Pyrene	**50**	ND	0.88 J	ND	ND	ND
Total Metals - ug/L						
Aluminum	**--**	260	ND	ND	ND	4,100
Barium	**1000**	320	220	38	140	110
Calcium	**--**	186,000	189,000	109,000	200,000	229,000
Chromium	**50**	ND	ND	ND	ND	6
Cyanide	**200**	12	16	ND	ND	ND
Iron	**300**	**2,900**	**25,000**	120	280 J	**5,400**
Magnesium	**35000**	27,400	21,700	18,600	34,000	**58,300**
Manganese	**300**	**550**	**2,300**	68	**600**	**310**
Potassium	**--**	10,400	13,100	3,700	11,100	15,700
Sodium	**20000**	**236,000**	**192,000**	**45,700**	**396,000**	**399,000**
Vanadium	**14**	ND	ND	ND	ND	7.9
Zinc	**2000**	ND	ND	ND	ND	19
Field Measurements (Units as Indicated)						
pH (units)	**6.5 - 8.5**	7.05	6.9	7.3	7.09	7.09
Temperature (oC)	**--**	11.2	12	10.1	10	10.3
Specific Conductance (uS)	**--**	2190	2001	799.8	3010	3500
Turbidity	**--**	29.3	19.8	12.3	11.8	664
DO (ppm)	**--**	1.09	1.19	2.95	4.2	1.28
ORP (mV)	**--**	-60	-107	115	112	73

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds or analytes were reported as non-detect.
2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - Class GA (TOGS 1.1.1)
3. The results presented for TKMW-8 are the higher of the direct sample results or its duplicate.

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter.
J = Estimated value.
J+ = estimated value may be biased high.
J- = estimated value may be biased low.
* = Laboratory control sample or laboratory control sample duplcate is outside acceptance limits.
F1 = matrix spike and/or matrix spike duplicate recovery is outside acceptacne limits.
BOLD = Result exceeds GWQS.

TABLE 8

STANDARDS, CRITERIA, AND GUIDANCE (SCGs)

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY

BATAVIA FORMER MGP SITE
11 EVANS STREET
BATAVIA, NEW YORK

Citation	Title	Regulatory Agency
General		
29CFR 1910.120	Hazardous Waste Operations and Emergency Response	US Dept. of Labor, OSHA
29CFR 1910.1000	OSHA General Industry Air Contaminants Standard	US Dept. of Labor, OSHA
29CFR 1926	Safety and Health Regulations for Construction	US Dept. of Labor, OSHA
Not Applicable	Analytical Services Protocol	NYSDEC
6NYCRR Part 608	Use and Protection of Waters	NYSDEC
6NYCRR Part 621	Uniform Procedures Regulations	NYSDEC
6NYCRR Parts 750-757	State Pollutant Discharge Elimination System	NYSDEC
Not Applicable	New York State Stormwater Management Design Manual	NYSDEC
Section 404	Clean Water Act	USACE
Soil/Fill		
6NYCRR Part 375	Environmental Remediation Programs	NYSDEC
DEC Policy CP-51	Soil Cleanup Guidance	NYSDEC
NYSDEC, June 2014	Technical Guidance for Screening Contaminated Sediments: LEL/SEL	NYSDEC
Groundwater		
6NYCRR Part 700-705	Surface Water and Ground Water Classification Standards	NYSDEC
TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values	NYSDEC
TOGS 2.1.3	Primary and Principal Aquifer	NYSDEC
Air/Soil Vapor		
DER-10 Appendix 1B	Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites	NYSDEC
NYSDOH, October 2006	Final - Guidance for Evaluating Soil Vapor Intrusion in the State of NY	NYSDOH
Solid Waste		
6NYCRR 360	Solid Waste Management Facilities	NYSDEC
6NYCRR 364	Waste Transporters	NYSDEC

TABLE 9

COST ESTIMATE FOR UNRESTRICTED USE (TRACK 1) ALTERNATIVE

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT

BATAVIA FORMER MGP SITE
11 EVANS STREET
BATAVIA, NEW YORK

Item	Quantity	Units	Unit Cost	Total Cost	Remarks
Demolition					
ACM Abatement & Building Demolition	1	EST	$ 15,000	$ 15,000	
Loading/Trucking/Disposing C&D Material	25	TON	$ 45	$ 1,125	
Subtotal:				**$ 17,000**	
Impacted Soil/Fill Removal & Water Management					
Excavation Dewatering and Treatment	100,000	GAL	$ 0.35	$ 35,000	30% porosity, approx. 2 excavation volumes
Discharge Permit	1	EST	$ 1,500	$ 1,500	Aquire permit & sampling
Vacuum Removal of Sediments/NAPL & Disposal	1	EST	$ 15,000	$ 15,000	
Soil/Fill Excavation and Loading	9,538	TON	$ 6	$ 57,228	5,961 CY from 5 Areas (1.6 tons per CY)
Transportation and Disposal at TSDF	8,898	TON	$ 45	$ 400,410	Assumes non-haz waste disposal
Ttransportation and Disposal Hazardous Out-of State	640	TON	$ 450	$ 288,000	Assumes 640 tons of Hazardous Soil from SB-8/MW-1
Post-Excavation Confirmatory Sampling	73	EA	$ 420	$ 30,660	1 sidewall every 30 LF, 1 bottom per 900 SF in each area plus QA/QC
Data Validation	73	EA	$ 105	$ 7,665	
Subtotal:			.	**$ 836,000**	
Backfilling/Site Restoration					
Geotextile	1	SF	$ 1.50	$ 2	
Import, Backfill, Place & Compact	9,538	TON	$ 16	$ 152,608	
Backfill Characterization Sampling	19	EA	$ 100	$ 1,900	VOCs
Data Validation	19	EA	$ 25	$ 475	
Backfill Characterization Sampling	8	EA	$ 500	$ 4,000	SVOCs, PCBs, Pesticides, Metals
Data Validation	8	EA	$ 80	$ 640	
Asphalt Pavement Restoration	18,547	SF	$ 5.00	$ 92,735	excavation square footage plus 15%
Subtotal:				**$ 253,000**	
Subtotal Capital Cost				**$ 1,106,000**	
Contractor Mobilization/Demobilization (5%)				$ 55,300	
Health and Safety (2%)				$ 22,120	
Engineering/Contingency (35%)				$ 387,100	
Total Capital Cost				**$ 1,571,000**	
Operation, Maintenance & Monitoring:					
Groundwater Monitoring	5	Events	$ 6,000	$ 30,000	Annual for 5 years
Annual Certification	5	Yr	$ 2,000	$ 10,000	GW Report
Total OM&M Cost				**$ 40,000**	
Total Capital Cost for Unrestricted Use (Track 1)				**$ 1,611,000**	

TABLE 10

COST ESTIMATE FOR COMMERCIAL USE (TRACK 4) ALTERNATIVE

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT

BATAVIA FORMER MGP SITE
11 EVANS STREET
BATAVIA, NEW YORK

Item	Quantity	Units	Unit Cost	Total Cost	Remarks
Area 1 - In-situ Soil Stabilization (ISS) SB-8/MW-1					
Treatability Study & Pre-Design Investigation	1	EST	$ 15,000	$ 15,000	includes sample collection and determination of extent of treatment area.
Erosion Control	500	LF	$ 3	$ 1,500	Siltsoxx
Excavation Dewatering and Treatment	50,000	GAL	$ 0.35	$ 17,500	30% porosity, approx. 2 excavation volumes
Soil/Fill Excavation and Staging	356	TON	$ 6	$ 2,133	Assume upper 5 feet can be used for backfill
Mix Type I Portland Cement In-situ with MGP-Impacted Soils	800	TON	$ 45	$ 35,843	ISS 500 CY of soil/fill to be treated
Verification of Mixed Soils	6	EA	$ 1,000	$ 6,000	Measure Leachable PAHs & VOCs, and Ultimate Compressive Strength
Incidental Disposal of Materials (Asphalt, Cement, Etc.)	1	LS	$ 5,000	$ 5,000	Allowance
Subtotal:			.	**$ 83,000**	
Area 1 - Backfilling/Site Restoration					
Geotextile/Demarcation	1,200	SF	$ 1.50	$ 1,800	
Backfill, Place & Compact	356	TON	$ 10	$ 3,556	Backfill Stockpiled Soils
Asphalt Pavement Restoration	1,380	SF	$ 6.00	$ 8,280	excavation square footage plus 15%
Subtotal:				**$ 14,000**	
Area 2 - Impacted Soil/Fill Removal TP-1/SB-9/TKMW-6					
Soil/Fill Excavation and Loading	715	TON	$ 6	$ 4,290	445 CY from TP-1/SB-9/TKMW-6 (25 ft x 60 ft x 8 ft; 1.6 tons per CY)
Transportation and Disposal at TSDF	715	TON	$ 45	$ 32,175	Assumes non-haz waste disposal
Post-Excavation Confirmatory Sampling	11	EA	$ 420	$ 4,620	1 sidewall every 30 LF, 1 bottom per 900 SF in each area plus QA/QC
Data Validation	11	EA	$ 105	$ 1,155	
Subtotal:			.	**$ 43,000**	
Area 2 - Backfilling/Site Restoration					
Geotextile/Demarcation	1,500	SF	$ 1.00	$ 1,500	
Import, Backfill, Place & Compact	715	TON	$ 16	$ 11,440	
Backfill Characterization Sampling	5	EA	$ 100	$ 500	VOCs
Data Validation	5	EA	$ 25	$ 125	
Backfill Characterization Sampling	2	EA	$ 500	$ 1,000	SVOCs, PCBs, Pesticides, Metals
Data Validation	2	EA	$ 80	$ 160	
Asphalt Pavement Restoration	1,725	SF	$ 6.00	$ 10,350	excavation square footage plus 15%
Subtotal:				**$ 26,000**	
Area 3 - Impacted Soil/Fill Removal TKMW-7					
Soil/Fill Excavation and Loading	145	TON	$ 6	$ 870	90 CY from TKMW-7 (20 ft x 20 ft x 6 ft; 1.6 tons per CY)
Transportation and Disposal at TSDF	145	TON	$ 45	$ 6,525	Assumes non-haz waste disposal
Post-Excavation Confirmatory Sampling	8	EA	$ 420	$ 3,360	1 sidewall every 30 LF, 1 bottom per 900 SF in each area plus QA/QC
Data Validation	8	EA	$ 105	$ 840	
Subtotal:			.	**$ 12,000**	
Area 3 - Backfilling/Site Restoration					
Geotextile/Demarcation	500	SF	$ 1.00	$ 500	
Import, Backfill, Place & Compact	145	TON	$ 16	$ 2,320	
Backfill Characterization Sampling	3	EA	$ 100	$ 300	VOCs
Data Validation	3	EA	$ 25	$ 75	
Backfill Characterization Sampling	1	EA	$ 500	$ 500	SVOCs, PCBs, Pesticides, Metals
Data Validation	1	EA	$ 80	$ 80	
Asphalt Pavement Restoration	150	SF	$ 6.00	$ 900	
Subtotal:				**$ 5,000**	
Asphalt & Greenspace Cover System Installation					
Geotextile/Demarcation	8,600	SF	$ 1.00	$ 8,600	Area of asphalt placement and greenspace to be addressed
Asphalt placement in Southeast Portion of Site	5,000	SF	$ 6.00	$ 30,000	
Import, Backfill, Place & Compact	215	TON	$ 16	$ 3,440	3,600 sq feet at 1 foot thick; 133 cyds @1.6 tons per cyd
Backfill Characterization Sampling	4	EA	$ 100	$ 400	
Data Validation	4	EA	$ 25	$ 100	
Backfill Characterization Sampling	1	EA	$ 500	$ 500	SVOCs, PCBs, Pesticides, Metals
Data Validation	1	EA	$ 80	$ 80	
Subtotal:				**$ 44,000**	
Subtotal Capital Cost				**$ 227,000**	
Contractor Mobilization/Demobilization (5%)				$ 11,350	
Health and Safety (2%)				$ 4,540	
Engineering/Contingency (35%)				$ 79,450	
Total Capital Cost				**$ 323,000**	
Operation Maintenance & Monitoring:					
Groundwater Monitoring	5	Events	$ 6,000	$ 30,000	Annual for 5 years
Annual Certification	5	Yr	$ 2,000	$ 10,000	GW Report
Total OM&M Cost				**$ 40,000**	
Total Capital Cost for Commercial Use (Track 4)				**$ 363,000**	

Notes:

TABLE 11

COMPARISON OF REMEDIAL ALTERNATIVES

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT

BATAVIA FORMER MGP SITE
11 EVANS STREET
BATAVIA, NEW YORK

Remedial Alternative	NYSDEC DER-10 Evaluation Criteria								
	1. Overall	2. SCGs	3. Eff & Perm	4. Reduction	5. Imp & Eff	6. Implement	7. Cost Eff	8. Community	9. Land Use
Alternative 1 - No Action						✓	$0	TBE	
Alternative 2 - Track 1 Cleanup	✓	✓	✓	✓		✓	$1.61 million	TBE	✓
Alternative 3 - Track 4 Cleanup	✓	✓	✓	✓	✓	✓	$363,000	TBE	✓

Notes:

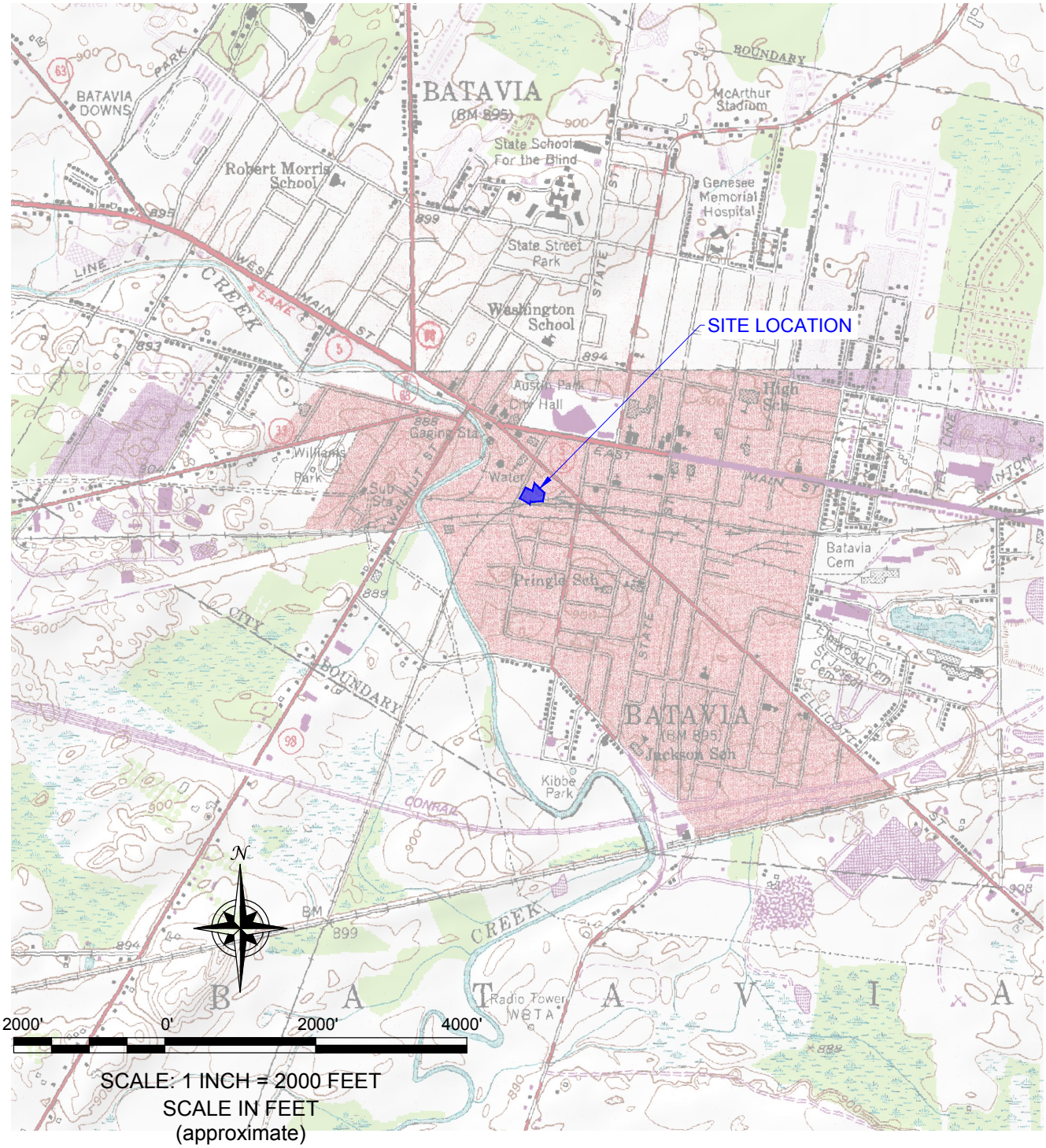
1. Overall Protectiveness of Public Health and the Environment
2. Compliance with Standards, Criteria, and Guidance (SCGs)
3. Long-Term Effectiveness and Permanence
4. Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment
5. Short-Term Impacts and Effectiveness
6. Implementability (Technical and Administrative)
7. Cost Effectiveness
8. Community Acceptance
9. Land Use

✓ = Alternative satisfies criterion
TBE = To be evaluated following public comment period

FIGURES

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RIFS\Figure 1; Site Location & Vicinity Map.dwg, DWG To PDF.pc3

FIGURE 1



TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0333-015-001

DATE: DECEMBER 2018

DRAFTED BY: RFL

SITE LOCATION AND VICINTY MAP

REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY REPORT

FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PREPARED FOR

R&J ENTERPRISES OF BATAVIA, LLC

DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

DATE: DECEMBER 2018
DRAFTED BY: RPL

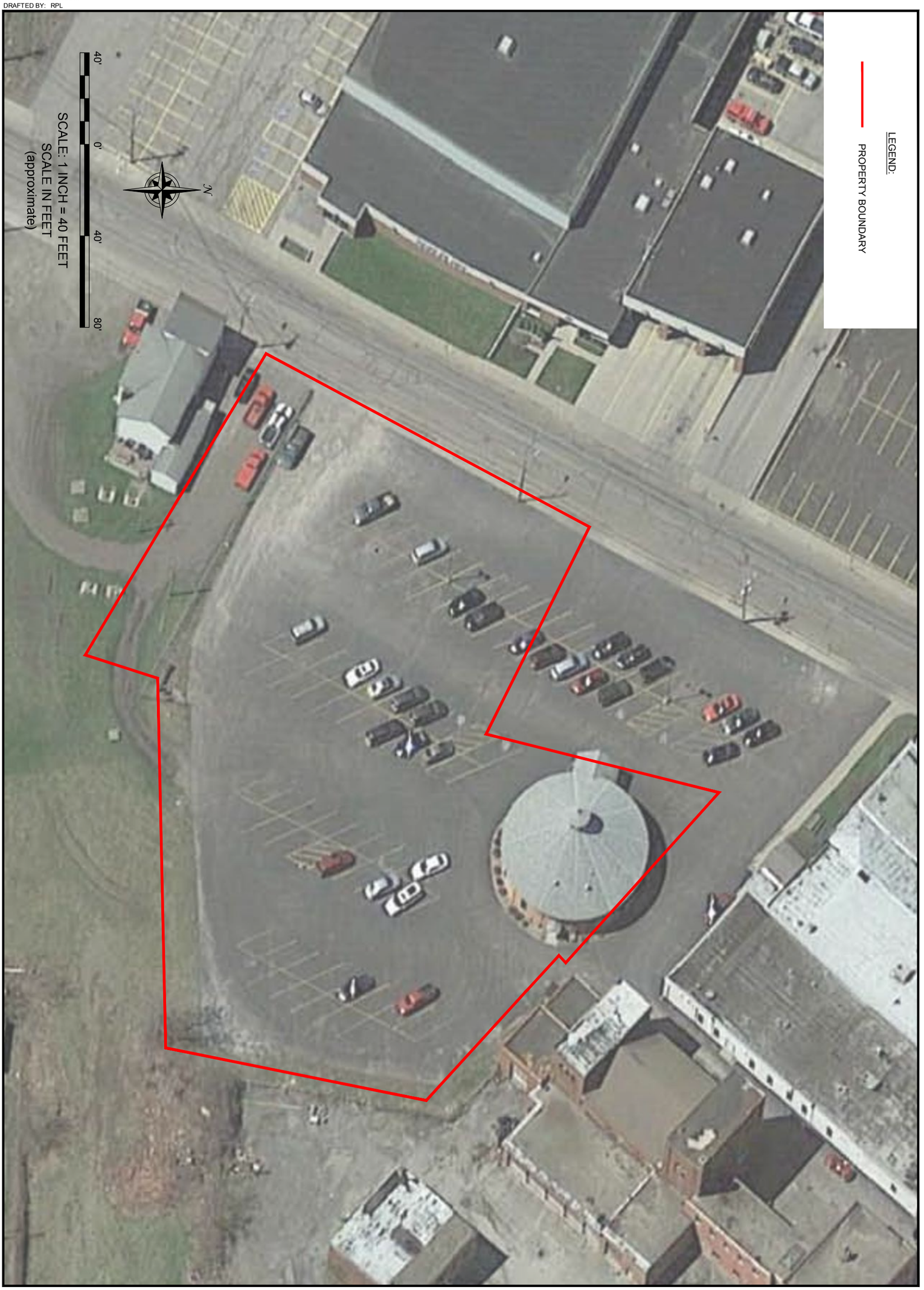


FIGURE 2

AERIAL SITE PLAN

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT

FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PREPARED FOR

R&J ENTERPRISES OF BATAVIA, LLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: 0333-015-001

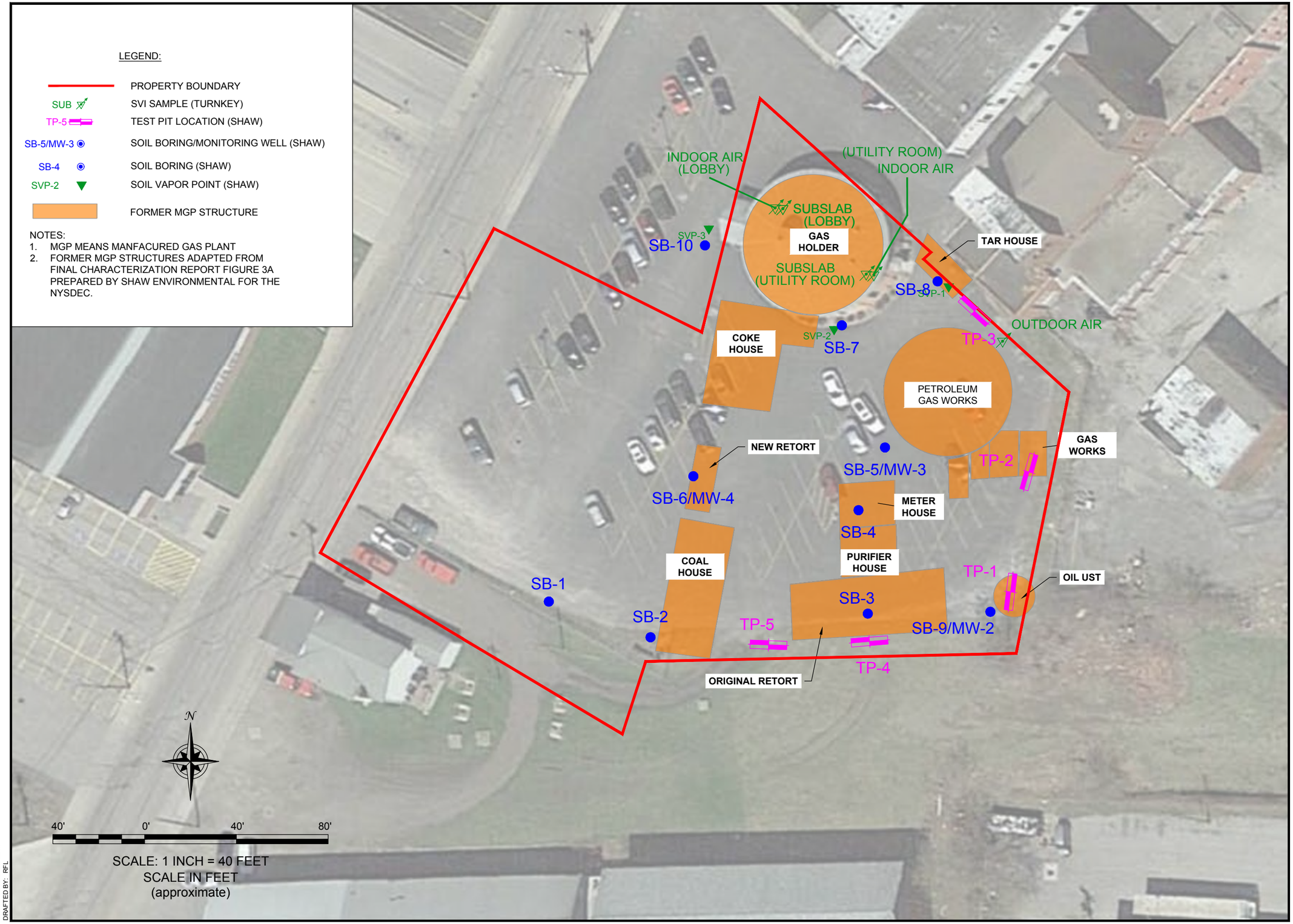
DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RIFS\Figure 3; Former MGP and Historic Sampling Locations.dwg, DWG To PDF.pc3

LEGEND:

- PROPERTY BOUNDARY
- SUB — SVI SAMPLE (TURNKEY)
- TP-5 — TEST PIT LOCATION (SHAW)
- SB-5/MW-3 — SOIL BORING/MONITORING WELL (SHAW)
- SB-4 — SOIL BORING (SHAW)
- SVP-2 — SOIL VAPOR POINT (SHAW)
- FORMER MGP STRUCTURE

NOTES:
1. MGP MEANS MANFACURED GAS PLANT
2. FORMER MGP STRUCTURES ADAPTED FROM FINAL CHARACTERIZATION REPORT FIGURE 3A PREPARED BY SHAW ENVIRONMENTAL FOR THE NYSDEC.



DATE: DECEMBER 2018
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: 0333-015-001

FORMER MGP STRUCTURES AND PREVIOUS INVESTIGATION LOCATIONS

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT
FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK
PREPARED FOR
R&J ENTERPRISES OF BATAVIA, LLC

FIGURE 3

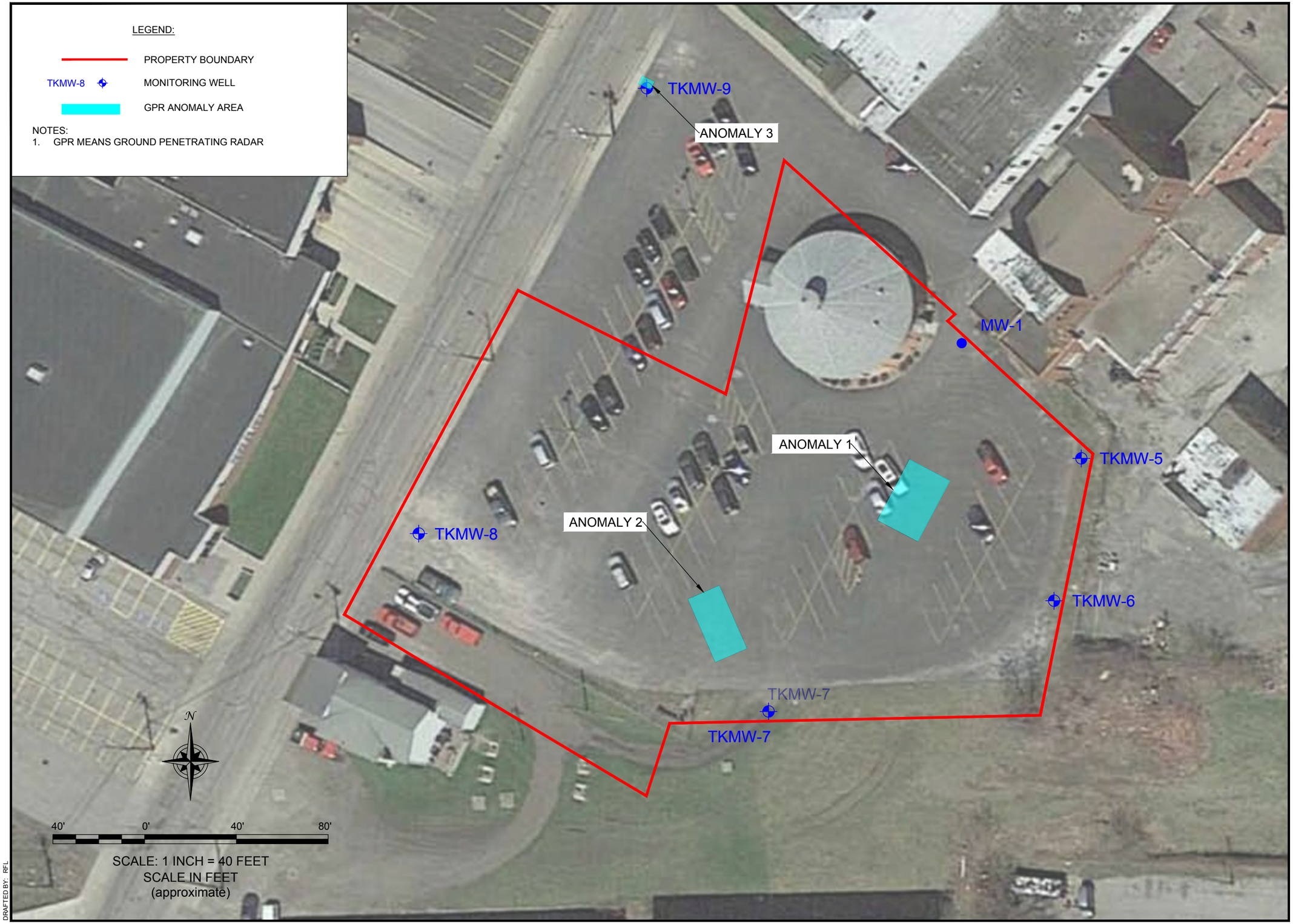
DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RIFS\Figure 4; GPR AND RI INV LOC.dwg, DWG To PDF.pc3

LEGEND:

- PROPERTY BOUNDARY
- TKMW-8 — MONITORING WELL
- GPR ANOMALY AREA

NOTES:
1. GPR MEANS GROUND PENETRATING RADAR



SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: DECEMBER 2018
DRAFTED BY: RFL

GPR ANOMALIES AND RI SAMPLE LOCATIONS

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT

FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PREPARED FOR
R&J ENTERPRISES OF BATAVIA, LLC

FIGURE 4

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: 0333-015-001

DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RFS\Figure 5; GW Contours and Contamination.dwg

LEGEND:

PROPERTY BOUNDARY

TKMW-8
883.1
MONITORING WELL AND GROUNDWATER ELEVATION

882
GROUNDWATER CONTOUR AND ELEVATION

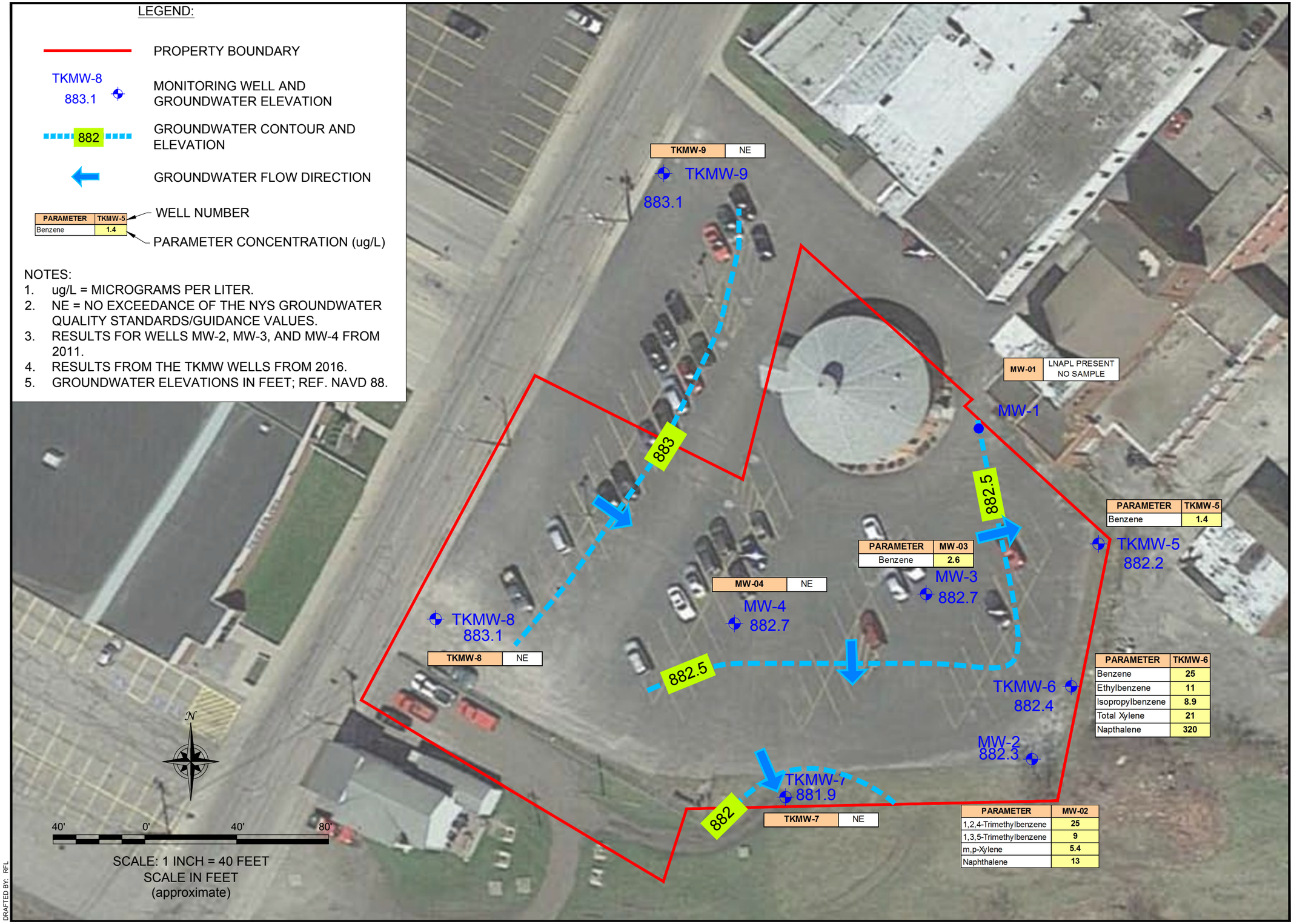
GROUNDWATER FLOW DIRECTION

PARAMETER	TKMW-5
Benzene	1.4

WELL NUMBER

PARAMETER CONCENTRATION (ug/L)

NOTES:
1. ug/L = MICROGRAMS PER LITER.
2. NE = NO EXCEEDANCE OF THE NYS GROUNDWATER QUALITY STANDARDS/GUIDANCE VALUES.
3. RESULTS FOR WELLS MW-2, MW-3, AND MW-4 FROM 2011.
4. RESULTS FROM THE TKMW WELLS FROM 2016.
5. GROUNDWATER ELEVATIONS IN FEET; REF. NAVD 88.



DATE: FEBRUARY 2019
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0333-015-001

GROUNDWATER ISOPOTENTIAL MAP (MAY 23, 2016)
AND GROUNDATER CONTAMINATION EXCEEDANCES

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT
FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK
PREPARED FOR
R&J ENTERPRISES OF BATAVIA, LLC

FIGURE 5

DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RIFS\Figure 6; CSCO Exceedance Locations.dwg, DWG To PDF.pc3

LEGEND:

- PROPERTY BOUNDARY
- SB-2 — SOIL BORING LOCATIONS
- TP-4 — TEST PIT LOCATIONS
- TKMW-8 — MONITORING WELL
- CSCO EXCEEDANCE

PARAMETER	SB-7 (9-12')
Benzo(a)pyrene	2.5

CONCENTRATION IN MILLIGRAMS PER KILOGRAM

NOTES:
1. CSCO MEANS COMMERCIAL SOIL CLEANUP OBJECTIVE

TKMW-9

PARAMETER	SB-8 (10-14')
Benzene	150
Acenaphthylene	630
Anthracene	820
Benzo(a)anthracene	640
Benzo(a)pyrene	450
Benzo(b)fluoranthene	530
Benzo(k)fluoranthene	190
o-Cresol	450
p-Cresol	200
Dibenzo(a,h)anthracene	69
Dibenzofuran	650
Chrysene	520
Fluoranthene	1400
Fluorene	780
Indeno(1,2,3-cd)pyrene	190
Naphthalene	3800
Phenanthrene	2400
Pyrene	1200

SB-10

MW-1

SB-8

TP-3

SB-7

PARAMETER	SB-7 (9-12')
Benzo(a)pyrene	2.5

TKMW-5

TKMW-8

SB-6/MW-4

SB-5/MW-3

TP-2

SB-4

PARAMETER	SB-4 (25-26')
Arsenic	16.9

PARAMETER	TKMW-6 (8-10')
Benzo(a)pyrene	3.2

TKMW-6

TP-1

SB-1

SB-2

SB-3

TP-5

TKMW-7

SB-9/MW-2

TP-4

TKMW-7

PARAMETER	TKMW-7 (2-5')
Benzo(a)anthracene	66
Benzo(a)pyrene	90
Benzo(b)fluoranthene	98
Dibenzo(a,h)anthracene	9.8
Indeno(1,2,3-cd)pyrene	60
Arsenic	16.1

PARAMETER	SB-9 (5-10')
Benzo(a)anthracene	8.4
Benzo(a)pyrene	8
Benzo(b)fluoranthene	9.7
Dibenzo(a,h)anthracene	1.6

N

40' 0' 40' 80'

SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: DECEMBER 2018
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0333-015-001

COMMERCIAL SOIL CLEANUP OBJECTIVE EXCEEDANCE LOCATIONS

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT

FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PREPARED FOR

R&J ENTERPRISES OF BATAVIA, LLC

FIGURE 6

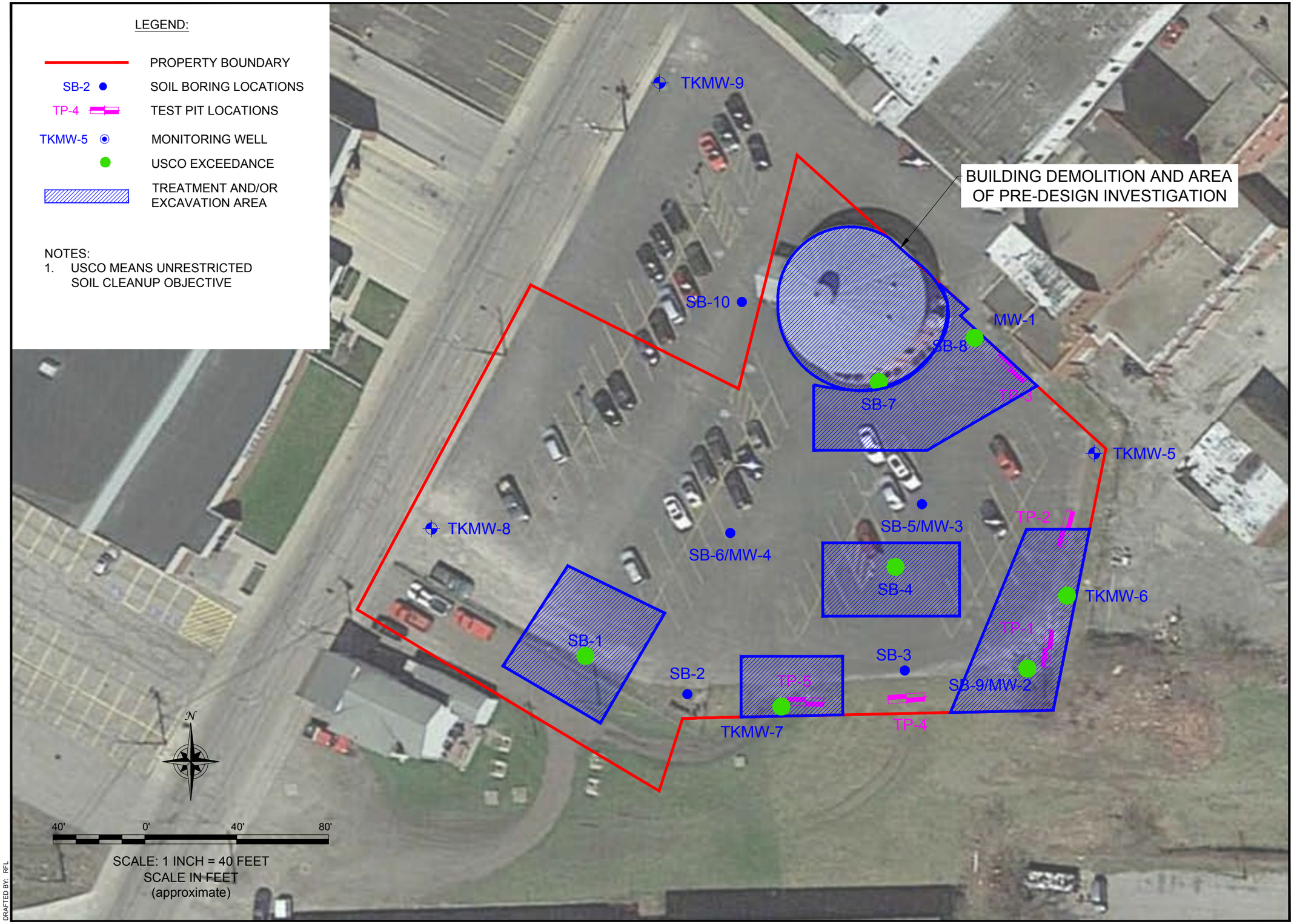
DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RIFS\Figure 7- USCO Remediation.dwg

LEGEND:

- PROPERTY BOUNDARY
- SB-2 ● SOIL BORING LOCATIONS
- TP-4 TEST PIT LOCATIONS
- TKMW-5 MONITORING WELL
- USCO EXCEEDANCE
- TREATMENT AND/OR EXCAVATION AREA

NOTES:
1. USCO MEANS UNRESTRICTED SOIL CLEANUP OBJECTIVE



DATE: FEBRUARY 2019
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0333-015-001

UNRESTRICTED USE CLEANUP

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT
FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK
PREPARED FOR
R&J ENTERPRISES OF BATAVIA, LLC

FIGURE 7

DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

LEGEND:

- PROPERTY BOUNDARY
- SB-2 — SOIL BORING LOCATIONS
- TP-4 — TEST PIT LOCATIONS
- TKMW-8 — MONITORING WELL
- CSCO EXCEEDANCE

PARAMETER	SB-7 (9-12')
Benzo(a)pyrene	2.5

CONCENTRATION IN MILLIGRAMS PER KILOGRAM

TREATMENT AND/OR EXCAVATION AREA

NOTES:
1. CSCO MEANS COMMERCIAL SOIL CLEANUP OBJECTIVE

PARAMETER	SB-8 (10-14')
Benzene	150
Acenaphthylene	630
Anthracene	820
Benzo(a)anthracene	640
Benzo(a)pyrene	450
Benzo(b)fluoranthene	530
Benzo(k)fluoranthene	190
o-Cresol	450
p-Cresol	200
Dibenzo(a,h)anthracene	69
Dibenzofuran	650
Chrysene	520
Fluoranthene	1400
Fluorene	780
Indeno(1,2,3-cd)pyrene	190
Naphthalene	3800
Phenanthrene	2400
Pyrene	1200

PARAMETER	SB-7 (9-12')
Benzo(a)pyrene	2.5

PARAMETER	SB-4 (25-26')
Arsenic	16.9

PARAMETER	TKMW-6 (8-10')
Benzo(a)pyrene	3.2

PARAMETER	TKMW-7 (2-5')
Benzo(a)anthracene	66
Benzo(a)pyrene	90
Benzo(b)fluoranthene	98
Dibenzo(a,h)anthracene	9.8
Indeno(1,2,3-cd)pyrene	60
Arsenic	16.1

PARAMETER	SB-9 (5-10')
Benzo(a)anthracene	8.4
Benzo(a)pyrene	8
Benzo(b)fluoranthene	9.7
Dibenzo(a,h)anthracene	1.6

TKMW-9, SB-10, MW-1, SB-8, TP-3, IN-SITU SOURCE AREA TREATMENT, SB-7, TKMW-5, TKMW-8, SB-6/MW-4, SB-5/MW-3, TP-2, SB-4, TKMW-6, SB-1, SB-2, SB-3, TP-5, SB-9/MW-2, TP-1, SOURCE AREA REMOVAL (25'x60'), TKMW-7, TP-4, SOIL/FILL EXCAVATION AREA (20'x20')

N

40' 0' 40' 80'

SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: FEBRUARY 2019
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: 0333-015-001

RESTRICTED COMMERCIAL USE CLEANUP

REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY REPORT

FORMER BATAVIA MGP SITE
NYSDEC SITE No. 819019
11 EVANS STREET
BATAVIA, NEW YORK

PREPARED FOR

R&J ENTERPRISES OF BATAVIA, LLC

FIGURE 8

DISCLAIMER:
PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.

F:\CAD\TurnKey\R&J Enterprises of Batavia\11 Evans (Former Batavia MGP)\RIFS\Figure 8; CSCO Remediation.dwg, 3/29/2019 4:01:00 PM, DWG To PDF.pc3

APPENDIX A

SOIL BORING / MONITORING WELL LOGS

Project No: 0333-015-001

Borehole Number: TKMW-5

Project: Batavia Former MGP Site

A.K.A.:

Client: R&J Enterprises of Batavia LLC

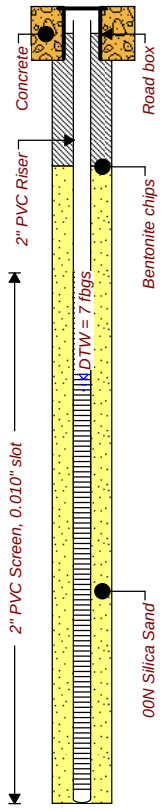
Logged By: PWW

Site Location: 11 Evans Street

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
	0.0	Ground Surface							
	0.0	***Topsoil***							
		Fill Black, moist, mostly brick and coal fines, some fine to coarse sand, little non-plastic fines, trace gravel, loose when disturbed, massive	S-1	NA	2.8		0.0, 0.0, 0.0		
4.0	-4.0 4.0	***Sandy Silt*** Brown, moist, mostly non-plastic fines, low dry strength and toughness, some fine sand, trace angular gravel, medium dense massive	S-2	NA	3.2		0.0, 0.0		
	-7.0 7.0	***Well Graded Sand*** Brown, moist to wet (7'), mostly fine to coarse sand, trace silt, loose when disturbed, massive, petroleum-like odor, sheen on water	S-3	NA	3.2		103.0, 78.0	Sampled (9-11')	
9.0	-8.0 8.0	As above, wet							
	-12.0 12.0	As above, slight petroleum-like odor	S-4	NA	4.0		5.6, 5.0		
14.0	-15.0 15.0	***Sand with Silt and Gravel*** Yellowish brown, wet, mostly fine sand, some non-plastic fines, some fine to coarse gravel, medium dense, massive, slight petroleum-like odors							
	-16.0 16.0	As above, grey, no odors	S-5	NA	4.0		3.1, 0.0, 0.0		
19.0	-20.0 20.0	End of Borehole							



Drilled By: Trec Environmental
Drill Rig Type: Track Mounted Geoprobe 6620DT
Drill Method: Direct-push with 4' macro-core
Comments: Wells installed using 4.25" hollow stem augers
Drill Date(s): 4-13-16

Hole Size: 8.25"
Stick-up: NA
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: 0333-015-001

Borehole Number: TKMW-6

Project: Batavia Former MGP Site

A.K.A.:

Client: R&J Enterprises of Batavia LLC

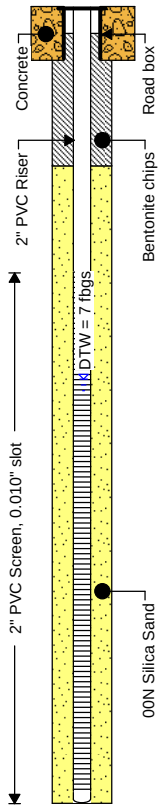
Logged By: PWW

Site Location: 11 Evans Street

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
	0.0	Ground Surface							
	0.0	***Topsoil***							
		Fill Black, moist, mostly brick and coal fines, some fine to coarse sand, little non-plastic fines, trace gravel, loose when disturbed, massive	S-1	NA	2.5		2.6, 3.0, 4.6		
4.0	-4.0 / 4.0	***Sandy Silt*** Brown, moist, mostly non-plastic fines, low dry strength and toughness, some fine sand, trace angular gravel, petroleum-like odor, medium dense massive	S-2	NA	3.0		22.4, 63.0		
	-7.0 / 7.0	***Well Graded Sand*** Brown, moist to wet (7'), mostly fine to coarse sand, trace silt, loose when disturbed, massive, strong petroleum-like odor, sheen on water							
9.0	-8.0 / 8.0	As above, wet	S-3	NA	4.0		914.0, 567.0	Sampled (8-10')	
	-12.0 / 12.0	As above	S-4	NA	4.0		362.0, 22.1		
14.0	-15.0 / 15.0	***Sand with Silt and Gravel*** Yellowish brown, wet, mostly fine sand, some non-plastic fines, some fine to coarse gravel, medium dense, massive, slight petroleum-like odors							
	-16.0 / 16.0	As above, grey, no odors	S-5	NA	4.0		3.4, 3.0, 2.0		
19.0	-20.0 / 20.0	End of Borehole							



Drilled By: Trec Environmental
Drill Rig Type: Track Mounted Geoprobe 6620DT
Drill Method: Direct-push with 4' macro-core
Comments: Wells installed using 4.25" hollow stem augers
Drill Date(s): 4-13-16

Hole Size: 8.25"
Stick-up: NA
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: 0333-015-001

Borehole Number: TKMW-7

Project: Batavia Former MGP Site

A.K.A.:

Client: R&J Enterprises of Batavia LLC

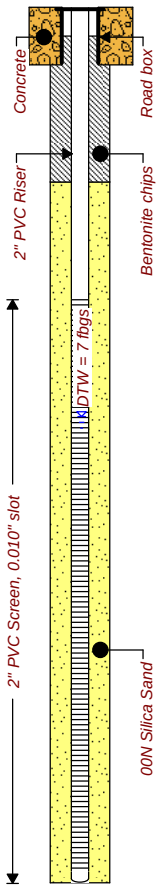
Logged By: PWW

Site Location: 11 Evans Street

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 12.5 / 25)	Lab Sample	Well Completion Details or Remarks
-1.0									
	0.0	Ground Surface							
	0.0	***Topsoil***					0.0		
		Fill Black, moist, mostly brick and coal fines, some fine to coarse sand, little non-plastic fines, trace gravel, loose when disturbed, massive	S-1	NA	2.7		0.0	Sampled (2-5')	
4.0	-4.0 / 4.0	As above					0.0		
	-6.0 / 6.0	***Well Graded Sand*** Brown, moist to wet (7'), mostly fine to coarse sand, trace silt, loose when disturbed, massive	S-2	NA	2.7		0.0		
	-8.0 / 8.0	As above, wet					0.0		
9.0			S-3	NA	4.0		0.0		
	-12.0 / 12.0	***Sand with Silt and Gravel*** Yellowish brown, wet, mostly fine sand, some non-plastic fines, some fine to coarse gravel, medium dense, massive					0.0		
14.0	-14.0 / 14.0	As above, grey	S-4	NA	4.0		0.0		
	-16.0 / 16.0	End of Borehole					0.0		
19.0									



Drilled By: Trec Environmental
Drill Rig Type: Track Mounted Geoprobe 6620DT
Drill Method: Direct-push with 4' macro-core
Comments: Wells installed using 4.25" hollow stem augers
Drill Date(s): 4-13-16

Hole Size: 8.25"
Stick-up: NA
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: 0333-015-001

Borehole Number: TKMW-8

Project: Batavia Former MGP Site

A.K.A.:

Client: R&J Enterprises of Batavia LLC

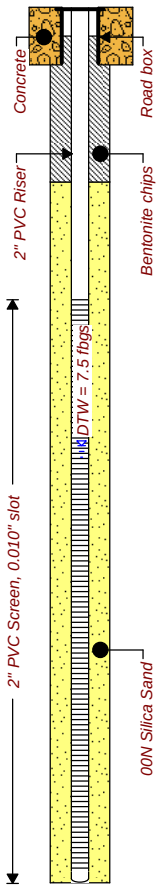
Logged By: PWW

Site Location: 11 Evans Street

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
-1.0									
	0.0	Ground Surface							
	0.0	***Asphalt***					0.0		
		Silty Clay Yellowish brown, moist, mostly medium plasticity fines, some non-plastic fines, soft, massive	S-1	NA	2.6		0.0		
	-4.0						0.0		
4.0	4.0	***Well Graded Sand*** Brown, moist to wet (7.5'), mostly fine to coarse sand, trace silt, loose when disturbed, massive	S-2	NA	3.6		0.0	Sampled (5.5-7.5')	
	-8.0						0.0		
	8.0	As above, wet							
	-9.0						0.0		
9.0	9.0	***Sand with Silt and Gravel*** Yellowish brown, wet, mostly fine sand, some non-plastic fines, some fine to coarse gravel, medium dense, massive	S-3	NA	3.2		0.0		
	-12.0						0.0		
	12.0	As above							
	-13.0						0.0		
	13.0	As above, grey							
14.0			S-4	NA	3.8		0.0		
	-16.0								
	16.0	End of Borehole							
19.0									



Drilled By: Trec Environmental
Drill Rig Type: Track Mounted Geoprobe 6620DT
Drill Method: Direct-push with 4' macro-core
Comments: Wells installed using 4.25" hollow stem augers
Drill Date(s): 4-13-16

Hole Size: 8.25"
Stick-up: NA
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: 0333-015-001

Borehole Number: TKMW-9

Project: Batavia Former MGP Site

A.K.A.:

Client: R&J Enterprises of Batavia LLC

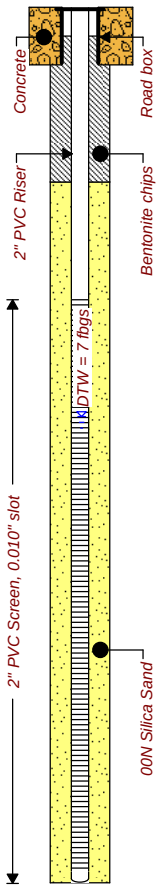
Logged By: PWW

Site Location: 11 Evans Street

Checked By: CZB

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt***					0.0		
		Well Graded Sand Brown, moist, mostly fine to coarse sand, trace silt, loose when disturbed, massive	S-1	NA	2.5		0.0 0.0		
4.0	-4.0 4.0	***Sandy Silt*** Brown, moist to wet (7'), mostly non-plastic fines, low dry strength and toughness, some fine sand, trace medium plasticity fines, medium dense, massive	S-2	NA	3.8		0.0 0.0	Sampled (5-7')	
9.0	-8.0 8.0	As above, wet	S-3	NA	3.3		0.0 0.0		
	-10.0 10.0	***Sand with Silt and Gravel*** Grey, wet, mostly fine sand, some non-plastic fines, some fine to coarse gravel, medium dense, massive							
14.0	-12.0 12.0	As above	S-4	NA	2.9		0.0 0.0		
	-15.0 15.0	Refusal End of Borehole					0.0		
19.0									



Drilled By: Trec Environmental
Drill Rig Type: Track Mounted Geoprobe 6620DT
Drill Method: Direct-push with 4' macro-core
Comments: Wells installed using 4.25" hollow stem augers
Drill Date(s): 4-13-16

Hole Size: 8.25"
Stick-up: NA
Datum: Mean Sea Level

Sheet: 1 of 1

Drilling Log

Soil Boring **SB-1**

Page: 1 of 1

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *890.8 ft.* Total Hole Depth *20.5 ft.* North *42.995445 ft.* East *-78.186477 ft.*

Top of Casing *NA* Water Level Initial ▽ *9.0 ft.* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *6620DT Geoprobe/Macro*

Drill Co. *Zebra Environmental* Method *Direct Push*

Driller *Joe Hutchins* Log By *Kevin Cronin* Date *9/6/11* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Soil sample collected from 5'-10' bgs at 1200.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GW	Hand cleared to 5' bgs. Loose, gray to black Fine Gravel.
2	0.4				SW SM	Hand cleared to 5' bgs. Brownish tan Fine Sand with Silt and trace Clay. No staining or odor observed.
4						
6					SW SM	Moist, firm, brownish tan to black Sandy Silt to Silty Sand with little Fine to Coarse Subround Gravel.
8	0.1	SB-1(5'-10') 70%			SP	Damp to moist, brownish tan Fine Sand. Wet below 9' bgs. Thin bedding observed. Brown color below 8'. No staining or odor observed.
10					SP	Same as above
12	0.0	50%			GW GM	Saturated grayish brown Clayey Silt to Silty Clay with some Gravel. Moist, dark gray Fine to Medium Sand and Fine to Coarse Subround Gravel; Trace clay.
14					GWS	
16						Wet, stiff, dark gray Silty Sand to Sandy Silt with trace to little Clay and some Gravel. No staining or odor observed.
18	0.0	40%			SWG	
20	0.1	140%			SWG	Same as above. Refusal at 20' bgs. 1" of thin, fractured Shale at 20.4' bgs. No staining or odor observed.
22						
24						
26						
28						
30						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **SB-2**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *891.0 ft.* Total Hole Depth *30.0 ft.* North *42.995406 ft.* East *-78.186316 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *6620DT Geoprobe/Macro*

Drill Co. *Zebra Environmental* Method *Direct Push*

Driller *Joe Hutchins* Log By *Kevin Cronin* Date *9/6/11* Permit # *NA*

Checked By _____ License No. _____

COMMENTS
Soil sample collected from 10'-15' bgs at 1335.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					SW SM	Hand cleared to 5' bgs. Loose, damp, gray to black Sand, Silt, and Fine to Coarse Gravel.
	0.5				SW	Hand cleared to 5' bgs. Damp, brownish tan, loose Fine Sand. No staining or odor observed.
5					SW	Damp to moist, loose, brownish tan Fine to Medium Sand; Wet below 9'. Transitions to Silty Sand with wet, loose Gravel in last 5" of interval.
	0.1	60%				
10					SW	Wet, loose, brown Fine to Medium Sand
	0.0	SB-2(10'-15') 60%			MLS	Wet, soft Sandy Silt.
					GPS	Wet, loose, gray Fine to Coarse Sand and Fine to Coarse Subround to Angular Gravel. No staining or odor observed.
15	0.0	100%			MLG	Moist, stiff, Sandy to Clayey Silt with Fine to Coarse Subround to Subangular Gravel.
20	0.0	70%			MLG	Wet to moist, dark gray, stiff Clayey Silt with some Fine to Coarse Subround to Subangular Gravel. Little Sand and occasional fractured Shale Partings. No staining or odor observed.
25	0.0	75%			SWG	Moist, stiff, dark gray Clayey Sand with some Fine to Coarse Gravel.
30						
35						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **SB-3**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *891.4 ft.* Total Hole Depth *18.0 ft.* North *42.995448 ft.* East *-78.185955 ft.*

Top of Casing *NA* Water Level Initial ▽ *10.0 ft.* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *6620DT Geoprobe/Macro*

Drill Co. *Zebra Environmental* Method *Direct Push*

Driller *Joe Hutchins* Log By *Kevin Cronin* Date *9/6/11* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Soil sample collected from 10'-15' bgs at 1600. Original Retort House.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0–2	0.0				FILL	Hand cleared to 5' bgs. Gravel subbase over Sand, Silt, Gravel, and Brick. Trace Wood. No odor or staining observed.
4–6					FILL	Damp, loose Sand, Silt, Fine to Coarse Subround to Subangular Gravel, and Brick. Wet in last 2".
8	0.3	25%			FILL	
10					FILL	Wet, loose fill as described above.
12	0.4	SB-3(10'-15') 65%			SM	Loose, gray to brown Silty Sand transitioning to wet, Fine to Medium Sand with little Silt. Rainbow sheen observed on soil.
16	0.0	90%			MLG	Refusal at 18' bgs. Wet, soft Clayey Silt with Gravel and some Sand. No sheen observed in free groundwater. No staining observed.
18–30						

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **SB-4**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *891.2 ft.* Total Hole Depth *26.0 ft.* North *42.995547 ft.* East *-78.185947 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *6620DT Geoprobe/Macro*

Drill Co. *Zebra Environmental* Method *Direct Push*

Driller *Joe Hutchins* Log By *Kevin Cronin* Date *9/7/11* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Soil sample collected from 10'-15' bgs at 0950 and 25'-26' bgs at 0955.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Hand cleared to 5' bgs. Gravel subbase over Sand, Silt, Gravel, Bricks, and trace Wood. Several wire rope sections across boring were observed. No staining or odor observed.
2	0.0				FILL	
4						
6						Grayish brown, damp Sand, Silt, Fine Gravel, Brick, and Wood. Moist to wet, bluish gray Sand and Fine Gravel in bottom 2".
8	0.4	30%			FILL	
10						Fill in top 3" over grayish brown, wet Fine to Medium Sand and Fine to Coarse Gravel. Wet, soft, brownish gray Clayey Silt with some Fine Gravel and Fine Sand in bottom 3". No staining or odor observed.
12	2.5	SB-4(10'-15') 55%			SWG	
14						Wet, loose, gray Fine to Medium Sand and Fine to Coarse Gravel with little Silt and trace Clay. No staining observed.
16						
18	0.0	40%			SWG	
20						Wet, loose, gray Fine to Medium Sand and Fine to Coarse Gravel with little Silt and trace Clay. No staining observed.
22	0.1	50%			SWG	
24						
26	0.0	SB-4(25'-26') 90%			MLG	Refusal at 26' bgs. Wet, stiff, dark gray Fine Sandy Silt to Clayey Silt with Fine to Coarse Angular to Subround Gravel. No staining or odor observed.
28						
30						

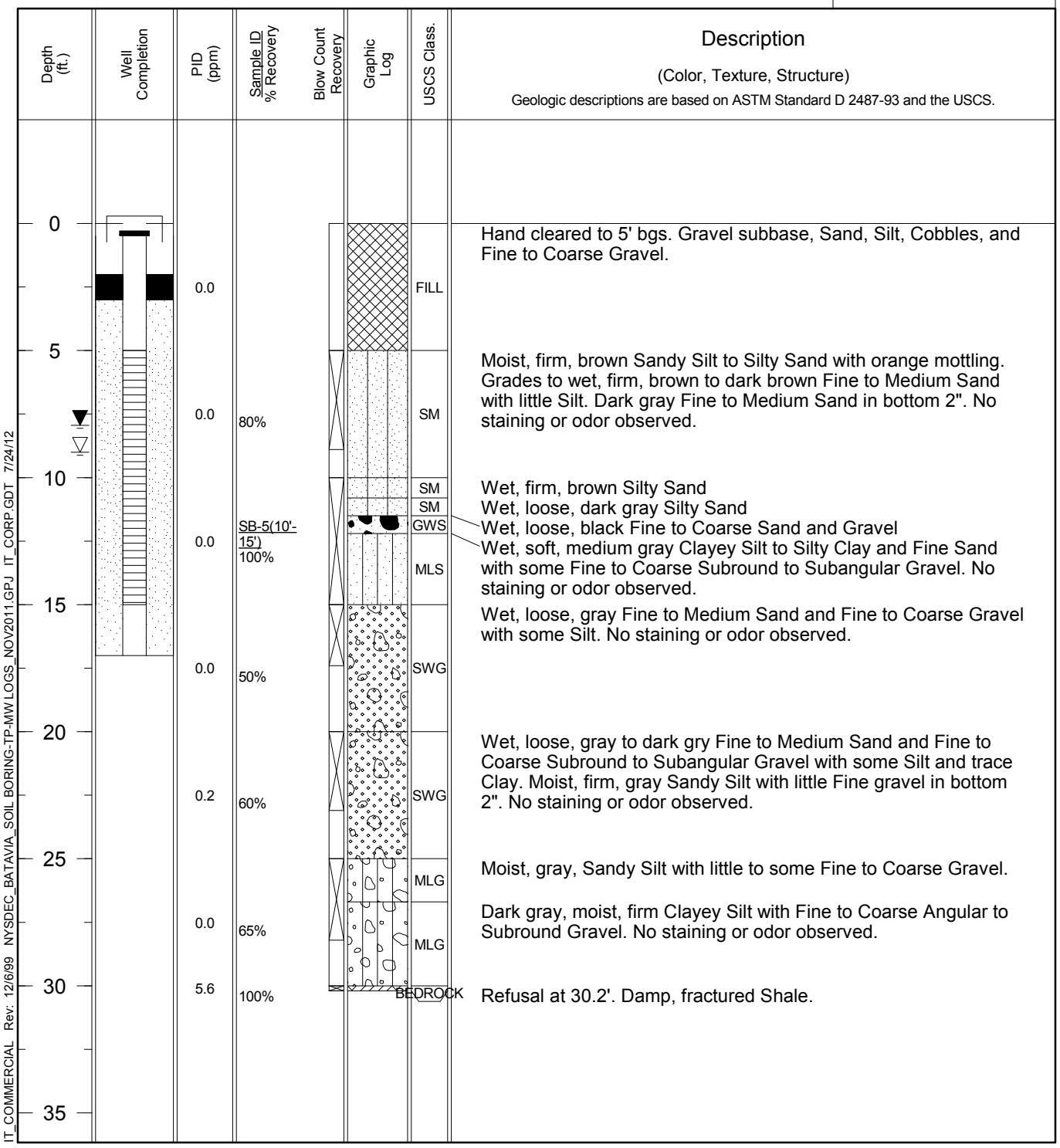
IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Monitoring Well **SB-5/MW-3**

Project: Batavia Former MGP | Owner: NYSDEC
Location: Batavia, Genesse County, New York | Proj. No.: 134685.23
Surface Elev.: 891.2 ft. | Total Hole Depth: 30.2 ft. | North: 42.995628 ft. | East: -78.185909 ft.
Top of Casing: 890.85 ft. | Water Level Initial: 9.0 ft. | Static: 7.9 ft. | Diameter: 4.25 in.
Screen: Dia: 2 in. | Length: 10 ft. | Type/Size: PVC Slotted Screen/0.010 in.
Casing: Dia: 2 in. | Length: 4.75 ft. | Type: Sch. 40 PVC
Fill Material: Well Sand | Rig/Core: 6620DT Geoprobe/Macro/HSA
Drill Co.: Zebra Environmental | Method: Direct Push/Hollow Stem Auger
Driller: Joe Hutchins | Log By: Kevin Cronin | Date: 9/7/11 | Permit #: NA
Checked By: | License No.:

COMMENTS
Soil sample collected from 10'-15' bgs at 1240. Groundwater sample collected from MW-3 on 09/29/11 at 1545. Duplicate-1 collected from MW-3 on 10/05/11 at 1255.



Description

(Color, Texture, Structure)

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

Hand cleared to 5' bgs. Gravel subbase, Sand, Silt, Cobbles, and Fine to Coarse Gravel.

Moist, firm, brown Sandy Silt to Silty Sand with orange mottling. Grades to wet, firm, brown to dark brown Fine to Medium Sand with little Silt. Dark gray Fine to Medium Sand in bottom 2". No staining or odor observed.

Wet, firm, brown Silty Sand
Wet, loose, dark gray Silty Sand
Wet, loose, black Fine to Coarse Sand and Gravel
Wet, soft, medium gray Clayey Silt to Silty Clay and Fine Sand with some Fine to Coarse Subround to Subangular Gravel. No staining or odor observed.

Wet, loose, gray Fine to Medium Sand and Fine to Coarse Gravel with some Silt. No staining or odor observed.

Wet, loose, gray to dark gry Fine to Medium Sand and Fine to Coarse Subround to Subangular Gravel with some Silt and trace Clay. Moist, firm, gray Sandy Silt with little Fine gravel in bottom 2". No staining or odor observed.

Moist, gray, Sandy Silt with little to some Fine to Coarse Gravel.

Dark gray, moist, firm Clayey Silt with Fine to Coarse Angular to Subround Gravel. No staining or odor observed.

Refusal at 30.2'. Damp, fractured Shale.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Monitoring Well **SB-6/MW-4**

Project: Batavia Former MGP | Owner: NYSDEC

Location: Batavia, Genesse County, New York | Proj. No.: 134685.23

Surface Elev.: 890.7 ft. | Total Hole Depth: 29.0 ft. | North: 42.99558 ft. | East: -78.186223 ft.

Top of Casing: 890.46 ft. | Water Level Initial: 10.0 ft. | Static: 7.5 ft. | Diameter: 4.25 in.

Screen: Dia 2 in. | Length: 10 ft. | Type/Size: PVC Slotted Screen/0.010 in.

Casing: Dia 2 in. | Length: 4.75 ft. | Type: Sch. 40 PVC

Fill Material: Well Sand | Rig/Core: 6620DT Geoprobe/Macro/HSA

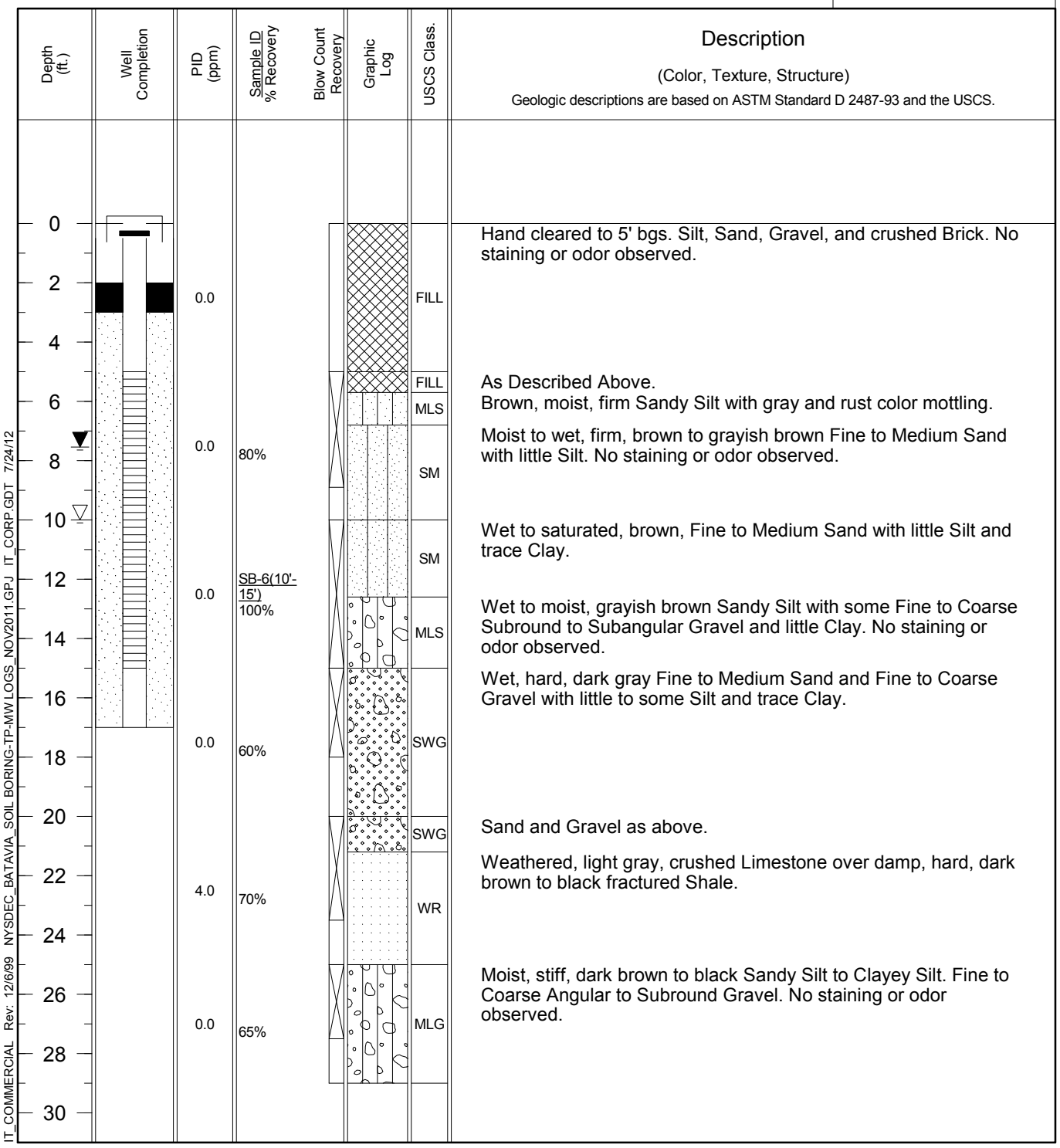
Drill Co.: Zebra Environmental | Method: Direct Push/Hollow Stem Auger

Driller: Joe Hutchins | Log By: Kevin Cronin | Date: 9/7/11 | Permit #: NA

Checked By: | License No.:

COMMENTS

Soil sample collected from 10'-15' bgs at 1530. Groundwater sample and MS/MSD collected from MW-4 on 09/29/11 at 1225. New Retort location.



Description

(Color, Texture, Structure)

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

Hand cleared to 5' bgs. Silt, Sand, Gravel, and crushed Brick. No staining or odor observed.

As Described Above.
Brown, moist, firm Sandy Silt with gray and rust color mottling.

Moist to wet, firm, brown to grayish brown Fine to Medium Sand with little Silt. No staining or odor observed.

Wet to saturated, brown, Fine to Medium Sand with little Silt and trace Clay.

Wet to moist, grayish brown Sandy Silt with some Fine to Coarse Subround to Subangular Gravel and little Clay. No staining or odor observed.

Wet, hard, dark gray Fine to Medium Sand and Fine to Coarse Gravel with little to some Silt and trace Clay.

Sand and Gravel as above.

Weathered, light gray, crushed Limestone over damp, hard, dark brown to black fractured Shale.

Moist, stiff, dark brown to black Sandy Silt to Clayey Silt. Fine to Coarse Angular to Subround Gravel. No staining or odor observed.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **SB-7**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *890.8 ft.* Total Hole Depth *29.5 ft.* North *42.995783 ft.* East *-78.185984 ft.*

Top of Casing *NA* Water Level Initial ▽ *9.0 ft.* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *6620DT Geoprobe/Macro*

Drill Co. *Zebra Environmental* Method *Direct Push*

Driller *Joe Hutchins* Log By *Kevin Cronin* Date *9/8/11* Permit # *NA*

Checked By _____ License No. _____

COMMENTS
Soil sample collected from 9'-12' bgs at 0850.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2	0.0				FILL	Hand clear to 5' bgs. Sand, Silt, Fine to Coarse Gravel, and occasional wood fragments. No staining or odor observed.
4						
6						Thin (0.5") layer of red brick fragments over wet, soft to firm, brown, Sandy Silt with little Clay. Transitions to wet, loose, brown Fine to Medium Sand with little Fine Subround Gravel. Material is black at 9.3' bgs.
8 ▽	1.2	75%			SW SM	
10					SWG	Black, stained, wet, loose, Fine to Medium Sand and Fine to Coarse Gravel.
12	24.0	SB-7(9'-12') 50%			GW GM	Wet, firm Clayey Silt with some Fine to Coarse Subround to Subangular Gravel (unstained).
14						
16						Wet, firm to stiff, grayish brown Sandy Silt to Silty Sand with little to some Fine to Coarse Subround to Subangular Gravel. No staining or odor observed.
18	0.4	70%			MLG	
20						Wet to damp, dark brown Sandy Silt with some Fine to Coarse Gravel, fractured Shale, and Fine Sand. No staining or odor observed.
22	1.1	75%			GWS	
24						As Described Above
26						
28	0.7	60%			GWS	
30						

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Monitoring Well **SB-8/MW-1**

Project: Batavia Former MGP | Owner: NYSDEC

Location: Batavia, Genesse County, New York | Proj. No.: 134685.23

Surface Elev.: 890.8 ft. | Total Hole Depth: 20.0 ft. | North: 42.995842 ft. | East: -78.185846 ft.

Top of Casing: 890.33 ft. | Water Level Initial: ▽ 6.0 ft. | Static: NA | Diameter: 4.25 in.

Screen: Dia 2 in. | Length: 15 ft. | Type/Size: PVC Slotted Screen/0.010 in.

Casing: Dia 2 in. | Length: 2.75 ft. | Type: Sch. 40 PVC

Fill Material: Well Sand | Rig/Core: 6620DT Geoprobe/Macro/HSA

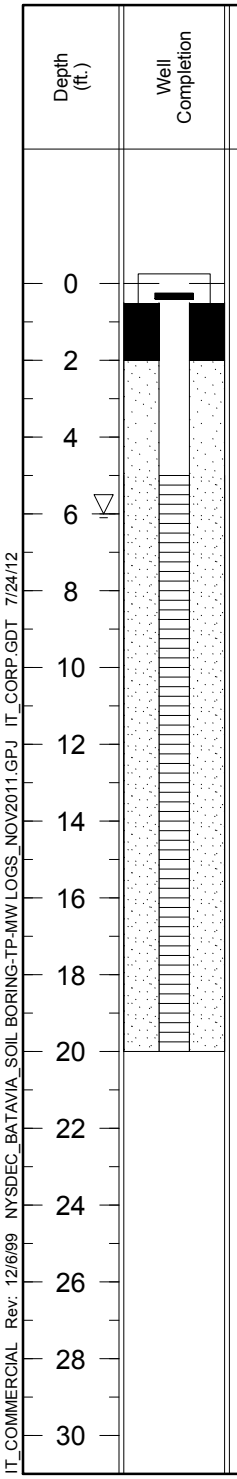
Drill Co.: Zebra Environmental | Method: Direct Push/Hollow Stem Auger

Driller: Joe Hutchins | Log By: Kevin Cronin | Date: 9/12/11 | Permit #: NA

Checked By: | License No.:

COMMENTS

Soil sample collected from 10'-14' bgs at 1130. Groundwater sample collected on 10/05/11 at 1050.



Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0							Hand clear to 5' bgs. Sand, Silt, Gravel, and Brick fragments.
2		0.0				FILL	
4							
6							Black, stained, wet Brick, Sand, Silt, and Gravel with creosote/sweet odor and rainbow sheen.
8		9.6	20%			FILL	
10						FILL	As Above
						FILL	Brown, wet, splintered wood.
12		80.0	SB-8(10'-14') 70%			GWS	Wet, black, stained Sand and Gravel fill with sheen. Transitions to moist, firm, grayish brown Sandy Silt with little Fine to Coarse Gravel. Decreasing odor.
14							
16							Moist, firm, grayish brown Sandy Silt to Clayey Silt with little to some Fine to Coarse Subangular to Subround Gravel. No staining or odor observed. Boring ended at 20' bgs.
18		0.3	70%			MLG	
20							
22							
24							
26							
28							
30							

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Monitoring Well **SB-9/MW-2**

Project: Batavia Former MGP | Owner: NYSDEC

Location: Batavia, Genesse County, New York | Proj. No.: 134685.23

Surface Elev.: 891.6 ft. | Total Hole Depth: 25.0 ft. | North: 42.995451 ft. | East: -78.185753 ft.

Top of Casing: 890.32 ft. | Water Level Initial: ▽ 5.0 ft. | Static: ▼ 8.3 ft. | Diameter: 4.25 in.

Screen: Dia: 2 in. | Length: 10 ft. | Type/Size: PVC Slotted Screen/0.010 in.

Casing: Dia: 2 in. | Length: 4.75 ft. | Type: Sch. 40 PVC

Fill Material: Well Sand | Rig/Core: 6620DT Geoprobe/Macro/HSA

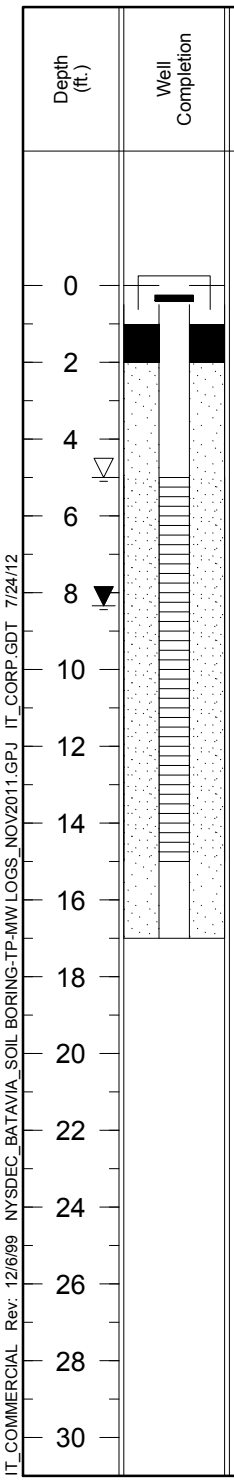
Drill Co.: Zebra Environmental | Method: Direct Push/Hollow Stem Auger

Driller: Joe Hutchins | Log By: Kevin Cronin | Date: 9/12/11 | Permit #: NA

Checked By: | License No.:

COMMENTS

Soil sample collected from 5'-10' bgs at 1350. Groundwater sample collected on 10/05/11 at 1050.



Description

(Color, Texture, Structure)

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

Hand clear to 5' bgs. Sand, Silt, Fine to Coarse Gravel, Brick, and Coal.

Wet, loose wood (1") over moist, loose, brown to black Fine to Medium Sand, little Silt, and Fine to Coarse Gravel. Becomes wet after a second layer (2") of wood. Slight odor.

Wet, firm to stiff, grayish brown Silty Sand to Sandy Silt with little Clay.

Brown to brownish gray Fine to Medium Sand, some Fine Gravel and trace Clay.

Wet, stiff, grayish brown Sandy Silt with little Fine to Coarse Gravel.

Wet, firm, gray Fine to Medium Sand and Fine to Coarse Subround to Subangular Gravel with some Silt and trace Clay. No staining or odor observed.

Wet, firm, gray Fine to Medium Sand and Fine to Coarse Subround to Subangular Gravel with little Silt. No staining or odor observed.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **SB-10**

Page: 1 of 1

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *890.1 ft.* Total Hole Depth *25.0 ft.* North *42.995875 ft.* East *-78.186218 ft.*

Top of Casing *NA* Water Level Initial ▽ *7.0 ft.* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *6620DT Geoprobe/Macro*

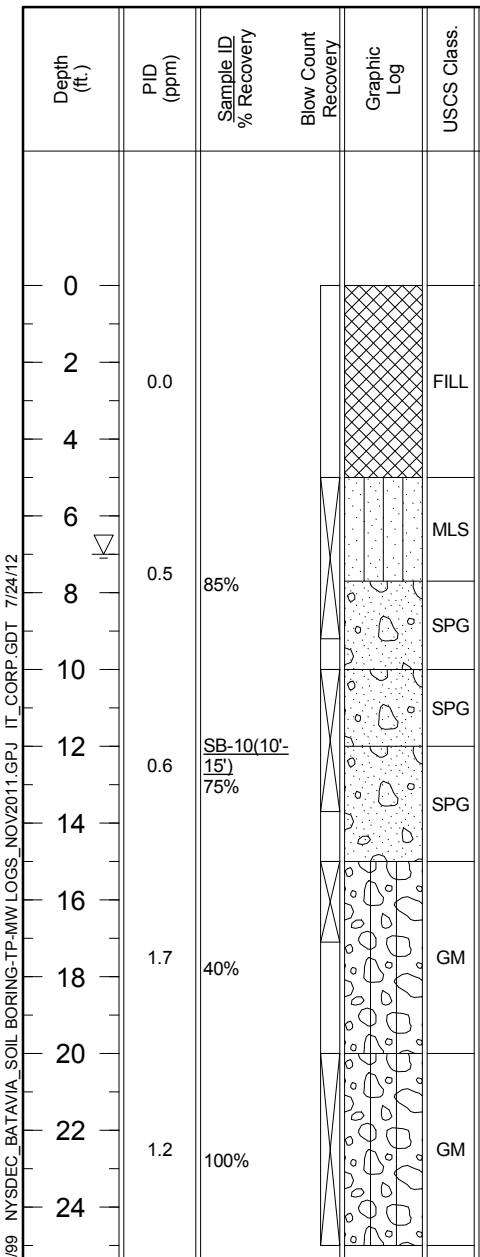
Drill Co. *Zebra Environmental* Method *Direct Push*

Driller *Joe Hutchins* Log By *Kevin Cronin* Date *9/13/11* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Soil sample collected from 10'-15' bgs at 0830.



Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	USCS Class.	Description (Color, Texture, Structure)
0–4	0.0			FILL	Hand clear to 5' bgs. Sand, Silt, Fine to Coarse Gravel, Brick and Brick fragments.
4–6				MLS	Moist to wet, firm, brown to dark brown Fine Sandy Silt to Silty Sand.
6–8	0.5	85%		SPG	Moist to wet, medium dense Fine to Medium Sand and Fine to Coarse Subround to Subangular Gravel. No staining or odor observed.
8–10				SPG	Wet, brown, compacted Sand and Gravel as above.
10–12	0.6	SB-10(10'-15') 75%		SPG	Wet, soft to firm, grayish brown Silty Sand with some Fine to Coarse Subround to Subangular Gravel. Bottom 6" becomes stiff. No staining or odor observed.
12–16				GM	Wet to damp, firm to stiff, brownish gray to gray to dark brown Sandy Silt with some Fine to Coarse Subround to Subangular Gravel. Trace Clay with little fractured Shale. No staining or odor observed.
16–18	1.7	40%			
18–22	1.2	100%		GM	Moist to dry, dark brown to blackish brown, firm to stiff Clayey Silt and Fine to Coarse Gravel (weathered Shale). No staining or odor observed. Refusal at 25' bgs.
22–30					

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **Test Pit 1**

Page: 1 of 1

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *891.1 ft.* Total Hole Depth *7.0 ft.* North *5089.08 ft.* East *5270.8 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *Komatsu PC40R*

Drill Co. *Nature's Way* Method *Excavator*

Driller *Rich Brown* Log By *Kevin Cronin* Date *9/27/11* Permit # *NA*

Checked By License No.

COMMENTS
Near former Oil UST. See Figure 3A of July 2012 SC Report.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						
					FILL	Dry, loose, brown to gray-brown silty SAND with GRAVEL and cinders. Have corroded 1.5" metal pipe with red flagging that reads, "Danger Asbestos Hazard". Lumber, concrete, rebar, glass, and wood cribbing also present.
6					SW SC	Black to gray clayey SILT to silty CLAY with strong product odor (PID = 399 ppm). Plastic sheeting, old bottles, pottery, broken iron pipe, and wrought iron also present. Appears wood cribbing on south side of pit with metal banding is the former oil UST.
10						

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **Test Pit 2**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *891.3 ft.* Total Hole Depth *5.8 ft.* North *5140.55 ft.* East *5251.95 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *Komatsu PC40R*

Drill Co. *Nature's Way* Method *Excavator*

Driller *Rich Brown* Log By *Kevin Cronin* Date *9/27/11* Permit # *NA*

Checked By License No.

COMMENTS
Near former Petroleum Gasworks structures on East site of Site. See figure 3A of July 2012 SC Report.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
					FILL	SAND, SILT, GRAVEL, and bricks.
2					DRCBBL	COBBLES and small BOULDERS with ash.
					SW SC	silty CLAY to clayey SILT with mottles sandy SILT. No odor or staining noted.
4					SW	NYSDEC PM directs equipment operator to dig further and extend test pit to the west and north. At 4ft bgs, dark brown to purple slag-like material with naphthalene-like odor encountered.
6						
8						
10						

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **Test Pit 3**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *890.4 ft.* Total Hole Depth *4.0 ft.* North *5189.48 ft.* East *5194.69 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *Komatsu PC40R*

Drill Co. *Nature's Way* Method *Excavator*

Driller *Rich Brown* Log By *Kevin Cronin* Date *9/27/11* Permit # *NA*

Checked By License No.

COMMENTS
Adjacent to former Tar Holder. See Figure 3A of July 2012 SC Report.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						SAND, SILT, GRAVEL. Bricks present at 1ft bgs. Void encountered at 3ft bgs. Move east and unearth rubble and structure that may be associated with former tar holder.
2					FILL	
4						
6						
8						
10						

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

Drilling Log

Soil Boring **Test Pit 4**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *890.9 ft.* Total Hole Depth *3.9 ft.* North *5040.94 ft.* East *5228.61 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *Komatsu PC40R*

Drill Co. *Nature's Way* Method *Excavator*

Driller *Rich Brown* Log By *Kevin Cronin* Date *9/27/11* Permit # *NA*

Checked By License No.

COMMENTS
Near Original Retort structure. See Figure 3A of July 2012 SC Report.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						
					FILL	SAND, SILT, and fine to coarse GRAVEL. Bricks, broken glass, concrete pieces, and 10" gear also encountered.
4					MLS	Mottled sandy SILT (native) encountered. No staining or odor noted.
10						

Drilling Log

Soil Boring **Test Pit 5**

Project *Batavia Former MGP* Owner *NYSDEC*

Location *Batavia, Genesse County, New York* Proj. No. *134685.23*

Surface Elev. *891.2 ft.* Total Hole Depth *5.0 ft.* North *5019.28 ft.* East *5191.09 ft.*

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Backfill* Rig/Core *Komatsu PC40R*

Drill Co. *Nature's Way* Method *Excavator*

Driller *Rich Brown* Log By *Kevin Cronin* Date *9/27/11* Permit # *NA*

Checked By License No.

COMMENTS
Near Original Retort structure. See Figure 3A of July 2012 SC Report.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						
					FILL	SAND, SILT, GRAVEL, brick, concrete, coal, slag, coke, and wood encountered. Observed steel and orange plastic elbow runnin toward former gas holder. Possibly former gas line from gas holder. Line not marked by utility locator.
2						
4						
6						
8						
10						

IT_COMMERCIAL Rev: 12/6/99 NYSDEC_BATAVIA_SOIL BORING-TP-MW LOGS_NOV2011.GPJ IT_CORP.GDT 7/24/12

APPENDIX B

GROUNDWATER DEVELOPMENT & SAMPLING FIELD FORMS

GROUNDWATER FIELD FORM

Project Name: 11 Evans St Site Date: 4/18/16

Location: 11 Evans St Batavia Project No.: 0333-015-001 Field Team: PLW

Well No. TKMW-9 | Diameter (inches): 2" | Sample Date / Time: 4/18/16

Product Depth (fbTOR): — | Water Column (ft): 6.3 | DTW when sampled:

DTW (static) (fbTOR): 8.28 | One Well Volume (gal): 1.02 | Purpose: ☒ Development ☐ Sample ☐ Purge & Sample

Total Depth (fbTOR): 14.58 | Total Volume Purged (gal): 10.0 | Purge Method: Bailer

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
9:55	0	Initial	2.25	6.75	13.6		7/000	2.94	127	Turbid brown / No odors
10:05	1	8.25	1.0	6.97	12.4		"	4.84	118	"
10:10	2	8.30	2.0	7.03	11.5		"	4.87	121	"
10:15	3	8.30	3.0	7.06	11.4		"	4.78	92	"
10:20	4	"	4.0	7.11	11.1		"	"	97	"
10:25	5	8.50	5.0	7.16	10.83		"	5.45	94	"
10:30	6	"	6.0	7.21	11.1		"	5.69	88	"
10:35	7	"	7.0	7.24	11.4		"	5.58	89	"
10:40	8	"	8.0	7.26	11.5		"	5.51	92	"
10:45	9	"	9.0	7.27	11.3		"		97	"
10:50	10	"	10.0	7.28	11.3		"		95	"
Sample Information:										
	S1									
	S2									

Well No. TKMW-8 | Diameter (inches): 2" | Sample Date / Time: 4/18/16

Product Depth (fbTOR): — | Water Column (ft): 8.53 | DTW when sampled:

DTW (static) (fbTOR): 6.45 | One Well Volume (gal): 1.39 | Purpose: ☒ Development ☐ Sample ☐ Purge & Sample

Total Depth (fbTOR): 14.98 | Total Volume Purged (gal): | Purge Method: Bailer

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:10	0	Initial	2.25	7.0	13.7		>1000	6.58	210	Turbid brown / No odor
11:15	1	8.10	1.5	6.97	10.8		"	6.58	172	"
11:20	2	9.0	3.0	6.98	10.8		"	6.78	402	"
11:25	3	11.20	4.5	6.86	11.0		"	6.88	219	"
11:30	4	11.40	6.0	6.85	10.9		"	6.62	190	"
11:35	5	11.70	7.5	6.83	10.7		"	6.57	187	"
11:40	6	12.2	9	6.84	11.0		"	6.90	163	"
11:45	7	12.7	10.5	6.83	10.9		"	6.24	167	"
11:50	8	13.0	12.0	6.84	10.7		"	6.10	166	"
11:55	9	13.4	13.6	6.84	10.9		"	5.80	166	"
12:00	10	13.6	15.0	6.86	10.8		"	5.72	165	"
Sample Information:										
	S1									
	S2									

REMARKS: Conductivity meter acting up

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: 11 Evans St Site Date: 4/18/16
Location: 11 Evans Street Batavia Project No.: 0333-015-001 Field Team: PLW

Well No. TKMW-6			Diameter (inches): 2"			Sample Date / Time: 4/18/16			
Product Depth (fbTOR):			Water Column (ft): 7.25			DTW when sampled:			
DTW (static) (fbTOR): 7.78			One Well Volume (gal): 1.18			Purpose: ☒ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 15.03			Total Volume Purged (gal):			Purge Method: Bailer			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
14:00	0 Initial	6.25	7.06	14.3		71000		-102	Turbid brown
14:05	1 10.02	1.25	7.14	12.5		"		-91	
14:10	2 11.10	2.5	7.05	11.7				-92	
14:15	3 11.0	3.75	7.09	11.6				-80	
14:20	4 11.10	5	7.09	11.5				-73	
14:25	5 11.30	6.25	7.06	11.5				-75	
14:30	6 11.10	7.50	7.03	11.6				-78	
14:35	7 11.0	8.75	7.02	11.6				-80	
14:40	8 11.25	10	7.03	11.7				-86	
14:45	9 11.30	11.25	7.05	11.7				-84	
14:50	10 11.34	12.50	7.08	11.6				-84	
Sample Information:									
	S1								
	S2								

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

REMARKS: Conductivity meter malfunction
Heavy sheen → DO not collected

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: 11 Evans St Site Date: 4/18/16

Location: 11 Evans Street Batavia Project No.: 0333-015-001 Field Team: PWW

Well No. TKMW-7		Diameter (inches): 2"		Sample Date / Time: 4/18/16			
Product Depth (fbTOR): —		Water Column (ft): 7.08		DTW when sampled:			
DTW (static) (fbTOR): 7.2		One Well Volume (gal): 1.15		Purpose: ☒ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 14.28		Total Volume Purged (gal):		Purge Method: Bailer			

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:10	0	Initial	6.25	7.41	12.9		71000	5.01	212	Turbid brown / No odo
12:15	1	8.0	1.20	7.34	10.9			5.04	196	
12:20	2	8.38	2.4	7.36	10.6			4.81	187	
12:25	3	8.05	3.6	7.37	10.4			4.58	176	
12:30	4	8.03	4.8	7.38	10.0			4.90	174	
12:35	5		6.0	7.36	10.0			4.85	167	
12:40	6		7.2	7.37	9.7			4.51	167	
12:45	7		8.4	7.37	9.8			4.20	162	
12:50	8		9.6	7.37	9.7			4.13	163	
12:55	9		10.8	7.37	9.6				160	
13:00	10		12.0	7.37	9.5				158	

Sample Information:

	S1									
	S2									

Well No. TKMW-5		Diameter (inches): 2"		Sample Date / Time: 4/18/16			
Product Depth (fbTOR): —		Water Column (ft): 7.75		DTW when sampled:			
DTW (static) (fbTOR): 7.53		One Well Volume (gal): 1.26		Purpose: ☒ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 15.28		Total Volume Purged (gal):		Purge Method: Bailer			

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
13:05	0	Initial	6.25	7.20	14.0		71000		-19	Turbid brown / Petro odor Heavy
13:10	1	8.0	1.25	7.04	12.0				-28	
13:15	2	8.3	2.5	7.08	11.4				-28	
13:20	3	8.38	3.75	7.12	11.1				-25	
13:25	4	8.35	5	7.11	11.1				-25	
13:30	5	8.30	6.25	7.16	11.0				-24	
13:35	6		7.50	7.09	11.0				-24	
13:40	7		8.75	7.10	10.8				-26	
13:45	8		10.00	7.11	10.8				-27	
13:50	9		11.25	7.11	10.9				-28	
13:55	10		12.50	7.12	10.7				-29	

Sample Information:

	S1									
	S2									

REMARKS: Conductivity meter malfunction TKMW-5 heavy sheen no DO collected

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All measurements are in feet, distance from top of riser.

PREPARED BY: Paul W Wen

TurnKey Environmental Restoration, LLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: 11 Evans St Site

Project No.: 0333-015-001

Client: R+J Enterprises of Batavia

Date: 4/18/16

Instrument Source: ☒ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☒ pH meter	units		Myron L Company Ultra Meter 6P	6213516 ☐ 6212375 ☒ 6223973 ☐	PWW	4.00 7.00 10.01	4.00 6.99 10.00	4.0 7.0 10.0 } ok
☒ Turbidity meter	NTU		Hach 2100P or 2100Q Turbidimeter	06120C020523 ☐ 07110C026405 ☒ 13120C030432 ☐	PWW	< 0.4 or 10 for 2100 Q 20 100 800	.29 21 98 803	0.4 20 100 800 } ok
☒ Sp. Cond. meter	uS mS		Myron L Company Ultra Meter 6P	6213516 ☐ 6212375 ☒ 6223973 ☐	PWW	1413 mS @ 25 °C	1416	1413 ok
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☒ Dissolved Oxygen	ppm		HACH Model HQ30d	0807000023281 ☒ 10050041867 ☐ 140200100319 ☐	PWW	100% Satuartion	100% Slope 77.7%	100 % ok
☐ Particulate meter	mg/m³					zero air		
☐ Oxygen	%					open air		
☐ Hydrogen sulfide	ppm					open air		
☐ Carbon monoxide	ppm					open air		
☐ LEL	%					open air		
☐ Radiation Meter	uR/H					background area		

GROUNDWATER FIELD FORM

Project Name: 11 Evans Street Site Date: 4/27/16

Location: 11 Evans St Batavia Project No.: 0333-015-003 Field Team: PWM

Well No. TKMW-5			Diameter (inches): 2"			Sample Date / Time: 4/27/16			
Product Depth (fbTOR):			Water Column (ft): 7.51			DTW when sampled:			
DTW (static) (fbTOR): 7.54			One Well Volume (gal): 1.23			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 15.09			Total Volume Purged (gal):			Purge Method: Low flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:45	0 Initial	0.1	7.21	13.3	2019	>1000	1.57	-83	Turbid/petro-like odor
12:47	1 7.78	.25	7.07	12.0	2013	483	1.49	-66	"
12:49	2 7.78	0.5	7.06	11.4	2055	344	1.39	-61	"
12:51	3 7.78	.5	7.06	11.3	2120	214	1.43	-60	"
12:53	4 7.78	0.75	7.05	11.0	2160	106	1.34	-58	"
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
12:55	S1 7.78	.75	7.03	11.1	2163	49	2.69	-55	clear/petro-like odor
13:20	S2		7.05	11.2	2190	29.3	1.09	-60	"

Well No.			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

REMARKS: Equip Blank collected @ 13:45

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: 11 Evans Street Site Date: 4/27/16

Location: 11 Evans St Batavia Project No.: 0333-015-003 Field Team: DWL

Well No. TKMW-7			Diameter (inches): 2"			Sample Date / Time: 4/27/16			11:28
Product Depth (fbTOR): —			Water Column (ft): 6.86			DTW when sampled:			7.56
DTW (static) (fbTOR): 7.42			One Well Volume (gal): 1.12			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 14.28			Total Volume Purged (gal): 1.0			Purge Method: low flow			

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:20	0	Initial	0.1	7.62	12.0	842.6	163	4.19	116	clear/No odor
11:22	1	7.5	.25	7.37	10.1	812.0	91.2	3.45	121	"
11:24	2	7.5	.5	7.30	9.8	840.7	63.5	3.25	122	"
11:26	3	7.5	.75	7.29	9.5	826.5	36.8	3.15	119	"
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
11:28	S1	7.5	1.0	7.27	9.6	814.7	22.0	3.15	119	"
11:40	S2	7.5	1.0	7.30	10.1	799.8	12.3	2.95	115	"

Well No. TKMW-6			Diameter (inches): 2"			Sample Date / Time: 4/27/16			12:08
Product Depth (fbTOR): —			Water Column (ft): 7.25			DTW when sampled:			8.41
DTW (static) (fbTOR): 7.78			One Well Volume (gal): 1.18			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 15.03			Total Volume Purged (gal): 1.0			Purge Method: low flow			

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:00	0	Initial	0.1	6.78	13.4	2063	239	1.78	-95	slight turbid / Petro-like odor
12:02	1	8.28	.75	6.83	11.0	2245	82.8	1.18	-110	clear / "
12:04	2	8.31	.5	6.82	13.0	2213	77.1	1.14	-117	"
12:06	3	8.37	.5	6.85	11.0	2345	61.2	1.05	-114	"
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
12:08	S1	8.41	.75	6.86	11.0	2252	40.3	1.02	-112	" / slight sheen
12:30	S2	8.51	1.0	6.90	12.0	2001	19.8	1.19	-107	"

REMARKS: TKMW-6 MS/MSD Taken

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: 11 Evans Street Site Date: 4/27/16
Location: 11 Evans St Batavia Project No.: 0333-015-003 Field Team: DWW

Well No. ~~MW~~ TKMW-9 | Diameter (inches): 2" | Sample Date / Time: 4/27/16 9:35
Product Depth (fbTOR): — | Water Column (ft): 7.34 | DTW when sampled: 8.75
DTW (static) (fbTOR): 7.29 | One Well Volume (gal): 1.19 | Purpose: ☐ Development ☐ Sample ☒ Purge & Sample
Total Depth (fbTOR): 14.63 | Total Volume Purged (gal): 1.25 | Purge Method: low flow

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
9:26	0	Initial	0.1	6.34	10.1	3735	>1000	2.5	227	Turbid brown / No odor
9:28	1	8.68	0.25	6.98	10.1	3635	"	1.56	178	"
9:30	2	8.72	0.25	6.97	10.2	3706	"	1.32	142	"
9:32	3	8.73	0.5	7.01	10.3	3671	1000	1.09	103	"
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
9:35	S1	8.75	0.75	7.03	10.3	3543	"	1.15	65	"
9:40	S2	"	1.25	7.09	10.3	3500	664	1.28	73	"

Well No. TKMW-8 | Diameter (inches): 2" | Sample Date / Time: 4/27/16
Product Depth (fbTOR): — | Water Column (ft): 8.44 | DTW when sampled:
DTW (static) (fbTOR): 6.54 | One Well Volume (gal): 1.37 | Purpose: ☐ Development ☐ Sample ☒ Purge & Sample
Total Depth (fbTOR): 14.98 | Total Volume Purged (gal): | Purge Method: low flow

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:30	0	Initial	0.1	6.89	11.3	3208	>1000	4.21	105	Turbid / No odor
10:32	1	6.98	0.25	6.99	10.0	3207	191	4.61	107	clear / "
10:34	2	6.99	.75	7.00	10.1	3220	120	4.46	110	"
10:36	3	6.99	.5	7.02	9.7	3147	72	4.23	110	"
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
10:38	S1	6.99	.75	7.01	9.9	3129	37.5	4.13	108	" / "
10:50	S2	6.99	1.25	7.09	10.0	3010	11.8	4.20	112	" / "

REMARKS: ~~TKMW-9 @ 1000 NTU collected~~ ~~Soluble metals to follow lab~~ ~~TKMW-9 MS/MSD collected~~
TKMW-8 Blind Dup collected
Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: [signature]

TurnKey Environmental Restoration, LLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: 11 Evans St Site

Project No.: 0333-015-003

Client: R+J Enterprises of Batavia

Date: 4/27/16

Instrument Source: [X] BM [ ] Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
[ ] pH meter	units	800	Myron L Company Ultra Meter 6P	6213516 [ ] 6212375 [ ] 6223973 [ ]	PWW	4.00 7.00 10.01	3.99 7.00 10.01	4 7 10 } ok
[ ] Turbidity meter	NTU	805	Hach 2100P or 2100Q Turbidimeter	06120C020523 [ ] 07110C026405 [ ] 13120C030432 [ ]	PWW	< 0.4 or 10 for 2100 Q 20 100 800	.3 21 102 809	2.4 20 100 800 } ok
[ ] Sp. Cond. meter	uS mS	809	Myron L Company Ultra Meter 6P	6213516 [ ] 6212375 [ ] 6223973 [ ]	PWW	1413 mS @ 25 °C	1414	1413 ok
[ ] PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
[ ] Dissolved Oxygen	ppm	815	HACH Model HQ30d	0807000023281 [ ] 10050041867 [ ] 140200100319 [ ]	PWW	100% Satuartion	100% 98.4% skpa	100% ok
[ ] Particulate meter	mg/m^3					zero air		
[ ] Oxygen	%					open air		
[ ] Hydrogen sulfide	ppm					open air		
[ ] Carbon monoxide	ppm					open air		
[ ] LEL	%					open air		
[ ] Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: [signature]

DATE: 4/27/16

APPENDIX C

REMEDIAL INVESTIGATION LABORATORY REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-98326-1

Client Project/Site: Benchmark - 11 Evan St., Batavia, NY

For:
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Lackawanna, New York 14218

Attn: Mr. Christopher Z Boron

Authorized for release by:
4/21/2016 5:21:18 PM

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-98326-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-98326-1

Comments
No additional comments.

Receipt
The samples were received on 4/14/2016 11:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-296128 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: TKMW-7 (2-5') (480-98326-3), TKMW-8 (5.5-7.5') (480-98326-4), TKMW-9 (5-7) (480-98326-5) and BLIND DUP (480-98326-6).

Method(s) 8260C: Reported analyte concentrations in the following samples are below 200 ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: TKMW-7 (2-5') (480-98326-3), TKMW-8 (5.5-7.5') (480-98326-4), TKMW-9 (5-7) (480-98326-5) and BLIND DUP (480-98326-6).

Method(s) 8260C: Internal standard (ISTD) response for the following sample was outside control limits: TKMW-7 (2-5') (480-98326-3). The sample was re-analyzed with concurring results, and the original set of data has been reported.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis due to the nature of the sample matrix: TKMW-5 (9-11') (480-98326-1), (480-98326-B-1-B MS) and (480-98326-B-1-C MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: TKMW-6 (8-10') (480-98326-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-296357 was outside the method criteria for the following analytes: Benzaldehyde and Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Method(s) 8270D: The following samples were diluted due to appearance and viscosity: TKMW-6 (8-10') (480-98326-2), TKMW-8 (5.5-7.5') (480-98326-4) and TKMW-8 (5.5-7.5') (480-98326-4[MS]). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples were diluted due to appearance and viscosity: TKMW-7 (2-5') (480-98326-3) and BLIND DUP (480-98326-6). As such, surrogate recoveries are below the calibration range and may not be reported. Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-296885 recovered outside acceptance criteria, low biased, for Benzaldehyde. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: The following samples were diluted due to appearance and viscosity: TKMW-8 (5.5-7.5') (480-98326-4[MSD]). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following sample was diluted due to an abundance of target analytes : TKMW-6 (8-10') (480-98326-2). As such, surrogate recoveries are below the calibration range, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-98326-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-296691/44) contained Total Iron outside the control limits. The reported samples BLIND DUP (480-98326-6) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of the samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-5 (9-11')

Lab Sample ID: 480-98326-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	50	J B F1	130	25	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	180	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	110	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	160	J	200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	91	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	190	J	200	44	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	640		200	23	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	220		200	21	ug/Kg	1	☼	8270D	Total/NA
Fluorene	1400		200	23	ug/Kg	1	☼	8270D	Total/NA
Pyrene	280		200	23	ug/Kg	1	☼	8270D	Total/NA
Aluminum	5410		12.7		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.5		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	18.2		0.64		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.27		0.25		mg/Kg	1	☼	6010C	Total/NA
Calcium	96200		63.5		mg/Kg	1	☼	6010C	Total/NA
Chromium	8.2		0.64		mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.0		0.64		mg/Kg	1	☼	6010C	Total/NA
Copper	11.2		1.3		mg/Kg	1	☼	6010C	Total/NA
Iron	9150		12.7		mg/Kg	1	☼	6010C	Total/NA
Lead	9.4		1.3		mg/Kg	1	☼	6010C	Total/NA
Magnesium	11300		25.4		mg/Kg	1	☼	6010C	Total/NA
Manganese	257		0.25		mg/Kg	1	☼	6010C	Total/NA
Nickel	12.4		6.4		mg/Kg	1	☼	6010C	Total/NA
Potassium	1860		38.1		mg/Kg	1	☼	6010C	Total/NA
Sodium	220		178		mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.6		0.64		mg/Kg	1	☼	6010C	Total/NA
Zinc	32.6		2.5		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: TKMW-6 (8-10')

Lab Sample ID: 480-98326-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1300		610	180	ug/Kg	5	☼	8260C	Total/NA
Isopropylbenzene	580	J	610	91	ug/Kg	5	☼	8260C	Total/NA
Methylcyclohexane	29000		610	280	ug/Kg	5	☼	8260C	Total/NA
Xylenes, Total	3500		1200	340	ug/Kg	5	☼	8260C	Total/NA
Biphenyl	460	J	980	140	ug/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	4600		980	200	ug/Kg	5	☼	8270D	Total/NA
Acenaphthene	3200		980	140	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	880	J	980	130	ug/Kg	5	☼	8270D	Total/NA
Anthracene	3300		980	240	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	3500		980	98	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	3200		980	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	3400		980	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2300		980	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1200		980	130	ug/Kg	5	☼	8270D	Total/NA
Carbazole	1200		980	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	3300		980	220	ug/Kg	5	☼	8270D	Total/NA
Dibenzofuran	1100		980	120	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	9200		980	100	ug/Kg	5	☼	8270D	Total/NA
Fluorene	2100		980	120	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TKMW-6 (8-10') (Continued)

Lab Sample ID: 480-98326-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	1600		980	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	12000		980	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	9800		980	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene - DL	23000		4900	630	ug/Kg	25	☼	8270D	Total/NA
Aluminum	6520		11.3		mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.9		2.3		mg/Kg	1	☼	6010C	Total/NA
Barium	18.9		0.57		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.33		0.23		mg/Kg	1	☼	6010C	Total/NA
Calcium	1340		56.7		mg/Kg	1	☼	6010C	Total/NA
Chromium	10.4		0.57		mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.8		0.57		mg/Kg	1	☼	6010C	Total/NA
Copper	14.9		1.1		mg/Kg	1	☼	6010C	Total/NA
Iron	12300		11.3		mg/Kg	1	☼	6010C	Total/NA
Lead	7.6		1.1		mg/Kg	1	☼	6010C	Total/NA
Magnesium	2050		22.7		mg/Kg	1	☼	6010C	Total/NA
Manganese	208		0.23		mg/Kg	1	☼	6010C	Total/NA
Nickel	19.9		5.7		mg/Kg	1	☼	6010C	Total/NA
Potassium	1890		34.0		mg/Kg	1	☼	6010C	Total/NA
Vanadium	20.2		0.57		mg/Kg	1	☼	6010C	Total/NA
Zinc	42.4		2.3		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: TKMW-7 (2-5')

Lab Sample ID: 480-98326-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	4000	J	11000	1600	ug/Kg	50	☼	8270D	Total/NA
Anthracene	10000	J	11000	2700	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]anthracene	66000		11000	1100	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]pyrene	90000		11000	1600	ug/Kg	50	☼	8270D	Total/NA
Benzo[b]fluoranthene	98000		11000	1700	ug/Kg	50	☼	8270D	Total/NA
Benzo[g,h,i]perylene	66000		11000	1200	ug/Kg	50	☼	8270D	Total/NA
Benzo[k]fluoranthene	45000		11000	1400	ug/Kg	50	☼	8270D	Total/NA
Carbazole	4700	J	11000	1300	ug/Kg	50	☼	8270D	Total/NA
Chrysene	53000		11000	2500	ug/Kg	50	☼	8270D	Total/NA
Dibenz(a,h)anthracene	9800	J	11000	1900	ug/Kg	50	☼	8270D	Total/NA
Dibenzofuran	1800	J	11000	1300	ug/Kg	50	☼	8270D	Total/NA
Fluoranthene	53000		11000	1200	ug/Kg	50	☼	8270D	Total/NA
Fluorene	2400	J	11000	1300	ug/Kg	50	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	60000		11000	1400	ug/Kg	50	☼	8270D	Total/NA
Phenanthrene	26000		11000	1600	ug/Kg	50	☼	8270D	Total/NA
Pyrene	53000		11000	1300	ug/Kg	50	☼	8270D	Total/NA
Aluminum	6210		13.9		mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.7		2.8		mg/Kg	1	☼	6010C	Total/NA
Barium	90.7		0.69		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.59		0.28		mg/Kg	1	☼	6010C	Total/NA
Calcium	21000		69.4		mg/Kg	1	☼	6010C	Total/NA
Chromium	10.6		0.69		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.3		0.69		mg/Kg	1	☼	6010C	Total/NA
Copper	24.8		1.4		mg/Kg	1	☼	6010C	Total/NA
Iron	12500		13.9		mg/Kg	1	☼	6010C	Total/NA
Lead	61.6		1.4		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-7 (2-5') (Continued)

Lab Sample ID: 480-98326-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	6060		27.8		mg/Kg	1	☼	6010C	Total/NA
Manganese	184		0.28		mg/Kg	1	☼	6010C	Total/NA
Nickel	17.1		6.9		mg/Kg	1	☼	6010C	Total/NA
Potassium	1010		41.7		mg/Kg	1	☼	6010C	Total/NA
Sodium	532		194		mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.3		0.69		mg/Kg	1	☼	6010C	Total/NA
Zinc	51.8		2.8		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.026		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TKMW-8 (5.5-7.5')

Lab Sample ID: 480-98326-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.1	J	5.9	2.7	ug/Kg	1	☼	8260C	Total/NA
Aluminum	9750		12.3		mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.6		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	25.9	F1	0.62		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.38		0.25		mg/Kg	1	☼	6010C	Total/NA
Calcium	29500	F2	61.7		mg/Kg	1	☼	6010C	Total/NA
Chromium	12.4		0.62		mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.9		0.62		mg/Kg	1	☼	6010C	Total/NA
Copper	14.8		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	13100		12.3		mg/Kg	1	☼	6010C	Total/NA
Lead	9.9		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	4070	F1	24.7		mg/Kg	1	☼	6010C	Total/NA
Manganese	163	F2 F1	0.25		mg/Kg	1	☼	6010C	Total/NA
Nickel	15.7		6.2		mg/Kg	1	☼	6010C	Total/NA
Potassium	1470	F1	37.0		mg/Kg	1	☼	6010C	Total/NA
Sodium	282		173		mg/Kg	1	☼	6010C	Total/NA
Vanadium	20.7	F1	0.62		mg/Kg	1	☼	6010C	Total/NA
Zinc	37.6		2.5		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: TKMW-9 (5-7)

Lab Sample ID: 480-98326-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.3	J	5.9	2.7	ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	68	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	32	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	61	J	200	23	ug/Kg	1	☼	8270D	Total/NA
Aluminum	16400		12.7		mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.7		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	63.4		0.63		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.75		0.25		mg/Kg	1	☼	6010C	Total/NA
Calcium	3520		63.4		mg/Kg	1	☼	6010C	Total/NA
Chromium	22.1		0.63		mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.0		0.63		mg/Kg	1	☼	6010C	Total/NA
Copper	21.1		1.3		mg/Kg	1	☼	6010C	Total/NA
Iron	21800		12.7		mg/Kg	1	☼	6010C	Total/NA
Lead	21.5		1.3		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3830		25.4		mg/Kg	1	☼	6010C	Total/NA
Manganese	275		0.25		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-9 (5-7) (Continued)

Lab Sample ID: 480-98326-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	27.9		6.3		mg/Kg	1	☼	6010C	Total/NA
Potassium	3110		38.0		mg/Kg	1	☼	6010C	Total/NA
Sodium	456		178		mg/Kg	1	☼	6010C	Total/NA
Vanadium	37.8		0.63		mg/Kg	1	☼	6010C	Total/NA
Zinc	65.0		2.5		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.030		0.023		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BLIND DUP

Lab Sample ID: 480-98326-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1600	J	9500	1400	ug/Kg	50	☼	8270D	Total/NA
Anthracene	3700	J	9500	2400	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]anthracene	25000		9500	950	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]pyrene	39000		9500	1400	ug/Kg	50	☼	8270D	Total/NA
Benzo[b]fluoranthene	45000		9500	1500	ug/Kg	50	☼	8270D	Total/NA
Benzo[g,h,i]perylene	29000		9500	1000	ug/Kg	50	☼	8270D	Total/NA
Benzo[k]fluoranthene	15000		9500	1200	ug/Kg	50	☼	8270D	Total/NA
Carbazole	2000	J	9500	1100	ug/Kg	50	☼	8270D	Total/NA
Chrysene	22000		9500	2100	ug/Kg	50	☼	8270D	Total/NA
Dibenz(a,h)anthracene	3500	J	9500	1700	ug/Kg	50	☼	8270D	Total/NA
Fluoranthene	22000		9500	1000	ug/Kg	50	☼	8270D	Total/NA
Fluorene	1100	J	9500	1100	ug/Kg	50	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	26000		9500	1200	ug/Kg	50	☼	8270D	Total/NA
Naphthalene	1300	J	9500	1200	ug/Kg	50	☼	8270D	Total/NA
Phenanthrene	10000		9500	1400	ug/Kg	50	☼	8270D	Total/NA
Pyrene	24000		9500	1100	ug/Kg	50	☼	8270D	Total/NA
Aluminum	5420		12.1		mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.1		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	67.1		0.60		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54		0.24		mg/Kg	1	☼	6010C	Total/NA
Calcium	39600		60.4		mg/Kg	1	☼	6010C	Total/NA
Chromium	11.0		0.60		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.5		0.60		mg/Kg	1	☼	6010C	Total/NA
Copper	38.6		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	12500	^	12.1		mg/Kg	1	☼	6010C	Total/NA
Lead	86.9		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	8120		24.1		mg/Kg	1	☼	6010C	Total/NA
Manganese	216		0.24		mg/Kg	1	☼	6010C	Total/NA
Nickel	15.8		6.0		mg/Kg	1	☼	6010C	Total/NA
Potassium	1200		36.2		mg/Kg	1	☼	6010C	Total/NA
Sodium	451		169		mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.6		0.60		mg/Kg	1	☼	6010C	Total/NA
Zinc	80.7		2.4		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.18		0.023		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-5 (9-11')
Date Collected: 04/13/16 12:50
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-1
Matrix: Solid
Percent Solids: 84.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	F1	130	35	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,1,2,2-Tetrachloroethane	ND		130	21	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,1,2-Trichloroethane	ND		130	27	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	130	64	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,1-Dichloroethane	ND		130	39	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,1-Dichloroethene	ND		130	44	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,2,4-Trichlorobenzene	ND		130	48	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,2-Dibromo-3-Chloropropane	ND		130	64	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,2-Dichlorobenzene	ND		130	33	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,2-Dichloroethane	ND		130	52	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,2-Dichloropropane	ND		130	21	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,3-Dichlorobenzene	ND		130	34	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,4-Dichlorobenzene	ND		130	18	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
2-Butanone (MEK)	ND		640	380	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
2-Hexanone	ND		640	260	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
4-Methyl-2-pentanone (MIBK)	ND		640	41	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Acetone	ND		640	530	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Benzene	ND		130	24	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Bromodichloromethane	ND		130	26	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Bromoform	ND		130	64	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Bromomethane	ND		130	28	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Carbon disulfide	ND		130	58	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Carbon tetrachloride	ND		130	33	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Chlorobenzene	ND		130	17	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Dibromochloromethane	ND		130	62	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Chloroethane	ND		130	27	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Chloroform	ND	F1	130	88	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Chloromethane	ND		130	30	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
cis-1,2-Dichloroethene	ND		130	35	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
cis-1,3-Dichloropropene	ND		130	31	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Cyclohexane	ND	F1	130	28	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Dichlorodifluoromethane	ND	F2	130	56	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Ethylbenzene	ND	F1	130	37	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
1,2-Dibromoethane	ND		130	22	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Isopropylbenzene	ND	F1	130	19	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Methyl acetate	ND		130	61	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Methyl tert-butyl ether	ND		130	48	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Methylcyclohexane	ND	F1	130	60	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Methylene Chloride	**50**	**J B F1**	130	25	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Styrene	ND	F1	130	31	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Tetrachloroethene	ND		130	17	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Toluene	ND	F1	130	34	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
trans-1,2-Dichloroethene	ND		130	30	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
trans-1,3-Dichloropropene	ND		130	13	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Trichloroethene	ND	F1	130	36	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Trichlorofluoromethane	ND		130	60	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Vinyl chloride	ND		130	43	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1
Xylenes, Total	ND	F1	260	71	ug/Kg	☼	04/19/16 19:21	04/20/16 00:54	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-5 (9-11')
Date Collected: 04/13/16 12:50
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-1
Matrix: Solid
Percent Solids: 84.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		50 - 149	04/19/16 19:21	04/20/16 00:54	1
1,2-Dichloroethane-d4 (Surr)	91		53 - 146	04/19/16 19:21	04/20/16 00:54	1
4-Bromofluorobenzene (Surr)	101		49 - 148	04/19/16 19:21	04/20/16 00:54	1
Dibromofluoromethane (Surr)	96		60 - 140	04/19/16 19:21	04/20/16 00:54	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,4-Dinitrophenol	ND		1900	920	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2-Chlorophenol	ND		200	36	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2-Methylphenol	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2-Nitroaniline	ND		390	29	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
2-Nitrophenol	ND		200	56	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
3,3'-Dichlorobenzidine	ND		390	230	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
3-Nitroaniline	ND		390	55	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Methylphenol	ND		390	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Nitroaniline	ND		390	100	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Acenaphthene	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Acenaphthylene	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Acetophenone	ND		200	27	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Anthracene	ND		200	49	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Atrazine	ND		200	69	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Benzaldehyde	ND		200	160	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Benzo[a]anthracene	**180**	**J**	200	20	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Benzo[a]pyrene	**110**	**J**	200	29	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Benzo[b]fluoranthene	**160**	**J**	200	32	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Benzo[k]fluoranthene	**91**	**J**	200	26	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Bis(2-ethylhexyl) phthalate	ND		200	68	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Caprolactam	ND		200	60	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Carbazole	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Chrysene	**190**	**J**	200	44	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-5 (9-11')
Date Collected: 04/13/16 12:50
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-1
Matrix: Solid
Percent Solids: 84.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Dibenzofuran	**640**		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Fluoranthene	**220**		200	21	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Fluorene	**1400**		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Hexachloroethane	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Isophorone	ND		200	42	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Naphthalene	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Nitrobenzene	ND		200	22	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Phenanthrene	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Phenol	ND		200	30	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1
Pyrene	**280**		200	23	ug/Kg	☼	04/15/16 07:29	04/16/16 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*34 - 132*	*04/15/16 07:29*	*04/16/16 22:56*	*1*
Phenol-d5 (Surr)	*77*		*11 - 120*	*04/15/16 07:29*	*04/16/16 22:56*	*1*
p-Terphenyl-d14 (Surr)	*88*		*65 - 153*	*04/15/16 07:29*	*04/16/16 22:56*	*1*
2,4,6-Tribromophenol (Surr)	*89*		*39 - 146*	*04/15/16 07:29*	*04/16/16 22:56*	*1*
2-Fluorobiphenyl	*81*		*37 - 120*	*04/15/16 07:29*	*04/16/16 22:56*	*1*
2-Fluorophenol (Surr)	*77*		*18 - 120*	*04/15/16 07:29*	*04/16/16 22:56*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5410**		12.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Antimony	ND		19.1		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Arsenic	**3.5**		2.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Barium	**18.2**		0.64		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Beryllium	**0.27**		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Cadmium	ND		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Calcium	**96200**		63.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Chromium	**8.2**		0.64		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Cobalt	**4.0**		0.64		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Copper	**11.2**		1.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Iron	**9150**		12.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Lead	**9.4**		1.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Magnesium	**11300**		25.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Manganese	**257**		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Nickel	**12.4**		6.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Potassium	**1860**		38.1		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Selenium	ND		5.1		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-5 (9-11')
Date Collected: 04/13/16 12:50
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-1
Matrix: Solid
Percent Solids: 84.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.76		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Sodium	**220**		178		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Thallium	ND		7.6		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Vanadium	**14.6**		0.64		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1
Zinc	**32.6**		2.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.024		mg/Kg	☼	04/19/16 09:50	04/19/16 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2		mg/Kg	☼	04/20/16 04:05	04/20/16 13:53	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-6 (8-10')
Date Collected: 04/13/16 12:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-2
Matrix: Solid
Percent Solids: 85.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		610	170	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,1,2,2-Tetrachloroethane	ND		610	99	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,1,2-Trichloroethane	ND		610	130	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		610	300	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,1-Dichloroethane	ND		610	190	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,1-Dichloroethene	ND		610	210	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,2,4-Trichlorobenzene	ND		610	230	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,2-Dibromo-3-Chloropropane	ND		610	300	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,2-Dichlorobenzene	ND		610	150	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,2-Dichloroethane	ND		610	250	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,2-Dichloropropane	ND		610	98	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,3-Dichlorobenzene	ND		610	160	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,4-Dichlorobenzene	ND		610	85	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
2-Butanone (MEK)	ND		3000	1800	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
2-Hexanone	ND		3000	1200	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
4-Methyl-2-pentanone (MIBK)	ND		3000	190	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Acetone	ND		3000	2500	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Benzene	ND		610	120	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Bromodichloromethane	ND		610	120	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Bromoform	ND		610	300	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Bromomethane	ND		610	130	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Carbon disulfide	ND		610	280	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Carbon tetrachloride	ND		610	150	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Chlorobenzene	ND		610	80	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Dibromochloromethane	ND		610	290	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Chloroethane	ND		610	130	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Chloroform	ND		610	420	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Chloromethane	ND		610	140	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
cis-1,2-Dichloroethene	ND		610	170	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
cis-1,3-Dichloropropene	ND		610	140	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Cyclohexane	ND		610	130	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Dichlorodifluoromethane	ND		610	260	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Ethylbenzene	**1300**		610	180	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
1,2-Dibromoethane	ND		610	110	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Isopropylbenzene	**580**	**J**	610	91	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Methyl acetate	ND		610	290	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Methyl tert-butyl ether	ND		610	230	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Methylcyclohexane	**29000**		610	280	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Methylene Chloride	ND		610	120	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Styrene	ND		610	150	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Tetrachloroethene	ND		610	82	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Toluene	ND		610	160	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
trans-1,2-Dichloroethene	ND		610	140	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
trans-1,3-Dichloropropene	ND		610	60	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Trichloroethene	ND		610	170	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Trichlorofluoromethane	ND		610	280	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Vinyl chloride	ND		610	200	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5
Xylenes, Total	**3500**		1200	340	ug/Kg	☼	04/19/16 19:21	04/20/16 01:21	5

Client Sample ID: TKMW-6 (8-10')
Date Collected: 04/13/16 12:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-2
Matrix: Solid
Percent Solids: 85.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*50 - 149*	*04/19/16 19:21*	*04/20/16 01:21*	*5*
1,2-Dichloroethane-d4 (Surr)	*96*		*53 - 146*	*04/19/16 19:21*	*04/20/16 01:21*	*5*
4-Bromofluorobenzene (Surr)	*101*		*49 - 148*	*04/19/16 19:21*	*04/20/16 01:21*	*5*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*04/19/16 19:21*	*04/20/16 01:21*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	**460**	**J**	980	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
bis (2-chloroisopropyl) ether	ND		980	200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,4,5-Trichlorophenol	ND		980	260	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,4,6-Trichlorophenol	ND		980	200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,4-Dichlorophenol	ND		980	100	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,4-Dimethylphenol	ND		980	240	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,4-Dinitrophenol	ND		9600	4500	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,4-Dinitrotoluene	ND		980	200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2,6-Dinitrotoluene	ND		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2-Chloronaphthalene	ND		980	160	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2-Chlorophenol	ND		980	180	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2-Methylphenol	ND		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2-Methylnaphthalene	**4600**		980	200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2-Nitroaniline	ND		1900	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
2-Nitrophenol	ND		980	280	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
3,3'-Dichlorobenzidine	ND		1900	1200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4,6-Dinitro-2-methylphenol	ND		1900	980	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Bromophenyl phenyl ether	ND		980	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Chloro-3-methylphenol	ND		980	240	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Chloroaniline	ND		980	240	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Chlorophenyl phenyl ether	ND		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Methylphenol	ND		1900	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Nitroaniline	ND		1900	510	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
4-Nitrophenol	ND		1900	690	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Acenaphthene	**3200**		980	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Acenaphthylene	**880**	**J**	980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Acetophenone	ND		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Anthracene	**3300**		980	240	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Atrazine	ND		980	340	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Benzaldehyde	ND		980	780	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Benzo[a]anthracene	**3500**		980	98	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Benzo[a]pyrene	**3200**		980	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Benzo[b]fluoranthene	**3400**		980	160	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Benzo[g,h,i]perylene	**2300**		980	100	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Benzo[k]fluoranthene	**1200**		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Bis(2-chloroethoxy)methane	ND		980	210	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Bis(2-chloroethyl)ether	ND		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Bis(2-ethylhexyl) phthalate	ND		980	330	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Butyl benzyl phthalate	ND		980	160	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Caprolactam	ND		980	290	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Carbazole	**1200**		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Chrysene	**3300**		980	220	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-6 (8-10')
Date Collected: 04/13/16 12:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-2
Matrix: Solid
Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		980	170	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Di-n-butyl phthalate	ND		980	170	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Di-n-octyl phthalate	ND		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Dibenzofuran	**1100**		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Diethyl phthalate	ND		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Dimethyl phthalate	ND		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Fluoranthene	**9200**		980	100	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Fluorene	**2100**		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Hexachlorobenzene	ND		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Hexachlorobutadiene	ND		980	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Hexachlorocyclopentadiene	ND		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Hexachloroethane	ND		980	130	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Indeno[1,2,3-cd]pyrene	**1600**		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Isophorone	ND		980	210	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
N-Nitrosodi-n-propylamine	ND		980	170	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
N-Nitrosodiphenylamine	ND		980	790	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Nitrobenzene	ND		980	110	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Pentachlorophenol	ND		1900	980	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Phenanthrene	**12000**		980	140	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Phenol	ND		980	150	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5
Pyrene	**9800**		980	120	ug/Kg	☼	04/15/16 07:29	04/16/16 23:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*81*		*34 - 132*	*04/15/16 07:29*	*04/16/16 23:22*	*5*
Phenol-d5 (Surr)	*72*		*11 - 120*	*04/15/16 07:29*	*04/16/16 23:22*	*5*
p-Terphenyl-d14 (Surr)	*81*		*65 - 153*	*04/15/16 07:29*	*04/16/16 23:22*	*5*
2,4,6-Tribromophenol (Surr)	*90*		*39 - 146*	*04/15/16 07:29*	*04/16/16 23:22*	*5*
2-Fluorobiphenyl	*82*		*37 - 120*	*04/15/16 07:29*	*04/16/16 23:22*	*5*
2-Fluorophenol (Surr)	*73*		*18 - 120*	*04/15/16 07:29*	*04/16/16 23:22*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**23000**		4900	630	ug/Kg	☼	04/15/16 07:29	04/20/16 02:55	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*71*		*34 - 132*	*04/15/16 07:29*	*04/20/16 02:55*	*25*
Phenol-d5 (Surr)	*58*		*11 - 120*	*04/15/16 07:29*	*04/20/16 02:55*	*25*
p-Terphenyl-d14 (Surr)	*77*		*65 - 153*	*04/15/16 07:29*	*04/20/16 02:55*	*25*
2,4,6-Tribromophenol (Surr)	*155*	*X*	*39 - 146*	*04/15/16 07:29*	*04/20/16 02:55*	*25*
2-Fluorobiphenyl	*77*		*37 - 120*	*04/15/16 07:29*	*04/20/16 02:55*	*25*
2-Fluorophenol (Surr)	*60*		*18 - 120*	*04/15/16 07:29*	*04/20/16 02:55*	*25*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6520**		11.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Antimony	ND		17.0		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Arsenic	**2.9**		2.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Barium	**18.9**		0.57		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Beryllium	**0.33**		0.23		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Cadmium	ND		0.23		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-6 (8-10')
Date Collected: 04/13/16 12:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-2
Matrix: Solid
Percent Solids: 85.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1340		56.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Chromium	10.4		0.57		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Cobalt	4.8		0.57		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Copper	14.9		1.1		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Iron	12300		11.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Lead	7.6		1.1		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Magnesium	2050		22.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Manganese	208		0.23		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Nickel	19.9		5.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Potassium	1890		34.0		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Selenium	ND		4.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Silver	ND		0.68		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Sodium	ND		159		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Thallium	ND		6.8		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Vanadium	20.2		0.57		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1
Zinc	42.4		2.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022		mg/Kg	☼	04/19/16 09:50	04/19/16 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2		mg/Kg	☼	04/20/16 04:05	04/20/16 13:55	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-7 (2-5')
Date Collected: 04/13/16 11:20
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-3
Matrix: Solid
Percent Solids: 77.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		59	4.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,1,2,2-Tetrachloroethane	ND	*	59	9.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,1,2-Trichloroethane	ND		59	7.7	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		59	13	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,1-Dichloroethane	ND		59	7.2	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,1-Dichloroethene	ND		59	7.2	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,2,4-Trichlorobenzene	ND	*	59	3.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,2-Dibromo-3-Chloropropane	ND	*	59	29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,2-Dichlorobenzene	ND	*	59	4.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,2-Dichloroethane	ND		59	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,2-Dichloropropane	ND		59	29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,3-Dichlorobenzene	ND	*	59	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,4-Dichlorobenzene	ND	*	59	8.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
2-Butanone (MEK)	ND		290	22	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
2-Hexanone	ND		290	29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
4-Methyl-2-pentanone (MIBK)	ND		290	19	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Acetone	ND		290	50	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Benzene	ND		59	2.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Bromodichloromethane	ND		59	7.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Bromoform	ND		59	29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Bromomethane	ND		59	5.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Carbon disulfide	ND		59	29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Carbon tetrachloride	ND		59	5.7	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Chlorobenzene	ND		59	7.8	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Dibromochloromethane	ND		59	7.5	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Chloroethane	ND		59	13	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Chloroform	ND		59	3.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Chloromethane	ND		59	3.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
cis-1,2-Dichloroethene	ND		59	7.5	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
cis-1,3-Dichloropropene	ND		59	8.5	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Cyclohexane	ND		59	8.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Dichlorodifluoromethane	ND		59	4.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Ethylbenzene	ND		59	4.1	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
1,2-Dibromoethane	ND		59	7.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Isopropylbenzene	ND	*	59	8.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Methyl acetate	ND		59	36	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Methyl tert-butyl ether	ND		59	5.8	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Methylcyclohexane	ND		59	9.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Methylene Chloride	ND		59	27	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Styrene	ND		59	2.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Tetrachloroethene	ND		59	7.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Toluene	ND		59	4.5	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
trans-1,2-Dichloroethene	ND		59	6.1	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
trans-1,3-Dichloropropene	ND		59	26	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Trichloroethene	ND		59	13	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Trichlorofluoromethane	ND		59	5.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Vinyl chloride	ND		59	7.2	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1
Xylenes, Total	ND		120	9.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:05	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-7 (2-5')
Date Collected: 04/13/16 11:20
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-3
Matrix: Solid
Percent Solids: 77.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	112		71 - 125	04/15/16 09:24	04/15/16 18:05	1
1,2-Dichloroethane-d4 (Surr)	87		64 - 126	04/15/16 09:24	04/15/16 18:05	1
4-Bromofluorobenzene (Surr)	84		72 - 126	04/15/16 09:24	04/15/16 18:05	1
Dibromofluoromethane (Surr)	96		60 - 140	04/15/16 09:24	04/15/16 18:05	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		11000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
bis (2-chloroisopropyl) ether	ND		11000	2200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,4,5-Trichlorophenol	ND		11000	3000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,4,6-Trichlorophenol	ND		11000	2200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,4-Dichlorophenol	ND		11000	1200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,4-Dimethylphenol	ND		11000	2700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,4-Dinitrophenol	ND		110000	51000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,4-Dinitrotoluene	ND		11000	2300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2,6-Dinitrotoluene	ND		11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2-Chloronaphthalene	ND		11000	1800	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2-Chlorophenol	ND		11000	2000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2-Methylphenol	ND		11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2-Methylnaphthalene	ND		11000	2200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2-Nitroaniline	ND		21000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
2-Nitrophenol	ND		11000	3100	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
3,3'-Dichlorobenzidine	ND		21000	13000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
3-Nitroaniline	ND		21000	3000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4,6-Dinitro-2-methylphenol	ND		21000	11000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Bromophenyl phenyl ether	ND		11000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Chloro-3-methylphenol	ND		11000	2700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Chloroaniline	ND		11000	2700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Chlorophenyl phenyl ether	ND		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Methylphenol	ND		21000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Nitroaniline	ND		21000	5800	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
4-Nitrophenol	ND		21000	7700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Acenaphthene	**4000**	**J**	11000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Acenaphthylene	ND		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Acetophenone	ND		11000	1500	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Anthracene	**10000**	**J**	11000	2700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Atrazine	ND		11000	3800	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Benzaldehyde	ND		11000	8700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Benzo[a]anthracene	**66000**		11000	1100	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Benzo[a]pyrene	**90000**		11000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Benzo[b]fluoranthene	**98000**		11000	1700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Benzo[g,h,i]perylene	**66000**		11000	1200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Benzo[k]fluoranthene	**45000**		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Bis(2-chloroethoxy)methane	ND		11000	2300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Bis(2-chloroethyl)ether	ND		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Bis(2-ethylhexyl) phthalate	ND		11000	3800	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Butyl benzyl phthalate	ND		11000	1800	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Caprolactam	ND		11000	3300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Carbazole	**4700**	**J**	11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Chrysene	**53000**		11000	2500	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50

Client Sample ID: TKMW-7 (2-5')
Date Collected: 04/13/16 11:20
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-3
Matrix: Solid
Percent Solids: 77.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	**9800**	**J**	11000	1900	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Di-n-butyl phthalate	ND		11000	1900	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Di-n-octyl phthalate	ND		11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Dibenzofuran	**1800**	**J**	11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Diethyl phthalate	ND		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Dimethyl phthalate	ND		11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Fluoranthene	**53000**		11000	1200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Fluorene	**2400**	**J**	11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Hexachlorobenzene	ND		11000	1500	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Hexachlorobutadiene	ND		11000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Hexachlorocyclopentadiene	ND		11000	1500	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Hexachloroethane	ND		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Indeno[1,2,3-cd]pyrene	**60000**		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Isophorone	ND		11000	2300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
N-Nitrosodi-n-propylamine	ND		11000	1900	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
N-Nitrosodiphenylamine	ND		11000	8900	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Naphthalene	ND		11000	1400	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Nitrobenzene	ND		11000	1200	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Pentachlorophenol	ND		21000	11000	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Phenanthrene	**26000**		11000	1600	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Phenol	ND		11000	1700	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50
Pyrene	**53000**		11000	1300	ug/Kg	☼	04/15/16 07:29	04/16/16 23:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*72*		*34 - 132*	*04/15/16 07:29*	*04/16/16 23:49*	*50*
Phenol-d5 (Surr)	*69*		*11 - 120*	*04/15/16 07:29*	*04/16/16 23:49*	*50*
p-Terphenyl-d14 (Surr)	*71*		*65 - 153*	*04/15/16 07:29*	*04/16/16 23:49*	*50*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*04/15/16 07:29*	*04/16/16 23:49*	*50*
2-Fluorobiphenyl	*70*		*37 - 120*	*04/15/16 07:29*	*04/16/16 23:49*	*50*
2-Fluorophenol (Surr)	*68*		*18 - 120*	*04/15/16 07:29*	*04/16/16 23:49*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6210**		13.9		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Antimony	ND		20.8		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Arsenic	**14.7**		2.8		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Barium	**90.7**		0.69		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Beryllium	**0.59**		0.28		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Cadmium	ND		0.28		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Calcium	**21000**		69.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Chromium	**10.6**		0.69		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Cobalt	**6.3**		0.69		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Copper	**24.8**		1.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Iron	**12500**		13.9		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Lead	**61.6**		1.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Magnesium	**6060**		27.8		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Manganese	**184**		0.28		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Nickel	**17.1**		6.9		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Potassium	**1010**		41.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Selenium	ND		5.6		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-7 (2-5')
Date Collected: 04/13/16 11:20
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-3
Matrix: Solid
Percent Solids: 77.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.83		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Sodium	**532**		194		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Thallium	ND		8.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Vanadium	**19.3**		0.69		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1
Zinc	**51.8**		2.8		mg/Kg	☼	04/16/16 08:30	04/19/16 01:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**		0.026		mg/Kg	☼	04/19/16 09:50	04/19/16 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.3		mg/Kg	☼	04/20/16 04:05	04/20/16 13:56	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-8 (5.5-7.5')
Date Collected: 04/13/16 10:30
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-4
Matrix: Solid
Percent Solids: 83.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.9	0.43	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,1,2,2-Tetrachloroethane	ND	F1	5.9	0.96	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,1,2-Trichloroethane	ND	F1	5.9	0.77	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.4	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,1-Dichloroethane	ND		5.9	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,1-Dichloroethene	ND		5.9	0.73	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,2,4-Trichlorobenzene	ND	F1	5.9	0.36	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,2-Dibromo-3-Chloropropane	ND	F1	5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,2-Dichlorobenzene	ND		5.9	0.46	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,2-Dichloroethane	ND	F1	5.9	0.30	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,2-Dichloropropane	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,3-Dichlorobenzene	ND		5.9	0.30	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,4-Dichlorobenzene	ND		5.9	0.83	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
2-Butanone (MEK)	ND	F1	30	2.2	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
2-Hexanone	ND	F1	30	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
4-Methyl-2-pentanone (MIBK)	ND	F1	30	1.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Acetone	ND		30	5.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Benzene	ND		5.9	0.29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Bromodichloromethane	ND		5.9	0.79	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Bromoform	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Carbon disulfide	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Chlorobenzene	ND		5.9	0.78	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Dibromochloromethane	ND		5.9	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Chloroform	ND		5.9	0.37	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Chloromethane	ND		5.9	0.36	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
cis-1,2-Dichloroethene	ND		5.9	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
cis-1,3-Dichloropropene	ND	F1	5.9	0.85	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Cyclohexane	ND		5.9	0.83	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Dichlorodifluoromethane	ND		5.9	0.49	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Ethylbenzene	ND		5.9	0.41	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
1,2-Dibromoethane	ND	F1	5.9	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Isopropylbenzene	ND		5.9	0.89	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Methyl acetate	ND	F1	5.9	3.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Methylcyclohexane	ND		5.9	0.90	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Methylene Chloride	**4.1**	**J**	5.9	2.7	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Styrene	ND	F1	5.9	0.30	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Tetrachloroethene	ND		5.9	0.80	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Toluene	ND		5.9	0.45	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
trans-1,2-Dichloroethene	ND		5.9	0.61	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
trans-1,3-Dichloropropene	ND		5.9	2.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Trichloroethene	ND		5.9	1.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Trichlorofluoromethane	ND		5.9	0.56	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Vinyl chloride	ND		5.9	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:31	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-8 (5.5-7.5')
Date Collected: 04/13/16 10:30
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-4
Matrix: Solid
Percent Solids: 83.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		71 - 125	04/15/16 09:24	04/15/16 18:31	1
1,2-Dichloroethane-d4 (Surr)	89		64 - 126	04/15/16 09:24	04/15/16 18:31	1
4-Bromofluorobenzene (Surr)	105		72 - 126	04/15/16 09:24	04/15/16 18:31	1
Dibromofluoromethane (Surr)	95		60 - 140	04/15/16 09:24	04/15/16 18:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,4,5-Trichlorophenol	ND	F2	1000	270	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,4-Dichlorophenol	ND	F2	1000	110	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,4-Dimethylphenol	ND	F1	1000	240	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,4-Dinitrophenol	ND		9900	4700	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2-Chlorophenol	ND		1000	180	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2-Methylphenol	ND	F1	1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2-Methylnaphthalene	ND		1000	200	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2-Nitroaniline	ND	F1 F2	2000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
3,3'-Dichlorobenzidine	ND	F1	2000	1200	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
3-Nitroaniline	ND	F1	2000	280	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4,6-Dinitro-2-methylphenol	ND	F2	2000	1000	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Chloro-3-methylphenol	ND	F2	1000	250	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Chloroaniline	ND	F1	1000	250	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Chlorophenyl phenyl ether	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Methylphenol	ND	F1 F2	2000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Nitroaniline	ND	F1	2000	530	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
4-Nitrophenol	ND	F2	2000	710	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Acenaphthene	ND		1000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Acenaphthylene	ND	F1 F2	1000	130	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Acetophenone	ND		1000	140	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Anthracene	ND	F1 F2	1000	250	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Atrazine	ND	F2	1000	350	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Benzaldehyde	ND		1000	800	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Benzo[a]anthracene	ND	F2	1000	100	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Benzo[a]pyrene	ND	F1 F2	1000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Benzo[b]fluoranthene	ND	F1 F2	1000	160	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Benzo[g,h,i]perylene	ND	F1	1000	110	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Benzo[k]fluoranthene	ND	F1 F2	1000	130	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Bis(2-chloroethoxy)methane	ND		1000	210	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Bis(2-ethylhexyl) phthalate	ND		1000	340	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Caprolactam	ND		1000	300	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Carbazole	ND	F2	1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Chrysene	ND	F2	1000	230	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5

Client Sample ID: TKMW-8 (5.5-7.5')
Date Collected: 04/13/16 10:30
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-4
Matrix: Solid
Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND	F1	1000	180	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Fluoranthene	ND	F1 F2	1000	110	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Fluorene	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Indeno[1,2,3-cd]pyrene	ND	F1	1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Isophorone	ND		1000	210	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
N-Nitrosodiphenylamine	ND	F1	1000	820	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Naphthalene	ND		1000	130	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Pentachlorophenol	ND	F1	2000	1000	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Phenanthrene	ND	F2	1000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Phenol	ND		1000	150	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5
Pyrene	ND		1000	120	ug/Kg	☼	04/15/16 07:29	04/16/16 22:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*76*		*34 - 132*	*04/15/16 07:29*	*04/16/16 22:30*	*5*
Phenol-d5 (Surr)	*75*		*11 - 120*	*04/15/16 07:29*	*04/16/16 22:30*	*5*
p-Terphenyl-d14 (Surr)	*90*		*65 - 153*	*04/15/16 07:29*	*04/16/16 22:30*	*5*
2,4,6-Tribromophenol (Surr)	*78*		*39 - 146*	*04/15/16 07:29*	*04/16/16 22:30*	*5*
2-Fluorobiphenyl	*86*		*37 - 120*	*04/15/16 07:29*	*04/16/16 22:30*	*5*
2-Fluorophenol (Surr)	*73*		*18 - 120*	*04/15/16 07:29*	*04/16/16 22:30*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9750**		12.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Antimony	ND	F1	18.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Arsenic	**4.6**		2.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Barium	**25.9**	**F1**	0.62		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Beryllium	**0.38**		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Cadmium	ND		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Calcium	**29500**	**F2**	61.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Chromium	**12.4**		0.62		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Cobalt	**4.9**		0.62		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Copper	**14.8**		1.2		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Iron	**13100**		12.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Lead	**9.9**		1.2		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Magnesium	**4070**	**F1**	24.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Manganese	**163**	**F2 F1**	0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Nickel	**15.7**		6.2		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Potassium	**1470**	**F1**	37.0		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Selenium	ND		4.9		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-8 (5.5-7.5')
Date Collected: 04/13/16 10:30
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-4
Matrix: Solid
Percent Solids: 83.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.74		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Sodium	**282**		173		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Thallium	ND		7.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Vanadium	**20.7**	**F1**	0.62		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1
Zinc	**37.6**		2.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.024		mg/Kg	☼	04/19/16 09:50	04/19/16 13:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2		mg/Kg	☼	04/20/16 04:05	04/20/16 13:49	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-9 (5-7)
Date Collected: 04/13/16 10:05
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-5
Matrix: Solid
Percent Solids: 83.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.9	0.43	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,1,2,2-Tetrachloroethane	ND		5.9	0.96	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,1,2-Trichloroethane	ND		5.9	0.77	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.4	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,1-Dichloroethane	ND		5.9	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,1-Dichloroethene	ND		5.9	0.73	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,2,4-Trichlorobenzene	ND		5.9	0.36	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,2-Dibromo-3-Chloropropane	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,2-Dichlorobenzene	ND		5.9	0.46	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,2-Dichloroethane	ND		5.9	0.30	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,2-Dichloropropane	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,3-Dichlorobenzene	ND		5.9	0.30	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,4-Dichlorobenzene	ND		5.9	0.83	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
4-Methyl-2-pentanone (MIBK)	ND		30	1.9	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Acetone	ND		30	5.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Benzene	ND		5.9	0.29	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Bromodichloromethane	ND		5.9	0.79	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Bromoform	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Carbon disulfide	ND		5.9	3.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Chlorobenzene	ND		5.9	0.78	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Dibromochloromethane	ND		5.9	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Chloroform	ND		5.9	0.37	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Chloromethane	ND		5.9	0.36	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
cis-1,2-Dichloroethene	ND		5.9	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
cis-1,3-Dichloropropene	ND		5.9	0.85	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Cyclohexane	ND		5.9	0.83	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Dichlorodifluoromethane	ND		5.9	0.49	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Ethylbenzene	ND		5.9	0.41	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
1,2-Dibromoethane	ND		5.9	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Isopropylbenzene	ND		5.9	0.89	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Methyl acetate	ND		5.9	3.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Methylcyclohexane	ND		5.9	0.90	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Methylene Chloride	**3.3**	**J**	5.9	2.7	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Styrene	ND		5.9	0.30	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Tetrachloroethene	ND		5.9	0.80	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Toluene	ND		5.9	0.45	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
trans-1,2-Dichloroethene	ND		5.9	0.61	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
trans-1,3-Dichloropropene	ND		5.9	2.6	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Trichloroethene	ND		5.9	1.3	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Trichlorofluoromethane	ND		5.9	0.56	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Vinyl chloride	ND		5.9	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	04/15/16 09:24	04/15/16 18:56	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-9 (5-7)
Date Collected: 04/13/16 10:05
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-5
Matrix: Solid
Percent Solids: 83.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	111		71 - 125	04/15/16 09:24	04/15/16 18:56	1
1,2-Dichloroethane-d4 (Surr)	103		64 - 126	04/15/16 09:24	04/15/16 18:56	1
4-Bromofluorobenzene (Surr)	122		72 - 126	04/15/16 09:24	04/15/16 18:56	1
Dibromofluoromethane (Surr)	110		60 - 140	04/15/16 09:24	04/15/16 18:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2-Chlorophenol	ND		200	36	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2-Methylphenol	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
2-Nitrophenol	ND		200	56	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
3-Nitroaniline	ND		380	55	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Methylphenol	ND		380	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Acenaphthene	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Acenaphthylene	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Acetophenone	ND		200	27	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Anthracene	ND		200	49	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Atrazine	ND		200	69	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Benzaldehyde	ND		200	160	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Benzo[a]pyrene	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Benzo[b]fluoranthene	ND		200	31	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Benzo[k]fluoranthene	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Bis(2-ethylhexyl) phthalate	ND		200	68	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Caprolactam	ND		200	59	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Carbazole	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Chrysene	ND		200	44	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1

Client Sample ID: TKMW-9 (5-7)
Date Collected: 04/13/16 10:05
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-5
Matrix: Solid
Percent Solids: 83.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Dibenzofuran	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Fluoranthene	**68**	**J**	200	21	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Fluorene	ND		200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Hexachloroethane	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Indeno[1,2,3-cd]pyrene	ND		200	24	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Isophorone	ND		200	42	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Naphthalene	ND		200	26	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Nitrobenzene	ND		200	22	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Phenanthrene	**32**	**J**	200	29	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Phenol	ND		200	30	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1
Pyrene	**61**	**J**	200	23	ug/Kg	☼	04/15/16 07:29	04/17/16 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*34 - 132*	*04/15/16 07:29*	*04/17/16 00:15*	*1*
Phenol-d5 (Surr)	*78*		*11 - 120*	*04/15/16 07:29*	*04/17/16 00:15*	*1*
p-Terphenyl-d14 (Surr)	*93*		*65 - 153*	*04/15/16 07:29*	*04/17/16 00:15*	*1*
2,4,6-Tribromophenol (Surr)	*87*		*39 - 146*	*04/15/16 07:29*	*04/17/16 00:15*	*1*
2-Fluorobiphenyl	*84*		*37 - 120*	*04/15/16 07:29*	*04/17/16 00:15*	*1*
2-Fluorophenol (Surr)	*73*		*18 - 120*	*04/15/16 07:29*	*04/17/16 00:15*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16400**		12.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Antimony	ND		19.0		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Arsenic	**5.7**		2.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Barium	**63.4**		0.63		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Beryllium	**0.75**		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Cadmium	ND		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Calcium	**3520**		63.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Chromium	**22.1**		0.63		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Cobalt	**9.0**		0.63		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Copper	**21.1**		1.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Iron	**21800**		12.7		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Lead	**21.5**		1.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Magnesium	**3830**		25.4		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Manganese	**275**		0.25		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Nickel	**27.9**		6.3		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Potassium	**3110**		38.0		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Selenium	ND		5.1		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: TKMW-9 (5-7)
Date Collected: 04/13/16 10:05
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-5
Matrix: Solid
Percent Solids: 83.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.76		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Sodium	**456**		178		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Thallium	ND		7.6		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Vanadium	**37.8**		0.63		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1
Zinc	**65.0**		2.5		mg/Kg	☼	04/16/16 08:30	04/19/16 01:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.030**		0.023		mg/Kg	☼	04/19/16 09:50	04/19/16 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2		mg/Kg	☼	04/20/16 04:05	04/20/16 13:58	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: BLIND DUP
Date Collected: 04/13/16 08:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-6
Matrix: Solid
Percent Solids: 86.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.6	0.41	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,1,2,2-Tetrachloroethane	ND		5.6	0.91	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,1,2-Trichloroethane	ND		5.6	0.73	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.3	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,1-Dichloroethane	ND		5.6	0.69	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,1-Dichloroethene	ND		5.6	0.69	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,2,4-Trichlorobenzene	ND		5.6	0.34	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,2-Dibromo-3-Chloropropane	ND		5.6	2.8	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,2-Dichlorobenzene	ND		5.6	0.44	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,2-Dichloroethane	ND		5.6	0.28	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,2-Dichloropropane	ND		5.6	2.8	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,3-Dichlorobenzene	ND		5.6	0.29	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,4-Dichlorobenzene	ND		5.6	0.79	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.8	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Acetone	ND		28	4.7	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Benzene	ND		5.6	0.28	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Bromodichloromethane	ND		5.6	0.75	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Bromoform	ND		5.6	2.8	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Bromomethane	ND		5.6	0.51	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Carbon disulfide	ND		5.6	2.8	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Carbon tetrachloride	ND		5.6	0.54	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Chlorobenzene	ND		5.6	0.74	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Dibromochloromethane	ND		5.6	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Chloroethane	ND		5.6	1.3	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Chloroform	ND		5.6	0.35	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Chloromethane	ND		5.6	0.34	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
cis-1,2-Dichloroethene	ND		5.6	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
cis-1,3-Dichloropropene	ND		5.6	0.81	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Cyclohexane	ND		5.6	0.79	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Dichlorodifluoromethane	ND		5.6	0.46	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Ethylbenzene	ND		5.6	0.39	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
1,2-Dibromoethane	ND		5.6	0.72	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Isopropylbenzene	ND		5.6	0.85	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Methyl acetate	ND		5.6	3.4	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Methyl tert-butyl ether	ND		5.6	0.55	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Methylcyclohexane	ND		5.6	0.86	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Methylene Chloride	ND		5.6	2.6	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Styrene	ND		5.6	0.28	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Tetrachloroethene	ND		5.6	0.76	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Toluene	ND		5.6	0.43	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
trans-1,2-Dichloroethene	ND		5.6	0.58	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
trans-1,3-Dichloropropene	ND		5.6	2.5	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Trichloroethene	ND		5.6	1.2	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Trichlorofluoromethane	ND		5.6	0.53	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Vinyl chloride	ND		5.6	0.69	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1
Xylenes, Total	ND		11	0.95	ug/Kg	☼	04/15/16 09:24	04/15/16 19:22	1

Client Sample ID: BLIND DUP
Date Collected: 04/13/16 08:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-6
Matrix: Solid
Percent Solids: 86.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	04/15/16 09:24	04/15/16 19:22	1
1,2-Dichloroethane-d4 (Surr)	92		64 - 126	04/15/16 09:24	04/15/16 19:22	1
4-Bromofluorobenzene (Surr)	106		72 - 126	04/15/16 09:24	04/15/16 19:22	1
Dibromofluoromethane (Surr)	98		60 - 140	04/15/16 09:24	04/15/16 19:22	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		9500	1400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
bis (2-chloroisopropyl) ether	ND		9500	1900	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,4,5-Trichlorophenol	ND		9500	2600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,4,6-Trichlorophenol	ND		9500	1900	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,4-Dichlorophenol	ND		9500	1000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,4-Dimethylphenol	ND		9500	2300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,4-Dinitrophenol	ND		93000	44000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,4-Dinitrotoluene	ND		9500	2000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2,6-Dinitrotoluene	ND		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2-Chloronaphthalene	ND		9500	1600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2-Chlorophenol	ND		9500	1700	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2-Methylphenol	ND		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2-Methylnaphthalene	ND		9500	1900	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2-Nitroaniline	ND		19000	1400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
2-Nitrophenol	ND		9500	2700	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
3,3'-Dichlorobenzidine	ND		19000	11000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
3-Nitroaniline	ND		19000	2600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4,6-Dinitro-2-methylphenol	ND		19000	9500	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Bromophenyl phenyl ether	ND		9500	1300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Chloro-3-methylphenol	ND		9500	2400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Chloroaniline	ND		9500	2400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Chlorophenyl phenyl ether	ND		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Methylphenol	ND		19000	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Nitroaniline	ND		19000	5000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
4-Nitrophenol	ND		19000	6700	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Acenaphthene	**1600**	**J**	9500	1400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Acenaphthylene	ND		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Acetophenone	ND		9500	1300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Anthracene	**3700**	**J**	9500	2400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Atrazine	ND		9500	3300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Benzaldehyde	ND		9500	7600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Benzo[a]anthracene	**25000**		9500	950	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Benzo[a]pyrene	**39000**		9500	1400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Benzo[b]fluoranthene	**45000**		9500	1500	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Benzo[g,h,i]perylene	**29000**		9500	1000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Benzo[k]fluoranthene	**15000**		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Bis(2-chloroethoxy)methane	ND		9500	2000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Bis(2-chloroethyl)ether	ND		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Bis(2-ethylhexyl) phthalate	ND		9500	3300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Butyl benzyl phthalate	ND		9500	1600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Caprolactam	ND		9500	2900	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Carbazole	**2000**	**J**	9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Chrysene	**22000**		9500	2100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: BLIND DUP
Date Collected: 04/13/16 08:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-6
Matrix: Solid
Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	**3500**	**J**	9500	1700	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Di-n-butyl phthalate	ND		9500	1600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Di-n-octyl phthalate	ND		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Dibenzofuran	ND		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Diethyl phthalate	ND		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Dimethyl phthalate	ND		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Fluoranthene	**22000**		9500	1000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Fluorene	**1100**	**J**	9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Hexachlorobenzene	ND		9500	1300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Hexachlorobutadiene	ND		9500	1400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Hexachlorocyclopentadiene	ND		9500	1300	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Hexachloroethane	ND		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Indeno[1,2,3-cd]pyrene	**26000**		9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Isophorone	ND		9500	2000	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
N-Nitrosodi-n-propylamine	ND		9500	1600	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
N-Nitrosodiphenylamine	ND		9500	7700	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Naphthalene	**1300**	**J**	9500	1200	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Nitrobenzene	ND		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Pentachlorophenol	ND		19000	9500	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Phenanthrene	**10000**		9500	1400	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Phenol	ND		9500	1500	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50
Pyrene	**24000**		9500	1100	ug/Kg	☼	04/15/16 07:29	04/17/16 00:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*65*		*34 - 132*	*04/15/16 07:29*	*04/17/16 00:41*	*50*
Phenol-d5 (Surr)	*78*		*11 - 120*	*04/15/16 07:29*	*04/17/16 00:41*	*50*
p-Terphenyl-d14 (Surr)	*72*		*65 - 153*	*04/15/16 07:29*	*04/17/16 00:41*	*50*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*04/15/16 07:29*	*04/17/16 00:41*	*50*
2-Fluorobiphenyl	*69*		*37 - 120*	*04/15/16 07:29*	*04/17/16 00:41*	*50*
2-Fluorophenol (Surr)	*62*		*18 - 120*	*04/15/16 07:29*	*04/17/16 00:41*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5420**		12.1		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Antimony	ND		18.1		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Arsenic	**16.1**		2.4		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Barium	**67.1**		0.60		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Beryllium	**0.54**		0.24		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Cadmium	ND		0.24		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Calcium	**39600**		60.4		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Chromium	**11.0**		0.60		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Cobalt	**6.5**		0.60		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Copper	**38.6**		1.2		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Iron	**12500**	**^**	12.1		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Lead	**86.9**		1.2		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Magnesium	**8120**		24.1		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Manganese	**216**		0.24		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Nickel	**15.8**		6.0		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Potassium	**1200**		36.2		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Selenium	ND		4.8		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Client Sample ID: BLIND DUP
Date Collected: 04/13/16 08:00
Date Received: 04/14/16 11:55

Lab Sample ID: 480-98326-6
Matrix: Solid
Percent Solids: 86.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.72		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Sodium	**451**		169		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Thallium	ND		7.2		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Vanadium	**18.6**		0.60		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1
Zinc	**80.7**		2.4		mg/Kg	☼	04/16/16 08:30	04/19/16 02:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.18**		0.023		mg/Kg	☼	04/19/16 09:50	04/19/16 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.1		mg/Kg	☼	04/20/16 04:05	04/20/16 13:59	1

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	12DCE	BFB	DBFM
Lab Sample ID	Client Sample ID	(50-149)	(53-146)	(49-148)	(60-140)
480-98326-1	TKMW-5 (9-11')	93	91	101	96
480-98326-1 MS	TKMW-5 (9-11')	96	85	104	92
480-98326-1 MSD	TKMW-5 (9-11')	96	87	102	93
480-98326-2	TKMW-6 (8-10')	94	96	101	94

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	12DCE	BFB	DBFM
Lab Sample ID	Client Sample ID	(71-125)	(64-126)	(72-126)	(60-140)
480-98326-3	TKMW-7 (2-5')	112	87	84	96
480-98326-4	TKMW-8 (5.5-7.5')	97	89	105	95
480-98326-4 MS	TKMW-8 (5.5-7.5')	98	78	107	94
480-98326-4 MSD	TKMW-8 (5.5-7.5')	104	86	111	103
480-98326-5	TKMW-9 (5-7)	111	103	122	110
480-98326-6	BLIND DUP	99	92	106	98
LCS 480-296125/1-A	Lab Control Sample	98	90	110	98
MB 480-296125/2-A	Method Blank	97	89	110	95

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPH	TBP	FBP	2FP
Lab Sample ID	Client Sample ID	(34-132)	(11-120)	(65-153)	(39-146)	(37-120)	(18-120)
480-98326-1	TKMW-5 (9-11')	86	77	88	89	81	77
480-98326-2	TKMW-6 (8-10')	81	72	81	90	82	73
480-98326-2 - DL	TKMW-6 (8-10')	71	58	77	155 X	77	60
480-98326-3	TKMW-7 (2-5')	72	69	71	0 X	70	68
480-98326-4	TKMW-8 (5.5-7.5')	76	75	90	78	86	73
480-98326-4 MS	TKMW-8 (5.5-7.5')	85	82	91	98	86	80
480-98326-4 MSD	TKMW-8 (5.5-7.5')	84	79	92	89	85	76
480-98326-5	TKMW-9 (5-7)	80	78	93	87	84	73
480-98326-6	BLIND DUP	65	78	72	0 X	69	62
LCS 480-296082/2-A	Lab Control Sample	86	85	102	95	86	80
MB 480-296082/1-A	Method Blank	85	78	93	83	85	77

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-296125/2-A
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
2-Hexanone	ND		25	2.5	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Acetone	14.8	J	25	4.2	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Benzene	ND		5.0	0.24	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Bromoform	ND		5.0	2.5	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Bromomethane	ND		5.0	0.45	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Chloroethane	ND		5.0	1.1	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Chloroform	ND		5.0	0.31	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Chloromethane	ND		5.0	0.30	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Cyclohexane	ND		5.0	0.70	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Ethylbenzene	ND		5.0	0.34	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Methyl acetate	ND		5.0	3.0	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Styrene	ND		5.0	0.25	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Toluene	0.514	J	5.0	0.38	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Trichloroethene	ND		5.0	1.1	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		04/15/16 09:24	04/15/16 11:58	1
Xylenes, Total	1.03	J	9.9	0.83	ug/Kg		04/15/16 09:24	04/15/16 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*71 - 125*	*04/15/16 09:24*	*04/15/16 11:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*64 - 126*	*04/15/16 09:24*	*04/15/16 11:58*	*1*
4-Bromofluorobenzene (Surr)	*110*		*72 - 126*	*04/15/16 09:24*	*04/15/16 11:58*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*	*04/15/16 09:24*	*04/15/16 11:58*	*1*

Lab Sample ID: LCS 480-296125/1-A
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	49.3	48.7		ug/Kg		99	77 - 121
1,1,2,2-Tetrachloroethane	49.3	40.7		ug/Kg		83	80 - 120
1,1,2-Trichloroethane	49.3	43.4		ug/Kg		88	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	49.3	53.8		ug/Kg		109	60 - 140
1,1-Dichloroethane	49.3	43.5		ug/Kg		88	73 - 126
1,1-Dichloroethene	49.3	48.2		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	49.3	44.9		ug/Kg		91	64 - 120
1,2-Dibromo-3-Chloropropane	49.3	39.0		ug/Kg		79	63 - 124
1,2-Dichlorobenzene	49.3	45.8		ug/Kg		93	75 - 120
1,2-Dichloroethane	49.3	43.0		ug/Kg		87	77 - 122
1,2-Dichloropropane	49.3	41.4		ug/Kg		84	75 - 124
1,3-Dichlorobenzene	49.3	45.1		ug/Kg		91	74 - 120
1,4-Dichlorobenzene	49.3	44.9		ug/Kg		91	73 - 120
2-Butanone (MEK)	247	225		ug/Kg		91	70 - 134
2-Hexanone	247	208		ug/Kg		84	59 - 130
4-Methyl-2-pentanone (MIBK)	247	206		ug/Kg		84	65 - 133
Acetone	247	288		ug/Kg		117	61 - 137
Benzene	49.3	45.5		ug/Kg		92	79 - 127
Bromodichloromethane	49.3	45.0		ug/Kg		91	80 - 122
Bromoform	49.3	48.4		ug/Kg		98	68 - 126
Bromomethane	49.3	47.9		ug/Kg		97	37 - 149
Carbon disulfide	49.3	45.1		ug/Kg		91	64 - 131
Carbon tetrachloride	49.3	49.8		ug/Kg		101	75 - 135
Chlorobenzene	49.3	45.8		ug/Kg		93	76 - 124
Dibromochloromethane	49.3	48.8		ug/Kg		99	76 - 125
Chloroethane	49.3	50.1		ug/Kg		102	69 - 135
Chloroform	49.3	46.3		ug/Kg		94	80 - 118
Chloromethane	49.3	46.0		ug/Kg		93	63 - 127
cis-1,2-Dichloroethene	49.3	45.8		ug/Kg		93	81 - 117
cis-1,3-Dichloropropene	49.3	42.3		ug/Kg		86	82 - 120
Cyclohexane	49.3	45.9		ug/Kg		93	65 - 106
Dichlorodifluoromethane	49.3	47.1		ug/Kg		96	57 - 142
Ethylbenzene	49.3	46.2		ug/Kg		94	80 - 120
1,2-Dibromoethane	49.3	44.6		ug/Kg		90	78 - 120
Isopropylbenzene	49.3	43.9		ug/Kg		89	72 - 120
Methyl acetate	247	208		ug/Kg		84	55 - 136
Methyl tert-butyl ether	49.3	44.2		ug/Kg		90	63 - 125
Methylcyclohexane	49.3	47.6		ug/Kg		97	60 - 140
Methylene Chloride	49.3	43.4		ug/Kg		88	61 - 127
Styrene	49.3	44.5		ug/Kg		90	80 - 120
Tetrachloroethene	49.3	50.2		ug/Kg		102	74 - 122
Toluene	49.3	45.9		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	49.3	47.1		ug/Kg		96	78 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-296125/1-A
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	49.3	43.4		ug/Kg		88	73 - 123
Trichloroethene	49.3	44.6		ug/Kg		90	77 - 129
Trichlorofluoromethane	49.3	53.0		ug/Kg		107	65 - 146
Vinyl chloride	49.3	51.4		ug/Kg		104	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*71 - 125*
1,2-Dichloroethane-d4 (Surr)	*90*		*64 - 126*
4-Bromofluorobenzene (Surr)	*110*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		58.0	55.8		ug/Kg	☼	96	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1	58.0	34.1	F1	ug/Kg	☼	59	80 - 120
1,1,2-Trichloroethane	ND	F1	58.0	41.3	F1	ug/Kg	☼	71	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		58.0	61.1		ug/Kg	☼	105	60 - 140
1,1-Dichloroethane	ND		58.0	50.2		ug/Kg	☼	86	73 - 126
1,1-Dichloroethene	ND		58.0	55.7		ug/Kg	☼	96	59 - 125
1,2,4-Trichlorobenzene	ND	F1	58.0	40.0		ug/Kg	☼	69	64 - 120
1,2-Dibromo-3-Chloropropane	ND	F1	58.0	26.7	F1	ug/Kg	☼	46	63 - 124
1,2-Dichlorobenzene	ND		58.0	45.9		ug/Kg	☼	79	75 - 120
1,2-Dichloroethane	ND	F1	58.0	43.9	F1	ug/Kg	☼	76	77 - 122
1,2-Dichloropropane	ND		58.0	45.2		ug/Kg	☼	78	75 - 124
1,3-Dichlorobenzene	ND		58.0	47.3		ug/Kg	☼	82	74 - 120
1,4-Dichlorobenzene	ND		58.0	46.8		ug/Kg	☼	81	73 - 120
2-Butanone (MEK)	ND	F1	290	147	F1	ug/Kg	☼	51	70 - 134
2-Hexanone	ND	F1	290	146	F1	ug/Kg	☼	50	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	F1	290	155	F1	ug/Kg	☼	54	65 - 133
Acetone	ND		290	177		ug/Kg	☼	61	61 - 137
Benzene	ND		58.0	51.0		ug/Kg	☼	88	79 - 127
Bromodichloromethane	ND		58.0	48.5		ug/Kg	☼	84	80 - 122
Bromoform	ND		58.0	41.3		ug/Kg	☼	71	68 - 126
Bromomethane	ND		58.0	56.7		ug/Kg	☼	98	37 - 149
Carbon disulfide	ND		58.0	51.3		ug/Kg	☼	88	64 - 131
Carbon tetrachloride	ND		58.0	57.5		ug/Kg	☼	99	75 - 135
Chlorobenzene	ND		58.0	50.2		ug/Kg	☼	87	76 - 124
Dibromochloromethane	ND		58.0	48.1		ug/Kg	☼	83	76 - 125
Chloroethane	ND		58.0	58.6		ug/Kg	☼	101	69 - 135
Chloroform	ND		58.0	52.3		ug/Kg	☼	90	80 - 118
Chloromethane	ND		58.0	51.4		ug/Kg	☼	89	63 - 127
cis-1,2-Dichloroethene	ND		58.0	51.6		ug/Kg	☼	89	81 - 117
cis-1,3-Dichloropropene	ND	F1	58.0	43.3	F1	ug/Kg	☼	75	82 - 120
Cyclohexane	ND		58.0	49.1		ug/Kg	☼	85	65 - 106

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		58.0	54.0		ug/Kg	☼	93	57 - 142
Ethylbenzene	ND		58.0	51.7		ug/Kg	☼	89	80 - 120
1,2-Dibromoethane	ND	F1	58.0	40.9	F1	ug/Kg	☼	71	78 - 120
Isopropylbenzene	ND		58.0	49.0		ug/Kg	☼	84	72 - 120
Methyl acetate	ND	F1	290	152	F1	ug/Kg	☼	52	55 - 136
Methyl tert-butyl ether	ND		58.0	42.0		ug/Kg	☼	72	63 - 125
Methylcyclohexane	ND		58.0	49.5		ug/Kg	☼	85	60 - 140
Methylene Chloride	4.1	J	58.0	52.8		ug/Kg	☼	84	61 - 127
Styrene	ND	F1	58.0	47.9		ug/Kg	☼	83	80 - 120
Tetrachloroethene	ND		58.0	56.0		ug/Kg	☼	97	74 - 122
Toluene	ND		58.0	51.0		ug/Kg	☼	88	74 - 128
trans-1,2-Dichloroethene	ND		58.0	54.1		ug/Kg	☼	93	78 - 126
trans-1,3-Dichloropropene	ND		58.0	42.6		ug/Kg	☼	73	73 - 123
Trichloroethene	ND		58.0	49.9		ug/Kg	☼	86	77 - 129
Trichlorofluoromethane	ND		58.0	63.8		ug/Kg	☼	110	65 - 146
Vinyl chloride	ND		58.0	56.6		ug/Kg	☼	98	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*71 - 125*
1,2-Dichloroethane-d4 (Surr)	*78*		*64 - 126*
4-Bromofluorobenzene (Surr)	*107*		*72 - 126*
Dibromofluoromethane (Surr)	*94*		*60 - 140*

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		57.9	54.8		ug/Kg	☼	95	77 - 121	2	30
1,1,2,2-Tetrachloroethane	ND	F1	57.9	36.5	F1	ug/Kg	☼	63	80 - 120	7	30
1,1,2-Trichloroethane	ND	F1	57.9	42.0	F1	ug/Kg	☼	73	78 - 122	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		57.9	58.6		ug/Kg	☼	101	60 - 140	4	30
1,1-Dichloroethane	ND		57.9	50.4		ug/Kg	☼	87	73 - 126	0	30
1,1-Dichloroethene	ND		57.9	54.2		ug/Kg	☼	94	59 - 125	3	30
1,2,4-Trichlorobenzene	ND	F1	57.9	35.0	F1	ug/Kg	☼	60	64 - 120	14	30
1,2-Dibromo-3-Chloropropane	ND	F1	57.9	28.4	F1	ug/Kg	☼	49	63 - 124	6	30
1,2-Dichlorobenzene	ND		57.9	44.9		ug/Kg	☼	77	75 - 120	2	30
1,2-Dichloroethane	ND	F1	57.9	45.5		ug/Kg	☼	79	77 - 122	4	30
1,2-Dichloropropane	ND		57.9	44.9		ug/Kg	☼	78	75 - 124	0	30
1,3-Dichlorobenzene	ND		57.9	45.8		ug/Kg	☼	79	74 - 120	3	30
1,4-Dichlorobenzene	ND		57.9	45.3		ug/Kg	☼	78	73 - 120	3	30
2-Butanone (MEK)	ND	F1	290	163	F1	ug/Kg	☼	56	70 - 134	11	30
2-Hexanone	ND	F1	290	164	F1	ug/Kg	☼	57	59 - 130	12	30
4-Methyl-2-pentanone (MIBK)	ND	F1	290	168	F1	ug/Kg	☼	58	65 - 133	8	30
Acetone	ND		290	199		ug/Kg	☼	69	61 - 137	12	30
Benzene	ND		57.9	51.0		ug/Kg	☼	88	79 - 127	0	30
Bromodichloromethane	ND		57.9	49.2		ug/Kg	☼	85	80 - 122	1	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296128

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		57.9	41.8		ug/Kg	☼	72	68 - 126	1	30
Bromomethane	ND		57.9	57.2		ug/Kg	☼	99	37 - 149	1	30
Carbon disulfide	ND		57.9	50.1		ug/Kg	☼	87	64 - 131	2	30
Carbon tetrachloride	ND		57.9	55.8		ug/Kg	☼	96	75 - 135	3	30
Chlorobenzene	ND		57.9	48.3		ug/Kg	☼	83	76 - 124	4	30
Dibromochloromethane	ND		57.9	47.8		ug/Kg	☼	83	76 - 125	1	30
Chloroethane	ND		57.9	58.9		ug/Kg	☼	102	69 - 135	1	30
Chloroform	ND		57.9	52.6		ug/Kg	☼	91	80 - 118	1	30
Chloromethane	ND		57.9	51.5		ug/Kg	☼	89	63 - 127	0	30
cis-1,2-Dichloroethene	ND		57.9	50.9		ug/Kg	☼	88	81 - 117	1	30
cis-1,3-Dichloropropene	ND	F1	57.9	43.3	F1	ug/Kg	☼	75	82 - 120	0	30
Cyclohexane	ND		57.9	46.7		ug/Kg	☼	81	65 - 106	5	30
Dichlorodifluoromethane	ND		57.9	56.1		ug/Kg	☼	97	57 - 142	4	30
Ethylbenzene	ND		57.9	49.1		ug/Kg	☼	85	80 - 120	5	30
1,2-Dibromoethane	ND	F1	57.9	41.4	F1	ug/Kg	☼	71	78 - 120	1	30
Isopropylbenzene	ND		57.9	48.2		ug/Kg	☼	83	72 - 120	1	30
Methyl acetate	ND	F1	290	166		ug/Kg	☼	57	55 - 136	9	30
Methyl tert-butyl ether	ND		57.9	44.2		ug/Kg	☼	76	63 - 125	5	30
Methylcyclohexane	ND		57.9	46.0		ug/Kg	☼	79	60 - 140	7	30
Methylene Chloride	4.1	J	57.9	53.6		ug/Kg	☼	86	61 - 127	1	30
Styrene	ND	F1	57.9	45.3	F1	ug/Kg	☼	78	80 - 120	5	30
Tetrachloroethene	ND		57.9	52.8		ug/Kg	☼	91	74 - 122	6	30
Toluene	ND		57.9	49.2		ug/Kg	☼	85	74 - 128	3	30
trans-1,2-Dichloroethene	ND		57.9	52.7		ug/Kg	☼	91	78 - 126	3	30
trans-1,3-Dichloropropene	ND		57.9	42.2		ug/Kg	☼	73	73 - 123	1	30
Trichloroethene	ND		57.9	48.7		ug/Kg	☼	84	77 - 129	2	30
Trichlorofluoromethane	ND		57.9	62.1		ug/Kg	☼	107	65 - 146	3	30
Vinyl chloride	ND		57.9	57.1		ug/Kg	☼	99	61 - 133	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*71 - 125*
1,2-Dichloroethane-d4 (Surr)	*86*		*64 - 126*
4-Bromofluorobenzene (Surr)	*111*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*

Lab Sample ID: 480-98326-1 MS
Matrix: Solid
Analysis Batch: 296925

Client Sample ID: TKMW-5 (9-11')
Prep Type: Total/NA
Prep Batch: 296922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	F1	2860	3830	F1	ug/Kg	☼	134	64 - 116
1,1,2,2-Tetrachloroethane	ND		2860	2200		ug/Kg	☼	77	75 - 120
1,1,2-Trichloroethane	ND		2860	3130		ug/Kg	☼	109	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	2860	3910	F1	ug/Kg	☼	137	40 - 120
1,1-Dichloroethane	ND		2860	3560		ug/Kg	☼	124	82 - 138
1,1-Dichloroethene	ND		2860	3950		ug/Kg	☼	138	50 - 147
1,2,4-Trichlorobenzene	ND		2860	2310		ug/Kg	☼	81	40 - 160

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-98326-1 MS
Matrix: Solid
Analysis Batch: 296925

Client Sample ID: TKMW-5 (9-11')
Prep Type: Total/NA
Prep Batch: 296922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		2860	2900		ug/Kg	☼	101	60 - 110
1,2-Dichlorobenzene	ND		2860	3170		ug/Kg	☼	111	80 - 132
1,2-Dichloroethane	ND		2860	2930		ug/Kg	☼	103	78 - 129
1,2-Dichloropropane	ND		2860	3510		ug/Kg	☼	123	76 - 125
1,3-Dichlorobenzene	ND		2860	3320		ug/Kg	☼	116	63 - 134
1,4-Dichlorobenzene	ND		2860	3290		ug/Kg	☼	115	60 - 134
2-Butanone (MEK)	ND		14300	12600		ug/Kg	☼	88	54 - 149
2-Hexanone	ND		14300	13900		ug/Kg	☼	97	70 - 127
4-Methyl-2-pentanone (MIBK)	ND		14300	13500		ug/Kg	☼	95	74 - 120
Acetone	ND		14300	12400		ug/Kg	☼	87	47 - 141
Benzene	ND		2860	3530		ug/Kg	☼	124	77 - 125
Bromodichloromethane	ND		2860	3300		ug/Kg	☼	115	71 - 121
Bromoform	ND		2860	2890		ug/Kg	☼	101	48 - 125
Bromomethane	ND		2860	2500		ug/Kg	☼	87	39 - 149
Carbon disulfide	ND		2860	3710		ug/Kg	☼	130	40 - 136
Carbon tetrachloride	ND		2860	3790		ug/Kg	☼	133	54 - 135
Chlorobenzene	ND		2860	3480		ug/Kg	☼	122	76 - 126
Dibromochloromethane	ND		2860	3260		ug/Kg	☼	114	64 - 118
Chloroethane	ND		2860	2560		ug/Kg	☼	90	23 - 164
Chloroform	ND	F1	2860	3540	F1	ug/Kg	☼	124	78 - 118
Chloromethane	ND		2860	3040		ug/Kg	☼	106	61 - 124
cis-1,2-Dichloroethene	ND		2860	3440		ug/Kg	☼	121	79 - 124
cis-1,3-Dichloropropene	ND		2860	3400		ug/Kg	☼	119	75 - 121
Cyclohexane	ND	F1	2860	3990	F1	ug/Kg	☼	140	49 - 129
Dichlorodifluoromethane	ND	F2	2860	2900		ug/Kg	☼	102	10 - 150
Ethylbenzene	ND	F1	2860	3590	F1	ug/Kg	☼	126	78 - 124
1,2-Dibromoethane	ND		2860	2900		ug/Kg	☼	102	81 - 119
Isopropylbenzene	ND	F1	2860	3660	F1	ug/Kg	☼	128	76 - 119
Methyl acetate	ND		14300	14400		ug/Kg	☼	101	71 - 123
Methyl tert-butyl ether	ND		2860	3000		ug/Kg	☼	105	67 - 137
Methylcyclohexane	ND	F1	2860	3860	F1	ug/Kg	☼	135	50 - 130
Methylene Chloride	50	J B F1	2860	3440	F1	ug/Kg	☼	119	75 - 118
Styrene	ND	F1	2860	3620	F1	ug/Kg	☼	127	84 - 119
Tetrachloroethene	ND		2860	3610		ug/Kg	☼	127	73 - 133
Toluene	ND	F1	2860	3590	F1	ug/Kg	☼	126	75 - 124
trans-1,2-Dichloroethene	ND		2860	3640		ug/Kg	☼	127	74 - 129
trans-1,3-Dichloropropene	ND		2860	3320		ug/Kg	☼	116	73 - 118
Trichloroethene	ND	F1	2860	3760	F1	ug/Kg	☼	132	75 - 131
Trichlorofluoromethane	ND		2860	3710		ug/Kg	☼	130	29 - 158
Vinyl chloride	ND		2860	3380		ug/Kg	☼	118	59 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*50 - 149*
1,2-Dichloroethane-d4 (Surr)	*85*		*53 - 146*
4-Bromofluorobenzene (Surr)	*104*		*49 - 148*
Dibromofluoromethane (Surr)	*92*		*60 - 140*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-98326-1 MSD
Matrix: Solid
Analysis Batch: 296925

Client Sample ID: TKMW-5 (9-11')
Prep Type: Total/NA
Prep Batch: 296922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	F1	2840	3760	F1	ug/Kg	☼	132	64 - 116	2	20
1,1,2,2-Tetrachloroethane	ND		2840	2140		ug/Kg	☼	75	75 - 120	3	20
1,1,2-Trichloroethane	ND		2840	3060		ug/Kg	☼	108	70 - 130	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	2840	3590	F1	ug/Kg	☼	126	40 - 120	8	20
1,1-Dichloroethane	ND		2840	3520		ug/Kg	☼	124	82 - 138	1	20
1,1-Dichloroethene	ND		2840	3760		ug/Kg	☼	132	50 - 147	5	20
1,2,4-Trichlorobenzene	ND		2840	2100		ug/Kg	☼	74	40 - 160	10	20
1,2-Dibromo-3-Chloropropane	ND		2840	2890		ug/Kg	☼	102	60 - 110	0	20
1,2-Dichlorobenzene	ND		2840	3040		ug/Kg	☼	107	80 - 132	4	20
1,2-Dichloroethane	ND		2840	2950		ug/Kg	☼	104	78 - 129	1	20
1,2-Dichloropropane	ND		2840	3380		ug/Kg	☼	119	76 - 125	4	20
1,3-Dichlorobenzene	ND		2840	3300		ug/Kg	☼	116	63 - 134	1	20
1,4-Dichlorobenzene	ND		2840	3220		ug/Kg	☼	113	60 - 134	2	20
2-Butanone (MEK)	ND		14200	12400		ug/Kg	☼	87	54 - 149	1	20
2-Hexanone	ND		14200	13500		ug/Kg	☼	95	70 - 127	3	20
4-Methyl-2-pentanone (MIBK)	ND		14200	13600		ug/Kg	☼	96	74 - 120	1	20
Acetone	ND		14200	13100		ug/Kg	☼	92	47 - 141	5	20
Benzene	ND		2840	3370		ug/Kg	☼	119	77 - 125	4	20
Bromodichloromethane	ND		2840	3270		ug/Kg	☼	115	71 - 121	1	20
Bromoform	ND		2840	2850		ug/Kg	☼	100	48 - 125	2	20
Bromomethane	ND		2840	2120		ug/Kg	☼	75	39 - 149	16	20
Carbon disulfide	ND		2840	3530		ug/Kg	☼	124	40 - 136	5	20
Carbon tetrachloride	ND		2840	3760		ug/Kg	☼	132	54 - 135	1	20
Chlorobenzene	ND		2840	3360		ug/Kg	☼	118	76 - 126	3	20
Dibromochloromethane	ND		2840	3200		ug/Kg	☼	113	64 - 118	2	20
Chloroethane	ND		2840	2210		ug/Kg	☼	78	23 - 164	15	20
Chloroform	ND	F1	2840	3490	F1	ug/Kg	☼	123	78 - 118	2	20
Chloromethane	ND		2840	2530		ug/Kg	☼	89	61 - 124	18	20
cis-1,2-Dichloroethene	ND		2840	3460		ug/Kg	☼	122	79 - 124	0	20
cis-1,3-Dichloropropene	ND		2840	3330		ug/Kg	☼	117	75 - 121	2	20
Cyclohexane	ND	F1	2840	3780	F1	ug/Kg	☼	133	49 - 129	5	20
Dichlorodifluoromethane	ND	F2	2840	1990	F2	ug/Kg	☼	70	10 - 150	37	20
Ethylbenzene	ND	F1	2840	3550	F1	ug/Kg	☼	125	78 - 124	1	20
1,2-Dibromoethane	ND		2840	2900		ug/Kg	☼	102	81 - 119	0	20
Isopropylbenzene	ND	F1	2840	3650	F1	ug/Kg	☼	128	76 - 119	0	20
Methyl acetate	ND		14200	14100		ug/Kg	☼	99	71 - 123	2	20
Methyl tert-butyl ether	ND		2840	3000		ug/Kg	☼	106	67 - 137	0	20
Methylcyclohexane	ND	F1	2840	3760	F1	ug/Kg	☼	132	50 - 130	3	20
Methylene Chloride	50	J B F1	2840	3440	F1	ug/Kg	☼	119	75 - 118	0	20
Styrene	ND	F1	2840	3480	F1	ug/Kg	☼	123	84 - 119	4	20
Tetrachloroethene	ND		2840	3440		ug/Kg	☼	121	73 - 133	5	20
Toluene	ND	F1	2840	3470		ug/Kg	☼	122	75 - 124	4	20
trans-1,2-Dichloroethene	ND		2840	3530		ug/Kg	☼	124	74 - 129	3	20
trans-1,3-Dichloropropene	ND		2840	3210		ug/Kg	☼	113	73 - 118	3	20
Trichloroethene	ND	F1	2840	3730		ug/Kg	☼	131	75 - 131	1	20
Trichlorofluoromethane	ND		2840	3180		ug/Kg	☼	112	29 - 158	15	20
Vinyl chloride	ND		2840	3150		ug/Kg	☼	111	59 - 124	7	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-98326-1 MSD
Matrix: Solid
Analysis Batch: 296925

Client Sample ID: TKMW-5 (9-11')
Prep Type: Total/NA
Prep Batch: 296922

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*96*		*50 - 149*
1,2-Dichloroethane-d4 (Surr)	*87*		*53 - 146*
4-Bromofluorobenzene (Surr)	*102*		*49 - 148*
Dibromofluoromethane (Surr)	*93*		*60 - 140*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-296082/1-A
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2-Chloronaphthalene	ND		170	28	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2-Chlorophenol	ND		170	30	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2-Methylphenol	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2-Methylnaphthalene	ND		170	33	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2-Nitroaniline	ND		320	25	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
2-Nitrophenol	ND		170	47	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
3-Nitroaniline	ND		320	46	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Chloroaniline	ND		170	41	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Methylphenol	ND		320	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Nitroaniline	ND		320	87	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
4-Nitrophenol	ND		320	120	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Acenaphthene	ND		170	25	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Acenaphthylene	ND		170	22	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Acetophenone	ND		170	23	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Anthracene	ND		170	41	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Atrazine	ND		170	58	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Benzaldehyde	ND		170	130	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Benzo[a]anthracene	ND		170	17	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Benzo[a]pyrene	ND		170	25	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		04/15/16 07:29	04/16/16 20:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-296082/1-A
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Caprolactam	ND		170	50	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Carbazole	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Chrysene	ND		170	37	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Dibenzofuran	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Diethyl phthalate	ND		170	22	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Dimethyl phthalate	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Fluoranthene	ND		170	18	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Fluorene	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Hexachlorobenzene	ND		170	23	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Hexachlorobutadiene	ND		170	25	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Hexachloroethane	ND		170	22	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Isophorone	ND		170	35	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Naphthalene	ND		170	22	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Nitrobenzene	ND		170	19	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Pentachlorophenol	ND		320	170	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Phenanthrene	ND		170	25	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Phenol	ND		170	26	ug/Kg		04/15/16 07:29	04/16/16 20:44	1
Pyrene	ND		170	20	ug/Kg		04/15/16 07:29	04/16/16 20:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*85*		*34 - 132*	*04/15/16 07:29*	*04/16/16 20:44*	*1*
Phenol-d5 (Surr)	*78*		*11 - 120*	*04/15/16 07:29*	*04/16/16 20:44*	*1*
p-Terphenyl-d14 (Surr)	*93*		*65 - 153*	*04/15/16 07:29*	*04/16/16 20:44*	*1*
2,4,6-Tribromophenol (Surr)	*83*		*39 - 146*	*04/15/16 07:29*	*04/16/16 20:44*	*1*
2-Fluorobiphenyl	*85*		*37 - 120*	*04/15/16 07:29*	*04/16/16 20:44*	*1*
2-Fluorophenol (Surr)	*77*		*18 - 120*	*04/15/16 07:29*	*04/16/16 20:44*	*1*

Lab Sample ID: LCS 480-296082/2-A
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1660	1420		ug/Kg		85	71 - 120
bis (2-chloroisopropyl) ether	1660	1290		ug/Kg		78	44 - 120
2,4,5-Trichlorophenol	1660	1490		ug/Kg		90	59 - 126
2,4,6-Trichlorophenol	1660	1470		ug/Kg		88	59 - 123
2,4-Dichlorophenol	1660	1470		ug/Kg		88	52 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-296082/2-A
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	1660	1500		ug/Kg		90	36 - 120
2,4-Dinitrophenol	3320	2920		ug/Kg		88	35 - 146
2,4-Dinitrotoluene	1660	1620		ug/Kg		98	55 - 125
2,6-Dinitrotoluene	1660	1520		ug/Kg		91	66 - 128
2-Chloronaphthalene	1660	1430		ug/Kg		86	57 - 120
2-Chlorophenol	1660	1410		ug/Kg		85	38 - 120
2-Methylphenol	1660	1460		ug/Kg		88	48 - 120
2-Methylnaphthalene	1660	1460		ug/Kg		88	47 - 120
2-Nitroaniline	1660	1480		ug/Kg		89	61 - 130
2-Nitrophenol	1660	1440		ug/Kg		87	50 - 120
3,3'-Dichlorobenzidine	3320	2450		ug/Kg		74	48 - 126
3-Nitroaniline	1660	1130		ug/Kg		68	61 - 127
4,6-Dinitro-2-methylphenol	3320	2960		ug/Kg		89	49 - 155
4-Bromophenyl phenyl ether	1660	1620		ug/Kg		97	58 - 131
4-Chloro-3-methylphenol	1660	1610		ug/Kg		97	49 - 125
4-Chloroaniline	1660	881		ug/Kg		53	49 - 120
4-Chlorophenyl phenyl ether	1660	1530		ug/Kg		92	63 - 124
4-Methylphenol	1660	1470		ug/Kg		89	50 - 119
4-Nitroaniline	1660	1400		ug/Kg		84	63 - 128
4-Nitrophenol	3320	3470		ug/Kg		104	43 - 137
Acenaphthene	1660	1510		ug/Kg		91	53 - 120
Acenaphthylene	1660	1460		ug/Kg		88	58 - 121
Acetophenone	1660	1500		ug/Kg		90	66 - 120
Anthracene	1660	1490		ug/Kg		90	62 - 129
Atrazine	3320	3150		ug/Kg		95	60 - 164
Benzaldehyde	3320	1650		ug/Kg		50	21 - 120
Benzo[a]anthracene	1660	1580		ug/Kg		95	65 - 133
Benzo[a]pyrene	1660	1510		ug/Kg		91	64 - 127
Benzo[b]fluoranthene	1660	1590		ug/Kg		96	64 - 135
Benzo[g,h,i]perylene	1660	1290		ug/Kg		77	50 - 152
Benzo[k]fluoranthene	1660	1580		ug/Kg		95	58 - 138
Bis(2-chloroethoxy)methane	1660	1450		ug/Kg		87	61 - 133
Bis(2-chloroethyl)ether	1660	1400		ug/Kg		84	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1710		ug/Kg		103	61 - 133
Butyl benzyl phthalate	1660	1730		ug/Kg		104	61 - 129
Caprolactam	3320	3190		ug/Kg		96	54 - 133
Carbazole	1660	1530		ug/Kg		92	59 - 129
Chrysene	1660	1510		ug/Kg		91	64 - 131
Dibenz(a,h)anthracene	1660	1370		ug/Kg		82	54 - 148
Di-n-butyl phthalate	1660	1630		ug/Kg		98	58 - 130
Di-n-octyl phthalate	1660	1580		ug/Kg		95	62 - 133
Dibenzofuran	1660	1490		ug/Kg		90	56 - 120
Diethyl phthalate	1660	1650		ug/Kg		99	66 - 126
Dimethyl phthalate	1660	1580		ug/Kg		95	65 - 124
Fluoranthene	1660	1480		ug/Kg		89	62 - 131
Fluorene	1660	1490		ug/Kg		90	63 - 126
Hexachlorobenzene	1660	1580		ug/Kg		95	60 - 132
Hexachlorobutadiene	1660	1420		ug/Kg		85	45 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-296082/2-A
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	1660	1370		ug/Kg		82	31 - 120
Hexachloroethane	1660	1420		ug/Kg		85	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1350		ug/Kg		81	56 - 149
Isophorone	1660	1520		ug/Kg		91	56 - 120
N-Nitrosodi-n-propylamine	1660	1530		ug/Kg		92	46 - 120
N-Nitrosodiphenylamine	1660	1530		ug/Kg		92	20 - 119
Naphthalene	1660	1400		ug/Kg		84	46 - 120
Nitrobenzene	1660	1390		ug/Kg		84	49 - 120
Pentachlorophenol	3320	2650		ug/Kg		80	33 - 136
Phenanthrene	1660	1480		ug/Kg		89	60 - 130
Phenol	1660	1490		ug/Kg		90	36 - 120
Pyrene	1660	1750		ug/Kg		105	51 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*86*		*34 - 132*
Phenol-d5 (Surr)	*85*		*11 - 120*
p-Terphenyl-d14 (Surr)	*102*		*65 - 153*
2,4,6-Tribromophenol (Surr)	*95*		*39 - 146*
2-Fluorobiphenyl	*86*		*37 - 120*
2-Fluorophenol (Surr)	*80*		*18 - 120*

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	ND		1970	1720		ug/Kg	☼	87	71 - 120
bis (2-chloroisopropyl) ether	ND		1970	1500		ug/Kg	☼	76	44 - 120
2,4,5-Trichlorophenol	ND	F2	1970	1760		ug/Kg	☼	89	59 - 126
2,4,6-Trichlorophenol	ND		1970	1800		ug/Kg	☼	91	59 - 123
2,4-Dichlorophenol	ND	F2	1970	1800		ug/Kg	☼	91	52 - 120
2,4-Dimethylphenol	ND	F1	1970	1710		ug/Kg	☼	86	36 - 120
2,4-Dinitrophenol	ND		3950	ND		ug/Kg	☼	NC	35 - 146
2,4-Dinitrotoluene	ND		1970	2050		ug/Kg	☼	104	55 - 125
2,6-Dinitrotoluene	ND		1970	1960		ug/Kg	☼	99	66 - 128
2-Chloronaphthalene	ND		1970	1650		ug/Kg	☼	84	57 - 120
2-Chlorophenol	ND		1970	1670		ug/Kg	☼	85	38 - 120
2-Methylphenol	ND	F1	1970	1740		ug/Kg	☼	88	48 - 120
2-Methylnaphthalene	ND		1970	1870		ug/Kg	☼	95	47 - 120
2-Nitroaniline	ND	F1 F2	1970	1970	J	ug/Kg	☼	100	61 - 130
2-Nitrophenol	ND		1970	1580		ug/Kg	☼	80	50 - 120
3,3'-Dichlorobenzidine	ND	F1	3950	3340		ug/Kg	☼	85	48 - 126
3-Nitroaniline	ND	F1	1970	1750	J	ug/Kg	☼	89	61 - 127
4,6-Dinitro-2-methylphenol	ND	F2	3950	3440		ug/Kg	☼	87	49 - 155
4-Bromophenyl phenyl ether	ND		1970	1910		ug/Kg	☼	97	58 - 131
4-Chloro-3-methylphenol	ND	F2	1970	1840		ug/Kg	☼	93	49 - 125
4-Chloroaniline	ND	F1	1970	1310		ug/Kg	☼	66	49 - 120
4-Chlorophenyl phenyl ether	ND		1970	1760		ug/Kg	☼	89	63 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methylphenol	ND	F1 F2	1970	1620	J	ug/Kg	☼	82	50 - 119
4-Nitroaniline	ND	F1	1970	1750	J	ug/Kg	☼	88	63 - 128
4-Nitrophenol	ND	F2	3950	3800		ug/Kg	☼	96	43 - 137
Acenaphthene	ND		1970	1870		ug/Kg	☼	95	53 - 120
Acenaphthylene	ND	F1 F2	1970	1790		ug/Kg	☼	91	58 - 121
Acetophenone	ND		1970	1750		ug/Kg	☼	89	66 - 120
Anthracene	ND	F1 F2	1970	1810		ug/Kg	☼	92	62 - 129
Atrazine	ND	F2	3950	3940		ug/Kg	☼	100	60 - 164
Benzaldehyde	ND		3950	2390		ug/Kg	☼	61	21 - 120
Benzo[a]anthracene	ND	F2	1970	2080		ug/Kg	☼	105	65 - 133
Benzo[a]pyrene	ND	F1 F2	1970	2010		ug/Kg	☼	102	64 - 127
Benzo[b]fluoranthene	ND	F1 F2	1970	2190		ug/Kg	☼	111	64 - 135
Benzo[g,h,i]perylene	ND	F1	1970	1960		ug/Kg	☼	99	50 - 152
Benzo[k]fluoranthene	ND	F1 F2	1970	1870		ug/Kg	☼	95	58 - 138
Bis(2-chloroethoxy)methane	ND		1970	1770		ug/Kg	☼	90	61 - 133
Bis(2-chloroethyl)ether	ND		1970	1610		ug/Kg	☼	82	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1970	2040		ug/Kg	☼	103	61 - 133
Butyl benzyl phthalate	ND		1970	1930		ug/Kg	☼	98	61 - 129
Caprolactam	ND		3950	3980		ug/Kg	☼	101	54 - 133
Carbazole	ND	F2	1970	1890		ug/Kg	☼	96	59 - 129
Chrysene	ND	F2	1970	2020		ug/Kg	☼	102	64 - 131
Dibenz(a,h)anthracene	ND	F1	1970	1830		ug/Kg	☼	93	54 - 148
Di-n-butyl phthalate	ND		1970	1850		ug/Kg	☼	94	58 - 130
Di-n-octyl phthalate	ND		1970	1980		ug/Kg	☼	100	62 - 133
Dibenzofuran	ND		1970	1800		ug/Kg	☼	91	56 - 120
Diethyl phthalate	ND		1970	1880		ug/Kg	☼	95	66 - 126
Dimethyl phthalate	ND		1970	1870		ug/Kg	☼	95	65 - 124
Fluoranthene	ND	F1 F2	1970	2600	F1	ug/Kg	☼	132	62 - 131
Fluorene	ND		1970	1830		ug/Kg	☼	93	63 - 126
Hexachlorobenzene	ND		1970	1690		ug/Kg	☼	85	60 - 132
Hexachlorobutadiene	ND		1970	1690		ug/Kg	☼	86	45 - 120
Hexachlorocyclopentadiene	ND		1970	1600		ug/Kg	☼	81	31 - 120
Hexachloroethane	ND		1970	1590		ug/Kg	☼	81	41 - 120
Indeno[1,2,3-cd]pyrene	ND	F1	1970	1900		ug/Kg	☼	96	56 - 149
Isophorone	ND		1970	1740		ug/Kg	☼	88	56 - 120
N-Nitrosodi-n-propylamine	ND		1970	1650		ug/Kg	☼	84	46 - 120
N-Nitrosodiphenylamine	ND	F1	1970	1790		ug/Kg	☼	91	20 - 119
Naphthalene	ND		1970	1670		ug/Kg	☼	84	46 - 120
Nitrobenzene	ND		1970	1680		ug/Kg	☼	85	49 - 120
Pentachlorophenol	ND	F1	3950	2640		ug/Kg	☼	67	33 - 136
Phenanthrene	ND	F2	1970	2180		ug/Kg	☼	110	60 - 130
Phenol	ND		1970	1750		ug/Kg	☼	89	36 - 120
Pyrene	ND		1970	2530		ug/Kg	☼	128	51 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*85*		*34 - 132*
Phenol-d5 (Surr)	*82*		*11 - 120*
p-Terphenyl-d14 (Surr)	*91*		*65 - 153*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296357

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296082

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*98*		*39 - 146*
2-Fluorobiphenyl	*86*		*37 - 120*
2-Fluorophenol (Surr)	*80*		*18 - 120*

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296885

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl	ND		1960	1630		ug/Kg	☼	83	71 - 120	6	20
bis (2-chloroisopropyl) ether	ND		1960	1390		ug/Kg	☼	71	44 - 120	7	24
2,4,5-Trichlorophenol	ND	F2	1960	1780		ug/Kg	☼	91	59 - 126	1	18
2,4,6-Trichlorophenol	ND		1960	1740		ug/Kg	☼	89	59 - 123	3	19
2,4-Dichlorophenol	ND	F2	1960	1720		ug/Kg	☼	88	52 - 120	5	19
2,4-Dimethylphenol	ND	F1	1960	1770		ug/Kg	☼	90	36 - 120	4	42
2,4-Dinitrophenol	ND		3920	ND		ug/Kg	☼	NC	35 - 146	NC	22
2,4-Dinitrotoluene	ND		1960	1970		ug/Kg	☼	100	55 - 125	4	20
2,6-Dinitrotoluene	ND		1960	1890		ug/Kg	☼	97	66 - 128	3	15
2-Chloronaphthalene	ND		1960	1710		ug/Kg	☼	87	57 - 120	3	21
2-Chlorophenol	ND		1960	1530		ug/Kg	☼	78	38 - 120	9	25
2-Methylphenol	ND	F1	1960	1660		ug/Kg	☼	85	48 - 120	5	27
2-Methylnaphthalene	ND		1960	1740		ug/Kg	☼	89	47 - 120	7	21
2-Nitroaniline	ND	F1 F2	1960	1820	J	ug/Kg	☼	93	61 - 130	8	15
2-Nitrophenol	ND		1960	1590		ug/Kg	☼	81	50 - 120	0	18
3,3'-Dichlorobenzidine	ND	F1	3920	3140		ug/Kg	☼	80	48 - 126	6	25
3-Nitroaniline	ND	F1	1960	1620	J	ug/Kg	☼	83	61 - 127	8	19
4,6-Dinitro-2-methylphenol	ND	F2	3920	3420		ug/Kg	☼	87	49 - 155	1	15
4-Bromophenyl phenyl ether	ND		1960	1640		ug/Kg	☼	84	58 - 131	15	15
4-Chloro-3-methylphenol	ND	F2	1960	1930		ug/Kg	☼	98	49 - 125	5	27
4-Chloroaniline	ND	F1	1960	1280		ug/Kg	☼	65	49 - 120	2	22
4-Chlorophenyl phenyl ether	ND		1960	1830		ug/Kg	☼	93	63 - 124	4	16
4-Methylphenol	ND	F1 F2	1960	1670	J	ug/Kg	☼	85	50 - 119	3	24
4-Nitroaniline	ND	F1	1960	1740	J	ug/Kg	☼	89	63 - 128	0	24
4-Nitrophenol	ND	F2	3920	3720		ug/Kg	☼	95	43 - 137	2	25
Acenaphthene	ND		1960	1840		ug/Kg	☼	94	53 - 120	2	35
Acenaphthylene	ND	F1 F2	1960	1710		ug/Kg	☼	87	58 - 121	5	18
Acetophenone	ND		1960	1760		ug/Kg	☼	90	66 - 120	0	20
Anthracene	ND	F1 F2	1960	1770		ug/Kg	☼	90	62 - 129	3	15
Atrazine	ND	F2	3920	3960		ug/Kg	☼	101	60 - 164	0	20
Benzaldehyde	ND		3920	2340		ug/Kg	☼	60	21 - 120	2	20
Benzo[a]anthracene	ND	F2	1960	1970		ug/Kg	☼	100	65 - 133	5	15
Benzo[a]pyrene	ND	F1 F2	1960	1890		ug/Kg	☼	96	64 - 127	6	15
Benzo[b]fluoranthene	ND	F1 F2	1960	1970		ug/Kg	☼	101	64 - 135	10	15
Benzo[g,h,i]perylene	ND	F1	1960	1880		ug/Kg	☼	96	50 - 152	4	15
Benzo[k]fluoranthene	ND	F1 F2	1960	1930		ug/Kg	☼	98	58 - 138	3	22
Bis(2-chloroethoxy)methane	ND		1960	1640		ug/Kg	☼	84	61 - 133	8	17
Bis(2-chloroethyl)ether	ND		1960	1610		ug/Kg	☼	82	45 - 120	0	21
Bis(2-ethylhexyl) phthalate	ND		1960	2000		ug/Kg	☼	102	61 - 133	2	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296885

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	ND		1960	2090		ug/Kg	☼	107	61 - 129	8	16
Caprolactam	ND		3920	3620		ug/Kg	☼	92	54 - 133	10	20
Carbazole	ND	F2	1960	1810		ug/Kg	☼	92	59 - 129	5	20
Chrysene	ND	F2	1960	2000		ug/Kg	☼	102	64 - 131	1	15
Dibenz(a,h)anthracene	ND	F1	1960	1760		ug/Kg	☼	90	54 - 148	4	15
Di-n-butyl phthalate	ND		1960	1890		ug/Kg	☼	97	58 - 130	3	15
Di-n-octyl phthalate	ND		1960	1940		ug/Kg	☼	99	62 - 133	2	16
Dibenzofuran	ND		1960	1730		ug/Kg	☼	88	56 - 120	4	15
Diethyl phthalate	ND		1960	1900		ug/Kg	☼	97	66 - 126	1	15
Dimethyl phthalate	ND		1960	1860		ug/Kg	☼	95	65 - 124	0	15
Fluoranthene	ND	F1 F2	1960	2570		ug/Kg	☼	131	62 - 131	1	15
Fluorene	ND		1960	1890		ug/Kg	☼	96	63 - 126	3	15
Hexachlorobenzene	ND		1960	1780		ug/Kg	☼	91	60 - 132	5	15
Hexachlorobutadiene	ND		1960	1930		ug/Kg	☼	98	45 - 120	13	44
Hexachlorocyclopentadiene	ND		1960	1300		ug/Kg	☼	66	31 - 120	21	49
Hexachloroethane	ND		1960	1600		ug/Kg	☼	81	41 - 120	0	46
Indeno[1,2,3-cd]pyrene	ND	F1	1960	1870		ug/Kg	☼	95	56 - 149	2	15
Isophorone	ND		1960	1690		ug/Kg	☼	86	56 - 120	3	17
N-Nitrosodi-n-propylamine	ND		1960	1640		ug/Kg	☼	84	46 - 120	1	31
N-Nitrosodiphenylamine	ND	F1	1960	1650		ug/Kg	☼	84	20 - 119	8	15
Naphthalene	ND		1960	1730		ug/Kg	☼	88	46 - 120	4	29
Nitrobenzene	ND		1960	1670		ug/Kg	☼	85	49 - 120	1	24
Pentachlorophenol	ND	F1	3920	2720		ug/Kg	☼	69	33 - 136	3	35
Phenanthrene	ND	F2	1960	2100		ug/Kg	☼	107	60 - 130	4	15
Phenol	ND		1960	1540		ug/Kg	☼	78	36 - 120	13	35
Pyrene	ND		1960	2410		ug/Kg	☼	123	51 - 133	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*84*		*34 - 132*
Phenol-d5 (Surr)	*79*		*11 - 120*
p-Terphenyl-d14 (Surr)	*92*		*65 - 153*
2,4,6-Tribromophenol (Surr)	*89*		*39 - 146*
2-Fluorobiphenyl	*85*		*37 - 120*
2-Fluorophenol (Surr)	*76*		*18 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-296273/1-A
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10.3		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Antimony	ND		15.5		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Arsenic	ND		2.1		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Barium	ND		0.52		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Beryllium	ND		0.21		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Cadmium	ND		0.21		mg/Kg		04/16/16 08:30	04/19/16 01:03	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-296273/1-A
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		51.6		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Chromium	ND		0.52		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Cobalt	ND		0.52		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Copper	ND		1.0		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Iron	ND		10.3		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Lead	ND		1.0		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Magnesium	ND		20.6		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Manganese	ND		0.21		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Nickel	ND		5.2		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Potassium	ND		30.9		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Selenium	ND		4.1		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Silver	ND		0.62		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Sodium	ND		144		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Thallium	ND		6.2		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Vanadium	ND		0.52		mg/Kg		04/16/16 08:30	04/19/16 01:03	1
Zinc	ND		2.1		mg/Kg		04/16/16 08:30	04/19/16 01:03	1

Lab Sample ID: LCSSRM 480-296273/2-A
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296273

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7930	9326		mg/Kg		117.6	39.0 - 161.4
Antimony	105	83.25		mg/Kg		79.3	20.4 - 254.3
Arsenic	98.5	91.73		mg/Kg		93.1	69.3 - 145.2
Barium	308	293.0		mg/Kg		95.1	74.0 - 126.0
Beryllium	66.0	61.30		mg/Kg		92.9	73.6 - 126.4
Cadmium	146	144.3		mg/Kg		98.9	73.3 - 126.7
Calcium	6610	6001		mg/Kg		90.8	74.1 - 125.9
Chromium	182	172.9		mg/Kg		95.0	70.9 - 129.7
Cobalt	162	185.7		mg/Kg		114.7	74.1 - 125.3
Copper	106	96.37		mg/Kg		90.9	74.5 - 125.5
Iron	14400	13950		mg/Kg		96.9	35.6 - 163.9
Lead	130	136.2		mg/Kg		104.8	72.5 - 126.9
Magnesium	2640	2576		mg/Kg		97.6	64.4 - 136.0
Manganese	410	410.2		mg/Kg		100.0	76.3 - 123.9
Nickel	149	173.3		mg/Kg		116.3	73.2 - 126.8

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-296273/2-A
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296273

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	2550	2900		mg/Kg		113.7	60.8 - 138.8
Selenium	154	146.7		mg/Kg		95.3	67.5 - 132.5
Silver	40.9	36.34		mg/Kg		88.8	66.0 - 133.7
Sodium	2480	2721		mg/Kg		109.7	65.3 - 134.3
Thallium	175	191.5		mg/Kg		109.4	68.6 - 130.9
Vanadium	96.7	101.2		mg/Kg		104.7	64.4 - 135.5
Zinc	191	180.0		mg/Kg		94.2	69.6 - 130.4

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9750		2400	17400	4	mg/Kg	☼	319	75 - 125
Antimony	ND	F1	48.0	26.48	F1	mg/Kg	☼	54	75 - 125
Arsenic	4.6		48.0	45.76		mg/Kg	☼	86	75 - 125
Barium	25.9	F1	48.0	102.4	F1	mg/Kg	☼	159	75 - 125
Beryllium	0.38		48.0	40.99		mg/Kg	☼	85	75 - 125
Cadmium	ND		48.0	39.83		mg/Kg	☼	83	75 - 125
Calcium	29500	F2	2400	37860	4	mg/Kg	☼	347	75 - 125
Chromium	12.4		48.0	57.94		mg/Kg	☼	95	75 - 125
Cobalt	4.9		48.0	55.66		mg/Kg	☼	106	75 - 125
Copper	14.8		48.0	63.43		mg/Kg	☼	101	75 - 125
Iron	13100		2400	15850	4	mg/Kg	☼	115	75 - 125
Lead	9.9		48.0	62.69		mg/Kg	☼	110	75 - 125
Magnesium	4070	F1	2400	5904		mg/Kg	☼	76	75 - 125
Manganese	163	F2 F1	48.0	547.4	F1	mg/Kg	☼	800	75 - 125
Nickel	15.7		48.0	71.91		mg/Kg	☼	117	75 - 125
Potassium	1470	F1	2400	6944	F1	mg/Kg	☼	228	75 - 125
Selenium	ND		48.0	40.14		mg/Kg	☼	84	75 - 125
Silver	ND		12.0	10.13		mg/Kg	☼	84	75 - 125
Sodium	282		2400	2488		mg/Kg	☼	92	75 - 125
Thallium	ND		48.0	47.49		mg/Kg	☼	99	75 - 125
Vanadium	20.7	F1	48.0	76.60		mg/Kg	☼	116	75 - 125
Zinc	37.6		48.0	84.62		mg/Kg	☼	98	75 - 125

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	9750		2410	19530	4	mg/Kg	☼	407	75 - 125	12	20
Antimony	ND	F1	48.1	29.38	F1	mg/Kg	☼	60	75 - 125	10	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296691

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.6		48.1	48.66		mg/Kg	☼	92	75 - 125	6	20
Barium	25.9	F1	48.1	106.6	F1	mg/Kg	☼	168	75 - 125	4	20
Beryllium	0.38		48.1	44.26		mg/Kg	☼	91	75 - 125	8	20
Cadmium	ND		48.1	41.98		mg/Kg	☼	87	75 - 125	5	20
Calcium	29500	F2	2410	3504	4 F2	mg/Kg	☼	-1081	75 - 125	166	20
Chromium	12.4		48.1	65.30		mg/Kg	☼	110	75 - 125	12	20
Cobalt	4.9		48.1	55.54		mg/Kg	☼	105	75 - 125	0	20
Copper	14.8		48.1	62.23		mg/Kg	☼	98	75 - 125	2	20
Iron	13100		2410	17060	4	mg/Kg	☼	165	75 - 125	7	20
Lead	9.9		48.1	61.65		mg/Kg	☼	108	75 - 125	2	20
Magnesium	4070	F1	2410	5133	F1	mg/Kg	☼	44	75 - 125	14	20
Manganese	163	F2 F1	48.1	225.3	F1 F2	mg/Kg	☼	129	75 - 125	83	20
Nickel	15.7		48.1	67.21		mg/Kg	☼	107	75 - 125	7	20
Potassium	1470	F1	2410	6809	F1	mg/Kg	☼	222	75 - 125	2	20
Selenium	ND		48.1	42.62		mg/Kg	☼	89	75 - 125	6	20
Silver	ND		12.0	10.63		mg/Kg	☼	88	75 - 125	5	20
Sodium	282		2410	2648		mg/Kg	☼	98	75 - 125	6	20
Thallium	ND		48.1	48.65		mg/Kg	☼	101	75 - 125	2	20
Vanadium	20.7	F1	48.1	82.42	F1	mg/Kg	☼	128	75 - 125	7	20
Zinc	37.6		48.1	84.36		mg/Kg	☼	97	75 - 125	0	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-296729/1-A
Matrix: Solid
Analysis Batch: 296838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296729

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		04/19/16 09:50	04/19/16 13:28	1

Lab Sample ID: LCDSRM 480-296729/3-A ^5
Matrix: Solid
Analysis Batch: 296838

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 296729

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			7.10	6.96		mg/Kg		98.0	51.3 - 149.3	4	20

Lab Sample ID: LCSSRM 480-296729/2-A ^5
Matrix: Solid
Analysis Batch: 296838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296729

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury			7.10	6.70		mg/Kg		94.3	51.3 - 149.3

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 296838

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296729

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND	F1	0.396	0.285	F1	mg/Kg	☼	68	80 - 120

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 296838

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 296729

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND	F1	0.407	0.285	F1	mg/Kg	☼	66	80 - 120	0	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 480-297022/1-A
Matrix: Solid
Analysis Batch: 297139

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 297022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.97		mg/Kg		04/20/16 04:05	04/20/16 13:42	1

Lab Sample ID: LCSSRM 480-297022/2-A ^2
Matrix: Solid
Analysis Batch: 297139

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297022

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	39.6	42.56		mg/Kg		107.5	33.3 - 195.2

Lab Sample ID: 480-98326-4 MS
Matrix: Solid
Analysis Batch: 297139

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 297022

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		11.7	11.97		mg/Kg	☼	102	85 - 115

Lab Sample ID: 480-98326-4 MSD
Matrix: Solid
Analysis Batch: 297139

Client Sample ID: TKMW-8 (5.5-7.5')
Prep Type: Total/NA
Prep Batch: 297022

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		11.6	12.28		mg/Kg	☼	106	85 - 115	3	15

GC/MS VOA

Prep Batch: 296125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	5035A	
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	5035A	
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	5035A	
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	5035A	
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	5035A	
480-98326-6	BLIND DUP	Total/NA	Solid	5035A	
LCS 480-296125/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-296125/2-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 296128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	8260C	296125
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	8260C	296125
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	8260C	296125
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	8260C	296125
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	8260C	296125
480-98326-6	BLIND DUP	Total/NA	Solid	8260C	296125
LCS 480-296125/1-A	Lab Control Sample	Total/NA	Solid	8260C	296125
MB 480-296125/2-A	Method Blank	Total/NA	Solid	8260C	296125

Prep Batch: 296922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	5035A	
480-98326-1 MS	TKMW-5 (9-11')	Total/NA	Solid	5035A	
480-98326-1 MSD	TKMW-5 (9-11')	Total/NA	Solid	5035A	
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	5035A	

Analysis Batch: 296925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	8260C	296922
480-98326-1 MS	TKMW-5 (9-11')	Total/NA	Solid	8260C	296922
480-98326-1 MSD	TKMW-5 (9-11')	Total/NA	Solid	8260C	296922
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	8260C	296922

GC/MS Semi VOA

Prep Batch: 296082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	3550C	
480-98326-2 - DL	TKMW-6 (8-10')	Total/NA	Solid	3550C	
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	3550C	
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	3550C	
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	3550C	
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	3550C	
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	3550C	
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	3550C	
480-98326-6	BLIND DUP	Total/NA	Solid	3550C	
LCS 480-296082/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-296082/1-A	Method Blank	Total/NA	Solid	3550C	

GC/MS Semi VOA (Continued)

Analysis Batch: 296357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	8270D	296082
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	8270D	296082
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	8270D	296082
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	8270D	296082
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	8270D	296082
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	8270D	296082
480-98326-6	BLIND DUP	Total/NA	Solid	8270D	296082
LCS 480-296082/2-A	Lab Control Sample	Total/NA	Solid	8270D	296082
MB 480-296082/1-A	Method Blank	Total/NA	Solid	8270D	296082

Analysis Batch: 296885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-2 - DL	TKMW-6 (8-10')	Total/NA	Solid	8270D	296082
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	8270D	296082

Metals

Prep Batch: 296273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	3050B	
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	3050B	
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	3050B	
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	3050B	
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	3050B	
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	3050B	
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	3050B	
480-98326-6	BLIND DUP	Total/NA	Solid	3050B	
LCSSRM 480-296273/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-296273/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 296691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	6010C	296273
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	6010C	296273
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	6010C	296273
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	6010C	296273
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	6010C	296273
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	6010C	296273
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	6010C	296273
480-98326-6	BLIND DUP	Total/NA	Solid	6010C	296273
LCSSRM 480-296273/2-A	Lab Control Sample	Total/NA	Solid	6010C	296273
MB 480-296273/1-A	Method Blank	Total/NA	Solid	6010C	296273

Prep Batch: 296729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	7471B	
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	7471B	
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	7471B	
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	7471B	
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 296729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	7471B	
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	7471B	
480-98326-6	BLIND DUP	Total/NA	Solid	7471B	
LCDSRM 480-296729/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-296729/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-296729/1-A	Method Blank	Total/NA	Solid	7471B	

Analysis Batch: 296838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	7471B	296729
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	7471B	296729
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	7471B	296729
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	7471B	296729
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	7471B	296729
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	7471B	296729
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	7471B	296729
480-98326-6	BLIND DUP	Total/NA	Solid	7471B	296729
LCDSRM 480-296729/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	7471B	296729
LCSSRM 480-296729/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	296729
MB 480-296729/1-A	Method Blank	Total/NA	Solid	7471B	296729

General Chemistry

Analysis Batch: 296051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	Moisture	
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	Moisture	
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	Moisture	
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	Moisture	
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	Moisture	
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	Moisture	
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	Moisture	
480-98326-6	BLIND DUP	Total/NA	Solid	Moisture	

Prep Batch: 297022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	9012B	
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	9012B	
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	9012B	
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	9012B	
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	9012B	
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	9012B	
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	9012B	
480-98326-6	BLIND DUP	Total/NA	Solid	9012B	
LCSSRM 480-297022/2-A ^2	Lab Control Sample	Total/NA	Solid	9012B	
MB 480-297022/1-A	Method Blank	Total/NA	Solid	9012B	

Analysis Batch: 297139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-1	TKMW-5 (9-11')	Total/NA	Solid	9012B	297022

General Chemistry (Continued)

Analysis Batch: 297139 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98326-2	TKMW-6 (8-10')	Total/NA	Solid	9012B	297022
480-98326-3	TKMW-7 (2-5')	Total/NA	Solid	9012B	297022
480-98326-4	TKMW-8 (5.5-7.5')	Total/NA	Solid	9012B	297022
480-98326-4 MS	TKMW-8 (5.5-7.5')	Total/NA	Solid	9012B	297022
480-98326-4 MSD	TKMW-8 (5.5-7.5')	Total/NA	Solid	9012B	297022
480-98326-5	TKMW-9 (5-7)	Total/NA	Solid	9012B	297022
480-98326-6	BLIND DUP	Total/NA	Solid	9012B	297022
LCSSRM 480-297022/2-A ^2	Lab Control Sample	Total/NA	Solid	9012B	297022
MB 480-297022/1-A	Method Blank	Total/NA	Solid	9012B	297022

Client Sample ID: TKMW-5 (9-11') — **Lab Sample ID: 480-98326-1**
Date Collected: 04/13/16 12:50 — **Matrix: Solid**
Date Received: 04/14/16 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	296051	04/14/16 21:03	CMK	TAL BUF

Client Sample ID: TKMW-5 (9-11') — **Lab Sample ID: 480-98326-1**
Date Collected: 04/13/16 12:50 — **Matrix: Solid**
Date Received: 04/14/16 11:55 — **Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			296922	04/19/16 19:21	GVF	TAL BUF
Total/NA	Analysis	8260C		1	296925	04/20/16 00:54	SWO	TAL BUF
Total/NA	Prep	3550C			296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D		1	296357	04/16/16 22:56	LMW	TAL BUF
Total/NA	Prep	3050B			296273	04/16/16 08:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	296691	04/19/16 01:23	LMH	TAL BUF
Total/NA	Prep	7471B			296729	04/19/16 09:50	TAS	TAL BUF
Total/NA	Analysis	7471B		1	296838	04/19/16 13:35	TAS	TAL BUF
Total/NA	Prep	9012B			297022	04/20/16 04:05	LAW	TAL BUF
Total/NA	Analysis	9012B		1	297139	04/20/16 13:53	JJK	TAL BUF

Client Sample ID: TKMW-6 (8-10') — **Lab Sample ID: 480-98326-2**
Date Collected: 04/13/16 12:00 — **Matrix: Solid**
Date Received: 04/14/16 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	296051	04/14/16 21:03	CMK	TAL BUF

Client Sample ID: TKMW-6 (8-10') — **Lab Sample ID: 480-98326-2**
Date Collected: 04/13/16 12:00 — **Matrix: Solid**
Date Received: 04/14/16 11:55 — **Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			296922	04/19/16 19:21	GVF	TAL BUF
Total/NA	Analysis	8260C		5	296925	04/20/16 01:21	SWO	TAL BUF
Total/NA	Prep	3550C			296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D		5	296357	04/16/16 23:22	LMW	TAL BUF
Total/NA	Prep	3550C	DL		296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D	DL	25	296885	04/20/16 02:55	LMW	TAL BUF
Total/NA	Prep	3050B			296273	04/16/16 08:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	296691	04/19/16 01:26	LMH	TAL BUF
Total/NA	Prep	7471B			296729	04/19/16 09:50	TAS	TAL BUF
Total/NA	Analysis	7471B		1	296838	04/19/16 13:36	TAS	TAL BUF
Total/NA	Prep	9012B			297022	04/20/16 04:05	LAW	TAL BUF
Total/NA	Analysis	9012B		1	297139	04/20/16 13:55	JJK	TAL BUF

Client Sample ID: TKMW-7 (2-5') — **Lab Sample ID: 480-98326-3**
Date Collected: 04/13/16 11:20 — **Matrix: Solid**
Date Received: 04/14/16 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	296051	04/14/16 21:03	CMK	TAL BUF

Client Sample ID: TKMW-7 (2-5') — **Lab Sample ID: 480-98326-3**
Date Collected: 04/13/16 11:20 — **Matrix: Solid**
Date Received: 04/14/16 11:55 — **Percent Solids: 77.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			296125	04/15/16 09:24	CDC	TAL BUF
Total/NA	Analysis	8260C		1	296128	04/15/16 18:05	NMD1	TAL BUF
Total/NA	Prep	3550C			296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D		50	296357	04/16/16 23:49	LMW	TAL BUF
Total/NA	Prep	3050B			296273	04/16/16 08:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	296691	04/19/16 01:29	LMH	TAL BUF
Total/NA	Prep	7471B			296729	04/19/16 09:50	TAS	TAL BUF
Total/NA	Analysis	7471B		1	296838	04/19/16 13:38	TAS	TAL BUF
Total/NA	Prep	9012B			297022	04/20/16 04:05	LAW	TAL BUF
Total/NA	Analysis	9012B		1	297139	04/20/16 13:56	JJK	TAL BUF

Client Sample ID: TKMW-8 (5.5-7.5') — **Lab Sample ID: 480-98326-4**
Date Collected: 04/13/16 10:30 — **Matrix: Solid**
Date Received: 04/14/16 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	296051	04/14/16 21:03	CMK	TAL BUF

Client Sample ID: TKMW-8 (5.5-7.5') — **Lab Sample ID: 480-98326-4**
Date Collected: 04/13/16 10:30 — **Matrix: Solid**
Date Received: 04/14/16 11:55 — **Percent Solids: 83.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			296125	04/15/16 09:24	CDC	TAL BUF
Total/NA	Analysis	8260C		1	296128	04/15/16 18:31	NMD1	TAL BUF
Total/NA	Prep	3550C			296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D		5	296357	04/16/16 22:30	LMW	TAL BUF
Total/NA	Prep	3050B			296273	04/16/16 08:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	296691	04/19/16 01:33	LMH	TAL BUF
Total/NA	Prep	7471B			296729	04/19/16 09:50	TAS	TAL BUF
Total/NA	Analysis	7471B		1	296838	04/19/16 13:39	TAS	TAL BUF
Total/NA	Prep	9012B			297022	04/20/16 04:05	LAW	TAL BUF
Total/NA	Analysis	9012B		1	297139	04/20/16 13:49	JJK	TAL BUF

Client Sample ID: TKMW-9 (5-7) — **Lab Sample ID: 480-98326-5**
Date Collected: 04/13/16 10:05 — **Matrix: Solid**
Date Received: 04/14/16 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	296051	04/14/16 21:03	CMK	TAL BUF

Client Sample ID: TKMW-9 (5-7) — **Lab Sample ID: 480-98326-5**
Date Collected: 04/13/16 10:05 — **Matrix: Solid**
Date Received: 04/14/16 11:55 — **Percent Solids: 83.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			296125	04/15/16 09:24	CDC	TAL BUF
Total/NA	Analysis	8260C		1	296128	04/15/16 18:56	NMD1	TAL BUF
Total/NA	Prep	3550C			296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D		1	296357	04/17/16 00:15	LMW	TAL BUF
Total/NA	Prep	3050B			296273	04/16/16 08:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	296691	04/19/16 01:49	LMH	TAL BUF
Total/NA	Prep	7471B			296729	04/19/16 09:50	TAS	TAL BUF
Total/NA	Analysis	7471B		1	296838	04/19/16 13:48	TAS	TAL BUF
Total/NA	Prep	9012B			297022	04/20/16 04:05	LAW	TAL BUF
Total/NA	Analysis	9012B		1	297139	04/20/16 13:58	JJK	TAL BUF

Client Sample ID: BLIND DUP — **Lab Sample ID: 480-98326-6**
Date Collected: 04/13/16 08:00 — **Matrix: Solid**
Date Received: 04/14/16 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	296051	04/14/16 21:03	CMK	TAL BUF

Client Sample ID: BLIND DUP — **Lab Sample ID: 480-98326-6**
Date Collected: 04/13/16 08:00 — **Matrix: Solid**
Date Received: 04/14/16 11:55 — **Percent Solids: 86.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			296125	04/15/16 09:24	CDC	TAL BUF
Total/NA	Analysis	8260C		1	296128	04/15/16 19:22	NMD1	TAL BUF
Total/NA	Prep	3550C			296082	04/15/16 07:29	JLS	TAL BUF
Total/NA	Analysis	8270D		50	296357	04/17/16 00:41	LMW	TAL BUF
Total/NA	Prep	3050B			296273	04/16/16 08:30	CMM	TAL BUF
Total/NA	Analysis	6010C		1	296691	04/19/16 02:02	LMH	TAL BUF
Total/NA	Prep	7471B			296729	04/19/16 09:50	TAS	TAL BUF
Total/NA	Analysis	7471B		1	296838	04/19/16 13:51	TAS	TAL BUF
Total/NA	Prep	9012B			297022	04/20/16 04:05	LAW	TAL BUF
Total/NA	Analysis	9012B		1	297139	04/20/16 13:59	JJK	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-98326-1	TKMW-5 (9-11')	Solid	04/13/16 12:50	04/14/16 11:55
480-98326-2	TKMW-6 (8-10')	Solid	04/13/16 12:00	04/14/16 11:55
480-98326-3	TKMW-7 (2-5')	Solid	04/13/16 11:20	04/14/16 11:55
480-98326-4	TKMW-8 (5.5-7.5')	Solid	04/13/16 10:30	04/14/16 11:55
480-98326-5	TKMW-9 (5-7)	Solid	04/13/16 10:05	04/14/16 11:55
480-98326-6	BLIND DUP	Solid	04/13/16 08:00	04/14/16 11:55

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAm
THE LEADER IN ENVIRO

480-98326 Chain of Custody

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
TurnKey	Chris Boron	4/13/16	190623
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2558 Hamburg Turnpike	(716) 856-0599		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14218	Paul W Werthman	B Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
11 Evans Street Site			
Contract/Purchase Order/Quote No.			
0333-015-001			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TCL VOC	TCL SVOC	TAL Metals	Cyanide	Special Instructions/ Conditions of Receipt
TKMW-5 (8-11')	4-13-16	9:50				X	2						X	X	X	X	
TKMW-6 (8-10')		12:00				X	2						X	X	X	X	
TKMW-7 (2-5)		11:20				X	2						X	X	X	X	
TKMW-8 (5.5-7.5) (MS/MSD)		10:30				X	6						X	X	X	X	
TKMW-9 (5-7)		10:05				X	2						X	X	X	X	
Blind Dup		8:00				X	2						X	X	X	X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-13-16	18:00	1. Received By	4/14/16	11:55
2. Relinquished By	4/14/16	1510	2. Received By	4-14-16	1516
3. Relinquished By			3. Received By		

Comments

3.1 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-98326-1

Login Number: 98326

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-99240-1
Client Project/Site: Benchmark - 11 Evan St., Batavia, NY

For:
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Lackawanna, New York 14218

Attn: Mr. Christopher Z Boron

Authorized for release by:
5/5/2016 9:37:09 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-99240-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-99240-1

Receipt
The samples were received on 4/28/2016 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.2º C, 2.8º C and 3.6º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-299754 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane, 2-Butanone (MEK), 2-Hexanone, Acetone, and Carbon tetrachloride. The samples associated with this CCV had no detections above the reporting limit for the affected analytes; therefore, the data have been reported. The following samples are impacted: BLIND DUP (480-99240-1), TKMW-9 (480-99240-2), TKMW-8 (480-99240-3), TKMW-7 (480-99240-4), TKMW-6 (480-99240-5) and EQUIPMENT BLANK (480-99240-7).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-299754 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected above the reporting limit in the associated samples; therefore, the data have been reported. The following samples are affected: BLIND DUP (480-99240-1), TKMW-9 (480-99240-2), TKMW-8 (480-99240-3), TKMW-7 (480-99240-4), TKMW-6 (480-99240-5) and EQUIPMENT BLANK (480-99240-7).

Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: TKMW-6 (480-99240-5), TKMW-6 (480-99240-5[MS]) and TKMW-6 (480-99240-5[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-299852 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: TKMW-5 (480-99240-6)

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-299852 recovered above the upper control limit for Acetone, 1,1,2-Trichloro-1,2,2-trifluoroethane and 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: TKMW-5 (480-99240-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-299234 recovered outside acceptance criteria, low biased, for Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-299050 and analytical batch 480-299234 recovered outside control limits for the following analytes: Benzaldehyde. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-299371 recovered outside acceptance criteria, low biased, for Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: The following sample was diluted to bring the concentration of target analytes within the calibration range: TKMW-6 (480-99240-5). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following sample required a dilution due to the nature of the sample matrix: TKMW-6 (480-99240-5). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-299050 and analytical batch 480-299371 recovered outside control limits for the following analytes: Benzaldehyde. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 480-99240-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 3005A: MS/MSD volumes do not appear to look the same as the parent sample. Parent samples are not clear and has an orange tint, MS/MSD volumes are completely clear.

TKMW-6 (480-99240-5), TKMW-6 (480-99240-5[MS]) and TKMW-6 (480-99240-5[MSD])

Method(s) 7470A: Sample 5 matrix appears to be darker in color compared to sample 5 client matrix assigned ms/msd.

TKMW-6 (480-99240-5), TKMW-6 (480-99240-5[MS]) and TKMW-6 (480-99240-5[MSD])

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3510C: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: TKMW-7 (480-99240-4).

Method(s) 3510C: Due to an inadvertent spiking error, the following sample was spiked with 2mLs of surrogate mix: TKMW-5 (480-99240-6). Final volumes have been updated accordingly and final results are calculated based off the adjusted volume.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: BLIND DUP — Lab Sample ID: 480-99240-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7	J *	10	3.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.39	J	1.0	0.19	ug/L	1		8260C	Total/NA
Di-n-butyl phthalate	0.30	J	4.8	0.30	ug/L	1		8270D	Total/NA
Barium	0.14		0.0020		mg/L	1		6010C	Total/NA
Calcium	202		0.50		mg/L	1		6010C	Total/NA
Iron	0.28		0.050		mg/L	1		6010C	Total/NA
Magnesium	34.0		0.20		mg/L	1		6010C	Total/NA
Manganese	0.60		0.0030		mg/L	1		6010C	Total/NA
Potassium	11.1		0.50		mg/L	1		6010C	Total/NA
Sodium	396		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: TKMW-9 — Lab Sample ID: 480-99240-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.1	J *	10	3.0	ug/L	1		8260C	Total/NA
Benzene	0.76	J	1.0	0.41	ug/L	1		8260C	Total/NA
Carbon disulfide	0.81	J	1.0	0.19	ug/L	1		8260C	Total/NA
Di-n-butyl phthalate	0.35	J	4.7	0.29	ug/L	1		8270D	Total/NA
Aluminum	4.1		0.20		mg/L	1		6010C	Total/NA
Barium	0.11		0.0020		mg/L	1		6010C	Total/NA
Calcium	229		0.50		mg/L	1		6010C	Total/NA
Chromium	0.0060		0.0040		mg/L	1		6010C	Total/NA
Iron	5.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	58.3		0.20		mg/L	1		6010C	Total/NA
Manganese	0.31		0.0030		mg/L	1		6010C	Total/NA
Potassium	15.7		0.50		mg/L	1		6010C	Total/NA
Sodium	399		1.0		mg/L	1		6010C	Total/NA
Vanadium	0.0079		0.0050		mg/L	1		6010C	Total/NA
Zinc	0.019		0.010		mg/L	1		6010C	Total/NA

Client Sample ID: TKMW-8 — Lab Sample ID: 480-99240-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.0	J *	10	3.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.39	J	1.0	0.19	ug/L	1		8260C	Total/NA
Di-n-butyl phthalate	0.35	J	4.8	0.30	ug/L	1		8270D	Total/NA
Barium	0.14		0.0020		mg/L	1		6010C	Total/NA
Calcium	200		0.50		mg/L	1		6010C	Total/NA
Iron	0.20		0.050		mg/L	1		6010C	Total/NA
Magnesium	33.2		0.20		mg/L	1		6010C	Total/NA
Manganese	0.58		0.0030		mg/L	1		6010C	Total/NA
Potassium	11.0		0.50		mg/L	1		6010C	Total/NA
Sodium	392		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: TKMW-7 — Lab Sample ID: 480-99240-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzaldehyde	0.59	J *	8.3	0.44	ug/L	1		8270D	Total/NA
Barium	0.038		0.0020		mg/L	1		6010C	Total/NA
Calcium	109		0.50		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TKMW-7 (Continued) — Lab Sample ID: 480-99240-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.12		0.050		mg/L	1		6010C	Total/NA
Magnesium	18.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.068		0.0030		mg/L	1		6010C	Total/NA
Potassium	3.7		0.50		mg/L	1		6010C	Total/NA
Sodium	45.7		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: TKMW-6 — Lab Sample ID: 480-99240-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	25		10	4.1	ug/L	10		8260C	Total/NA
Cyclohexane	22		10	1.8	ug/L	10		8260C	Total/NA
Ethylbenzene	11		10	7.4	ug/L	10		8260C	Total/NA
Isopropylbenzene	8.9	J	10	7.9	ug/L	10		8260C	Total/NA
Methylcyclohexane	200	F1	10	1.6	ug/L	10		8260C	Total/NA
Xylenes, Total	21		20	6.6	ug/L	10		8260C	Total/NA
2-Methylnaphthalene	20		4.7	0.57	ug/L	1		8270D	Total/NA
Acenaphthene	7.6		4.7	0.39	ug/L	1		8270D	Total/NA
Anthracene	1.6	J	4.7	0.26	ug/L	1		8270D	Total/NA
Carbazole	8.3		4.7	0.28	ug/L	1		8270D	Total/NA
Dibenzofuran	2.7	J	9.4	0.48	ug/L	1		8270D	Total/NA
Fluoranthene	1.1	J	4.7	0.38	ug/L	1		8270D	Total/NA
Fluorene	4.0	J	4.7	0.34	ug/L	1		8270D	Total/NA
Phenanthrene	8.9		4.7	0.42	ug/L	1		8270D	Total/NA
Pyrene	0.88	J	4.7	0.32	ug/L	1		8270D	Total/NA
Naphthalene - DL	320		47	7.2	ug/L	10		8270D	Total/NA
Barium	0.22		0.0020		mg/L	1		6010C	Total/NA
Calcium	189		0.50		mg/L	1		6010C	Total/NA
Iron	25.0		0.050		mg/L	1		6010C	Total/NA
Magnesium	21.7		0.20		mg/L	1		6010C	Total/NA
Manganese	2.3		0.0030		mg/L	1		6010C	Total/NA
Potassium	13.1		0.50		mg/L	1		6010C	Total/NA
Sodium	192		1.0		mg/L	1		6010C	Total/NA
Cyanide, Total	0.016		0.010		mg/L	1		9012B	Total/NA

Client Sample ID: TKMW-5 — Lab Sample ID: 480-99240-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J *	10	3.0	ug/L	1		8260C	Total/NA
Benzene	1.4		1.0	0.41	ug/L	1		8260C	Total/NA
Cyclohexane	0.36	J	1.0	0.18	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.56	J	1.0	0.16	ug/L	1		8260C	Total/NA
Acenaphthene	7.3		4.9	0.40	ug/L	1		8270D	Total/NA
Anthracene	0.48	J	4.9	0.27	ug/L	1		8270D	Total/NA
Dibenzofuran	0.56	J	9.7	0.50	ug/L	1		8270D	Total/NA
Fluorene	2.5	J	4.9	0.35	ug/L	1		8270D	Total/NA
Phenanthrene	1.8	J	4.9	0.43	ug/L	1		8270D	Total/NA
Aluminum	0.26		0.20		mg/L	1		6010C	Total/NA
Barium	0.32		0.0020		mg/L	1		6010C	Total/NA
Calcium	186		0.50		mg/L	1		6010C	Total/NA
Iron	2.9		0.050		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-5 (Continued)

Lab Sample ID: 480-99240-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	27.4		0.20		mg/L	1		6010C	Total/NA
Manganese	0.55		0.0030		mg/L	1		6010C	Total/NA
Potassium	10.4		0.50		mg/L	1		6010C	Total/NA
Sodium	236		1.0		mg/L	1		6010C	Total/NA
Cyanide, Total	0.012		0.010		mg/L	1		9012B	Total/NA

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 480-99240-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzaldehyde	0.41	J *	4.7	0.25	ug/L	1		8270D	Total/NA
Barium	0.021		0.0020		mg/L	1		6010C	Total/NA
Calcium	33.4		0.50		mg/L	1		6010C	Total/NA
Copper	0.012		0.010		mg/L	1		6010C	Total/NA
Iron	0.075		0.050		mg/L	1		6010C	Total/NA
Magnesium	8.9		0.20		mg/L	1		6010C	Total/NA
Potassium	1.7		0.50		mg/L	1		6010C	Total/NA
Sodium	14.2		1.0		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLIND DUP
Date Collected: 04/27/16 08:00
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 03:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 03:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 03:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 03:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 03:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 03:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 03:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 03:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 03:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 03:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 03:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 03:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 03:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 03:59	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 03:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 03:59	1
Acetone	**5.7**	**J ***	10	3.0	ug/L			05/04/16 03:59	1
Benzene	ND		1.0	0.41	ug/L			05/04/16 03:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 03:59	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 03:59	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 03:59	1
Carbon disulfide	**0.39**	**J**	1.0	0.19	ug/L			05/04/16 03:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 03:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 03:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 03:59	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 03:59	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 03:59	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 03:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 03:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 03:59	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 03:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 03:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 03:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 03:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 03:59	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 03:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 03:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 03:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 03:59	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 03:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 03:59	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 03:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 03:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 03:59	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 03:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 03:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 03:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 03:59	1

Client Sample ID: BLIND DUP

Date Collected: 04/27/16 08:00
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/04/16 03:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*66 - 137*		*05/04/16 03:59*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/04/16 03:59*	*1*
Dibromofluoromethane (Surr)	*112*		*60 - 140*		*05/04/16 03:59*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.8	0.62	ug/L		04/29/16 14:15	05/01/16 15:27	1
bis (2-chloroisopropyl) ether	ND		4.8	0.50	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,4,5-Trichlorophenol	ND		4.8	0.46	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,4,6-Trichlorophenol	ND		4.8	0.58	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,4-Dichlorophenol	ND		4.8	0.49	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,4-Dimethylphenol	ND		4.8	0.48	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,4-Dinitrotoluene	ND		4.8	0.43	ug/L		04/29/16 14:15	05/01/16 15:27	1
2,6-Dinitrotoluene	ND		4.8	0.38	ug/L		04/29/16 14:15	05/01/16 15:27	1
2-Chloronaphthalene	ND		4.8	0.44	ug/L		04/29/16 14:15	05/01/16 15:27	1
2-Chlorophenol	ND		4.8	0.51	ug/L		04/29/16 14:15	05/01/16 15:27	1
2-Methylphenol	ND		4.8	0.38	ug/L		04/29/16 14:15	05/01/16 15:27	1
2-Methylnaphthalene	ND		4.8	0.57	ug/L		04/29/16 14:15	05/01/16 15:27	1
2-Nitroaniline	ND		9.5	0.40	ug/L		04/29/16 14:15	05/01/16 15:27	1
2-Nitrophenol	ND		4.8	0.46	ug/L		04/29/16 14:15	05/01/16 15:27	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		04/29/16 14:15	05/01/16 15:27	1
3-Nitroaniline	ND		9.5	0.46	ug/L		04/29/16 14:15	05/01/16 15:27	1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Bromophenyl phenyl ether	ND		4.8	0.43	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Chloro-3-methylphenol	ND		4.8	0.43	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Chloroaniline	ND		4.8	0.56	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Chlorophenyl phenyl ether	ND		4.8	0.33	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Methylphenol	ND		9.5	0.34	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Nitroaniline	ND		9.5	0.24	ug/L		04/29/16 14:15	05/01/16 15:27	1
4-Nitrophenol	ND		9.5	1.5	ug/L		04/29/16 14:15	05/01/16 15:27	1
Acenaphthene	ND		4.8	0.39	ug/L		04/29/16 14:15	05/01/16 15:27	1
Acenaphthylene	ND		4.8	0.36	ug/L		04/29/16 14:15	05/01/16 15:27	1
Acetophenone	ND		4.8	0.52	ug/L		04/29/16 14:15	05/01/16 15:27	1
Anthracene	ND		4.8	0.27	ug/L		04/29/16 14:15	05/01/16 15:27	1
Atrazine	ND		4.8	0.44	ug/L		04/29/16 14:15	05/01/16 15:27	1
Benzaldehyde	ND	*	4.8	0.25	ug/L		04/29/16 14:15	05/01/16 15:27	1
Benzo[a]anthracene	ND		4.8	0.34	ug/L		04/29/16 14:15	05/01/16 15:27	1
Benzo[a]pyrene	ND		4.8	0.45	ug/L		04/29/16 14:15	05/01/16 15:27	1
Benzo[b]fluoranthene	ND		4.8	0.32	ug/L		04/29/16 14:15	05/01/16 15:27	1
Benzo[g,h,i]perylene	ND		4.8	0.33	ug/L		04/29/16 14:15	05/01/16 15:27	1
Benzo[k]fluoranthene	ND		4.8	0.70	ug/L		04/29/16 14:15	05/01/16 15:27	1
Bis(2-chloroethoxy)methane	ND		4.8	0.33	ug/L		04/29/16 14:15	05/01/16 15:27	1
Bis(2-chloroethyl)ether	ND		4.8	0.38	ug/L		04/29/16 14:15	05/01/16 15:27	1
Bis(2-ethylhexyl) phthalate	ND		4.8	2.1	ug/L		04/29/16 14:15	05/01/16 15:27	1
Butyl benzyl phthalate	ND		4.8	0.95	ug/L		04/29/16 14:15	05/01/16 15:27	1
Caprolactam	ND		4.8	2.1	ug/L		04/29/16 14:15	05/01/16 15:27	1
Carbazole	ND		4.8	0.29	ug/L		04/29/16 14:15	05/01/16 15:27	1
Chrysene	ND		4.8	0.32	ug/L		04/29/16 14:15	05/01/16 15:27	1

Client Sample ID: BLIND DUP
Date Collected: 04/27/16 08:00
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.8	0.40	ug/L		04/29/16 14:15	05/01/16 15:27	1
Di-n-butyl phthalate	**0.30**	**J**	4.8	0.30	ug/L		04/29/16 14:15	05/01/16 15:27	1
Di-n-octyl phthalate	ND		4.8	0.45	ug/L		04/29/16 14:15	05/01/16 15:27	1
Dibenzofuran	ND		9.5	0.49	ug/L		04/29/16 14:15	05/01/16 15:27	1
Diethyl phthalate	ND		4.8	0.21	ug/L		04/29/16 14:15	05/01/16 15:27	1
Dimethyl phthalate	ND		4.8	0.34	ug/L		04/29/16 14:15	05/01/16 15:27	1
Fluoranthene	ND		4.8	0.38	ug/L		04/29/16 14:15	05/01/16 15:27	1
Fluorene	ND		4.8	0.34	ug/L		04/29/16 14:15	05/01/16 15:27	1
Hexachlorobenzene	ND		4.8	0.49	ug/L		04/29/16 14:15	05/01/16 15:27	1
Hexachlorobutadiene	ND		4.8	0.65	ug/L		04/29/16 14:15	05/01/16 15:27	1
Hexachlorocyclopentadiene	ND		4.8	0.56	ug/L		04/29/16 14:15	05/01/16 15:27	1
Hexachloroethane	ND		4.8	0.56	ug/L		04/29/16 14:15	05/01/16 15:27	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.45	ug/L		04/29/16 14:15	05/01/16 15:27	1
Isophorone	ND		4.8	0.41	ug/L		04/29/16 14:15	05/01/16 15:27	1
N-Nitrosodi-n-propylamine	ND		4.8	0.52	ug/L		04/29/16 14:15	05/01/16 15:27	1
N-Nitrosodiphenylamine	ND		4.8	0.49	ug/L		04/29/16 14:15	05/01/16 15:27	1
Naphthalene	ND		4.8	0.73	ug/L		04/29/16 14:15	05/01/16 15:27	1
Nitrobenzene	ND		4.8	0.28	ug/L		04/29/16 14:15	05/01/16 15:27	1
Pentachlorophenol	ND		9.5	2.1	ug/L		04/29/16 14:15	05/01/16 15:27	1
Phenanthrene	ND		4.8	0.42	ug/L		04/29/16 14:15	05/01/16 15:27	1
Phenol	ND		4.8	0.37	ug/L		04/29/16 14:15	05/01/16 15:27	1
Pyrene	ND		4.8	0.32	ug/L		04/29/16 14:15	05/01/16 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*46 - 120*	*04/29/16 14:15*	*05/01/16 15:27*	*1*
Phenol-d5 (Surr)	*38*		*16 - 120*	*04/29/16 14:15*	*05/01/16 15:27*	*1*
p-Terphenyl-d14 (Surr)	*85*		*67 - 150*	*04/29/16 14:15*	*05/01/16 15:27*	*1*
2,4,6-Tribromophenol (Surr)	*99*		*52 - 132*	*04/29/16 14:15*	*05/01/16 15:27*	*1*
2-Fluorobiphenyl	*89*		*48 - 120*	*04/29/16 14:15*	*05/01/16 15:27*	*1*
2-Fluorophenol (Surr)	*56*		*20 - 120*	*04/29/16 14:15*	*05/01/16 15:27*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		04/29/16 11:25	04/29/16 23:29	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:29	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/29/16 23:29	1
Barium	**0.14**		0.0020		mg/L		04/29/16 11:25	04/29/16 23:29	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:29	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:29	1
Calcium	**202**		0.50		mg/L		04/29/16 11:25	04/29/16 23:29	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:29	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:29	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:29	1
Iron	**0.28**		0.050		mg/L		04/29/16 11:25	04/29/16 23:29	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:29	1
Magnesium	**34.0**		0.20		mg/L		04/29/16 11:25	04/29/16 23:29	1
Manganese	**0.60**		0.0030		mg/L		04/29/16 11:25	04/29/16 23:29	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:29	1
Potassium	**11.1**		0.50		mg/L		04/29/16 11:25	04/29/16 23:29	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/29/16 23:29	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: BLIND DUP
Date Collected: 04/27/16 08:00
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-1
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/29/16 23:29	1
Sodium	**396**		1.0		mg/L		04/29/16 11:25	04/29/16 23:29	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:29	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/29/16 23:29	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:29	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		05/02/16 21:25	05/03/16 09:43	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-9
Date Collected: 04/27/16 09:35
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 04:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 04:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 04:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 04:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 04:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 04:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 04:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 04:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 04:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 04:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 04:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 04:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 04:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 04:26	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 04:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 04:26	1
Acetone	**9.1**	**J ***	10	3.0	ug/L			05/04/16 04:26	1
Benzene	**0.76**	**J**	1.0	0.41	ug/L			05/04/16 04:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 04:26	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 04:26	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 04:26	1
Carbon disulfide	**0.81**	**J**	1.0	0.19	ug/L			05/04/16 04:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 04:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 04:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 04:26	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 04:26	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 04:26	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 04:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 04:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 04:26	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 04:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 04:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 04:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 04:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 04:26	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 04:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 04:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 04:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 04:26	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 04:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 04:26	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 04:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 04:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 04:26	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 04:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 04:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 04:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 04:26	1

Client Sample ID: TKMW-9

Date Collected: 04/27/16 09:35
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/04/16 04:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*05/04/16 04:26*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/16 04:26*	*1*
Dibromofluoromethane (Surr)	*110*		*60 - 140*		*05/04/16 04:26*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.62	ug/L		04/29/16 14:15	05/01/16 15:56	1
bis (2-chloroisopropyl) ether	ND		4.7	0.49	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,4,5-Trichlorophenol	ND		4.7	0.45	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,4,6-Trichlorophenol	ND		4.7	0.58	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,4-Dichlorophenol	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,4-Dimethylphenol	ND		4.7	0.47	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,4-Dinitrotoluene	ND		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 15:56	1
2,6-Dinitrotoluene	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 15:56	1
2-Chloronaphthalene	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 15:56	1
2-Chlorophenol	ND		4.7	0.50	ug/L		04/29/16 14:15	05/01/16 15:56	1
2-Methylphenol	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 15:56	1
2-Methylnaphthalene	ND		4.7	0.57	ug/L		04/29/16 14:15	05/01/16 15:56	1
2-Nitroaniline	ND		9.5	0.40	ug/L		04/29/16 14:15	05/01/16 15:56	1
2-Nitrophenol	ND		4.7	0.45	ug/L		04/29/16 14:15	05/01/16 15:56	1
3,3'-Dichlorobenzidine	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 15:56	1
3-Nitroaniline	ND		9.5	0.45	ug/L		04/29/16 14:15	05/01/16 15:56	1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Bromophenyl phenyl ether	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Chloro-3-methylphenol	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Chloroaniline	ND		4.7	0.56	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Chlorophenyl phenyl ether	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Methylphenol	ND		9.5	0.34	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Nitroaniline	ND		9.5	0.24	ug/L		04/29/16 14:15	05/01/16 15:56	1
4-Nitrophenol	ND		9.5	1.4	ug/L		04/29/16 14:15	05/01/16 15:56	1
Acenaphthene	ND		4.7	0.39	ug/L		04/29/16 14:15	05/01/16 15:56	1
Acenaphthylene	ND		4.7	0.36	ug/L		04/29/16 14:15	05/01/16 15:56	1
Acetophenone	ND		4.7	0.51	ug/L		04/29/16 14:15	05/01/16 15:56	1
Anthracene	ND		4.7	0.26	ug/L		04/29/16 14:15	05/01/16 15:56	1
Atrazine	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 15:56	1
Benzaldehyde	ND	*	4.7	0.25	ug/L		04/29/16 14:15	05/01/16 15:56	1
Benzo[a]anthracene	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 15:56	1
Benzo[a]pyrene	ND		4.7	0.44	ug/L		04/29/16 14:15	05/01/16 15:56	1
Benzo[b]fluoranthene	ND		4.7	0.32	ug/L		04/29/16 14:15	05/01/16 15:56	1
Benzo[g,h,i]perylene	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 15:56	1
Benzo[k]fluoranthene	ND		4.7	0.69	ug/L		04/29/16 14:15	05/01/16 15:56	1
Bis(2-chloroethoxy)methane	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 15:56	1
Bis(2-chloroethyl)ether	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 15:56	1
Bis(2-ethylhexyl) phthalate	ND		4.7	2.1	ug/L		04/29/16 14:15	05/01/16 15:56	1
Butyl benzyl phthalate	ND		4.7	0.95	ug/L		04/29/16 14:15	05/01/16 15:56	1
Caprolactam	ND		4.7	2.1	ug/L		04/29/16 14:15	05/01/16 15:56	1
Carbazole	ND		4.7	0.28	ug/L		04/29/16 14:15	05/01/16 15:56	1
Chrysene	ND		4.7	0.31	ug/L		04/29/16 14:15	05/01/16 15:56	1

Client Sample ID: TKMW-9
Date Collected: 04/27/16 09:35
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.7	0.40	ug/L		04/29/16 14:15	05/01/16 15:56	1
Di-n-butyl phthalate	**0.35**	**J**	4.7	0.29	ug/L		04/29/16 14:15	05/01/16 15:56	1
Di-n-octyl phthalate	ND		4.7	0.44	ug/L		04/29/16 14:15	05/01/16 15:56	1
Dibenzofuran	ND		9.5	0.48	ug/L		04/29/16 14:15	05/01/16 15:56	1
Diethyl phthalate	ND		4.7	0.21	ug/L		04/29/16 14:15	05/01/16 15:56	1
Dimethyl phthalate	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 15:56	1
Fluoranthene	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 15:56	1
Fluorene	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 15:56	1
Hexachlorobenzene	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 15:56	1
Hexachlorobutadiene	ND		4.7	0.64	ug/L		04/29/16 14:15	05/01/16 15:56	1
Hexachlorocyclopentadiene	ND		4.7	0.56	ug/L		04/29/16 14:15	05/01/16 15:56	1
Hexachloroethane	ND		4.7	0.56	ug/L		04/29/16 14:15	05/01/16 15:56	1
Indeno[1,2,3-cd]pyrene	ND		4.7	0.44	ug/L		04/29/16 14:15	05/01/16 15:56	1
Isophorone	ND		4.7	0.41	ug/L		04/29/16 14:15	05/01/16 15:56	1
N-Nitrosodi-n-propylamine	ND		4.7	0.51	ug/L		04/29/16 14:15	05/01/16 15:56	1
N-Nitrosodiphenylamine	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 15:56	1
Naphthalene	ND		4.7	0.72	ug/L		04/29/16 14:15	05/01/16 15:56	1
Nitrobenzene	ND		4.7	0.27	ug/L		04/29/16 14:15	05/01/16 15:56	1
Pentachlorophenol	ND		9.5	2.1	ug/L		04/29/16 14:15	05/01/16 15:56	1
Phenanthrene	ND		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 15:56	1
Phenol	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 15:56	1
Pyrene	ND		4.7	0.32	ug/L		04/29/16 14:15	05/01/16 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*	*04/29/16 14:15*	*05/01/16 15:56*	*1*
Phenol-d5 (Surr)	*37*		*16 - 120*	*04/29/16 14:15*	*05/01/16 15:56*	*1*
p-Terphenyl-d14 (Surr)	*88*		*67 - 150*	*04/29/16 14:15*	*05/01/16 15:56*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*52 - 132*	*04/29/16 14:15*	*05/01/16 15:56*	*1*
2-Fluorobiphenyl	*76*		*48 - 120*	*04/29/16 14:15*	*05/01/16 15:56*	*1*
2-Fluorophenol (Surr)	*55*		*20 - 120*	*04/29/16 14:15*	*05/01/16 15:56*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4.1**		0.20		mg/L		04/29/16 11:25	04/29/16 23:32	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:32	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/29/16 23:32	1
Barium	**0.11**		0.0020		mg/L		04/29/16 11:25	04/29/16 23:32	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:32	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:32	1
Calcium	**229**		0.50		mg/L		04/29/16 11:25	04/29/16 23:32	1
Chromium	**0.0060**		0.0040		mg/L		04/29/16 11:25	04/29/16 23:32	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:32	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:32	1
Iron	**5.4**		0.050		mg/L		04/29/16 11:25	04/29/16 23:32	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:32	1
Magnesium	**58.3**		0.20		mg/L		04/29/16 11:25	04/29/16 23:32	1
Manganese	**0.31**		0.0030		mg/L		04/29/16 11:25	04/29/16 23:32	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:32	1
Potassium	**15.7**		0.50		mg/L		04/29/16 11:25	04/29/16 23:32	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/29/16 23:32	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-9
Date Collected: 04/27/16 09:35
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/29/16 23:32	1
Sodium	**399**		1.0		mg/L		04/29/16 11:25	04/29/16 23:32	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:32	1
Vanadium	**0.0079**		0.0050		mg/L		04/29/16 11:25	04/29/16 23:32	1
Zinc	**0.019**		0.010		mg/L		04/29/16 11:25	04/29/16 23:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		05/02/16 21:25	05/03/16 09:45	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-8
Date Collected: 04/27/16 10:38
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 04:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 04:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 04:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 04:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 04:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 04:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 04:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 04:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 04:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 04:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 04:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 04:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 04:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 04:53	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 04:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 04:53	1
Acetone	**4.0**	**J ***	10	3.0	ug/L			05/04/16 04:53	1
Benzene	ND		1.0	0.41	ug/L			05/04/16 04:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 04:53	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 04:53	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 04:53	1
Carbon disulfide	**0.39**	**J**	1.0	0.19	ug/L			05/04/16 04:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 04:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 04:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 04:53	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 04:53	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 04:53	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 04:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 04:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 04:53	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 04:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 04:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 04:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 04:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 04:53	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 04:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 04:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 04:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 04:53	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 04:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 04:53	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 04:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 04:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 04:53	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 04:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 04:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 04:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 04:53	1

Client Sample ID: TKMW-8

Date Collected: 04/27/16 10:38
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/04/16 04:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*66 - 137*		*05/04/16 04:53*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/04/16 04:53*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*		*05/04/16 04:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.8	0.63	ug/L		04/29/16 14:15	05/01/16 16:25	1
bis (2-chloroisopropyl) ether	ND		4.8	0.50	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,4,5-Trichlorophenol	ND		4.8	0.46	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,4,6-Trichlorophenol	ND		4.8	0.59	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,4-Dichlorophenol	ND		4.8	0.49	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,4-Dimethylphenol	ND		4.8	0.48	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,4-Dinitrophenol	ND		9.7	2.1	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,4-Dinitrotoluene	ND		4.8	0.43	ug/L		04/29/16 14:15	05/01/16 16:25	1
2,6-Dinitrotoluene	ND		4.8	0.39	ug/L		04/29/16 14:15	05/01/16 16:25	1
2-Chloronaphthalene	ND		4.8	0.44	ug/L		04/29/16 14:15	05/01/16 16:25	1
2-Chlorophenol	ND		4.8	0.51	ug/L		04/29/16 14:15	05/01/16 16:25	1
2-Methylphenol	ND		4.8	0.39	ug/L		04/29/16 14:15	05/01/16 16:25	1
2-Methylnaphthalene	ND		4.8	0.58	ug/L		04/29/16 14:15	05/01/16 16:25	1
2-Nitroaniline	ND		9.7	0.41	ug/L		04/29/16 14:15	05/01/16 16:25	1
2-Nitrophenol	ND		4.8	0.46	ug/L		04/29/16 14:15	05/01/16 16:25	1
3,3'-Dichlorobenzidine	ND		4.8	0.39	ug/L		04/29/16 14:15	05/01/16 16:25	1
3-Nitroaniline	ND		9.7	0.46	ug/L		04/29/16 14:15	05/01/16 16:25	1
4,6-Dinitro-2-methylphenol	ND		9.7	2.1	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Bromophenyl phenyl ether	ND		4.8	0.43	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Chloro-3-methylphenol	ND		4.8	0.43	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Chloroaniline	ND		4.8	0.57	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Chlorophenyl phenyl ether	ND		4.8	0.34	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Methylphenol	ND		9.7	0.35	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Nitroaniline	ND		9.7	0.24	ug/L		04/29/16 14:15	05/01/16 16:25	1
4-Nitrophenol	ND		9.7	1.5	ug/L		04/29/16 14:15	05/01/16 16:25	1
Acenaphthene	ND		4.8	0.40	ug/L		04/29/16 14:15	05/01/16 16:25	1
Acenaphthylene	ND		4.8	0.37	ug/L		04/29/16 14:15	05/01/16 16:25	1
Acetophenone	ND		4.8	0.52	ug/L		04/29/16 14:15	05/01/16 16:25	1
Anthracene	ND		4.8	0.27	ug/L		04/29/16 14:15	05/01/16 16:25	1
Atrazine	ND		4.8	0.44	ug/L		04/29/16 14:15	05/01/16 16:25	1
Benzaldehyde	ND	*	4.8	0.26	ug/L		04/29/16 14:15	05/01/16 16:25	1
Benzo[a]anthracene	ND		4.8	0.35	ug/L		04/29/16 14:15	05/01/16 16:25	1
Benzo[a]pyrene	ND		4.8	0.45	ug/L		04/29/16 14:15	05/01/16 16:25	1
Benzo[b]fluoranthene	ND		4.8	0.33	ug/L		04/29/16 14:15	05/01/16 16:25	1
Benzo[g,h,i]perylene	ND		4.8	0.34	ug/L		04/29/16 14:15	05/01/16 16:25	1
Benzo[k]fluoranthene	ND		4.8	0.70	ug/L		04/29/16 14:15	05/01/16 16:25	1
Bis(2-chloroethoxy)methane	ND		4.8	0.34	ug/L		04/29/16 14:15	05/01/16 16:25	1
Bis(2-chloroethyl)ether	ND		4.8	0.39	ug/L		04/29/16 14:15	05/01/16 16:25	1
Bis(2-ethylhexyl) phthalate	ND		4.8	2.1	ug/L		04/29/16 14:15	05/01/16 16:25	1
Butyl benzyl phthalate	ND		4.8	0.97	ug/L		04/29/16 14:15	05/01/16 16:25	1
Caprolactam	ND		4.8	2.1	ug/L		04/29/16 14:15	05/01/16 16:25	1
Carbazole	ND		4.8	0.29	ug/L		04/29/16 14:15	05/01/16 16:25	1
Chrysene	ND		4.8	0.32	ug/L		04/29/16 14:15	05/01/16 16:25	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-8
Date Collected: 04/27/16 10:38
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.8	0.41	ug/L		04/29/16 14:15	05/01/16 16:25	1
Di-n-butyl phthalate	**0.35**	**J**	4.8	0.30	ug/L		04/29/16 14:15	05/01/16 16:25	1
Di-n-octyl phthalate	ND		4.8	0.45	ug/L		04/29/16 14:15	05/01/16 16:25	1
Dibenzofuran	ND		9.7	0.49	ug/L		04/29/16 14:15	05/01/16 16:25	1
Diethyl phthalate	ND		4.8	0.21	ug/L		04/29/16 14:15	05/01/16 16:25	1
Dimethyl phthalate	ND		4.8	0.35	ug/L		04/29/16 14:15	05/01/16 16:25	1
Fluoranthene	ND		4.8	0.39	ug/L		04/29/16 14:15	05/01/16 16:25	1
Fluorene	ND		4.8	0.35	ug/L		04/29/16 14:15	05/01/16 16:25	1
Hexachlorobenzene	ND		4.8	0.49	ug/L		04/29/16 14:15	05/01/16 16:25	1
Hexachlorobutadiene	ND		4.8	0.66	ug/L		04/29/16 14:15	05/01/16 16:25	1
Hexachlorocyclopentadiene	ND		4.8	0.57	ug/L		04/29/16 14:15	05/01/16 16:25	1
Hexachloroethane	ND		4.8	0.57	ug/L		04/29/16 14:15	05/01/16 16:25	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.45	ug/L		04/29/16 14:15	05/01/16 16:25	1
Isophorone	ND		4.8	0.42	ug/L		04/29/16 14:15	05/01/16 16:25	1
N-Nitrosodi-n-propylamine	ND		4.8	0.52	ug/L		04/29/16 14:15	05/01/16 16:25	1
N-Nitrosodiphenylamine	ND		4.8	0.49	ug/L		04/29/16 14:15	05/01/16 16:25	1
Naphthalene	ND		4.8	0.73	ug/L		04/29/16 14:15	05/01/16 16:25	1
Nitrobenzene	ND		4.8	0.28	ug/L		04/29/16 14:15	05/01/16 16:25	1
Pentachlorophenol	ND		9.7	2.1	ug/L		04/29/16 14:15	05/01/16 16:25	1
Phenanthrene	ND		4.8	0.42	ug/L		04/29/16 14:15	05/01/16 16:25	1
Phenol	ND		4.8	0.38	ug/L		04/29/16 14:15	05/01/16 16:25	1
Pyrene	ND		4.8	0.33	ug/L		04/29/16 14:15	05/01/16 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*95*		*46 - 120*	*04/29/16 14:15*	*05/01/16 16:25*	*1*
Phenol-d5 (Surr)	*35*		*16 - 120*	*04/29/16 14:15*	*05/01/16 16:25*	*1*
p-Terphenyl-d14 (Surr)	*89*		*67 - 150*	*04/29/16 14:15*	*05/01/16 16:25*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*52 - 132*	*04/29/16 14:15*	*05/01/16 16:25*	*1*
2-Fluorobiphenyl	*91*		*48 - 120*	*04/29/16 14:15*	*05/01/16 16:25*	*1*
2-Fluorophenol (Surr)	*53*		*20 - 120*	*04/29/16 14:15*	*05/01/16 16:25*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		04/29/16 11:25	04/29/16 23:36	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:36	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/29/16 23:36	1
Barium	**0.14**		0.0020		mg/L		04/29/16 11:25	04/29/16 23:36	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:36	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:36	1
Calcium	**200**		0.50		mg/L		04/29/16 11:25	04/29/16 23:36	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:36	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:36	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:36	1
Iron	**0.20**		0.050		mg/L		04/29/16 11:25	04/29/16 23:36	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:36	1
Magnesium	**33.2**		0.20		mg/L		04/29/16 11:25	04/29/16 23:36	1
Manganese	**0.58**		0.0030		mg/L		04/29/16 11:25	04/29/16 23:36	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:36	1
Potassium	**11.0**		0.50		mg/L		04/29/16 11:25	04/29/16 23:36	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/29/16 23:36	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-8
Date Collected: 04/27/16 10:38
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-3
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/29/16 23:36	1
Sodium	**392**		1.0		mg/L		04/29/16 11:25	04/29/16 23:36	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:36	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/29/16 23:36	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		05/02/16 21:25	05/03/16 09:46	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-7
Date Collected: 04/27/16 11:28
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 05:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 05:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 05:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 05:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 05:21	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 05:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 05:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 05:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 05:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 05:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 05:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 05:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 05:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 05:21	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 05:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 05:21	1
Acetone	ND	*	10	3.0	ug/L			05/04/16 05:21	1
Benzene	ND		1.0	0.41	ug/L			05/04/16 05:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 05:21	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 05:21	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 05:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/04/16 05:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 05:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 05:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 05:21	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 05:21	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 05:21	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 05:21	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 05:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 05:21	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 05:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 05:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 05:21	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 05:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 05:21	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 05:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 05:21	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 05:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 05:21	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 05:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 05:21	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 05:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 05:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 05:21	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 05:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 05:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 05:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 05:21	1

Client Sample ID: TKMW-7

Date Collected: 04/27/16 11:28
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*71 - 126*		*05/04/16 05:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*66 - 137*		*05/04/16 05:21*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*05/04/16 05:21*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*		*05/04/16 05:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		8.3	1.1	ug/L		04/29/16 14:15	05/01/16 16:53	1
bis (2-chloroisopropyl) ether	ND		8.3	0.86	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,4,5-Trichlorophenol	ND		8.3	0.80	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,4,6-Trichlorophenol	ND		8.3	1.0	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,4-Dichlorophenol	ND		8.3	0.85	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,4-Dimethylphenol	ND		8.3	0.83	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,4-Dinitrophenol	ND		17	3.7	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,4-Dinitrotoluene	ND		8.3	0.74	ug/L		04/29/16 14:15	05/01/16 16:53	1
2,6-Dinitrotoluene	ND		8.3	0.66	ug/L		04/29/16 14:15	05/01/16 16:53	1
2-Chloronaphthalene	ND		8.3	0.76	ug/L		04/29/16 14:15	05/01/16 16:53	1
2-Chlorophenol	ND		8.3	0.88	ug/L		04/29/16 14:15	05/01/16 16:53	1
2-Methylphenol	ND		8.3	0.66	ug/L		04/29/16 14:15	05/01/16 16:53	1
2-Methylnaphthalene	ND		8.3	0.99	ug/L		04/29/16 14:15	05/01/16 16:53	1
2-Nitroaniline	ND		17	0.70	ug/L		04/29/16 14:15	05/01/16 16:53	1
2-Nitrophenol	ND		8.3	0.80	ug/L		04/29/16 14:15	05/01/16 16:53	1
3,3'-Dichlorobenzidine	ND		8.3	0.66	ug/L		04/29/16 14:15	05/01/16 16:53	1
3-Nitroaniline	ND		17	0.80	ug/L		04/29/16 14:15	05/01/16 16:53	1
4,6-Dinitro-2-methylphenol	ND		17	3.6	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Bromophenyl phenyl ether	ND		8.3	0.75	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Chloro-3-methylphenol	ND		8.3	0.75	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Chloroaniline	ND		8.3	0.98	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Chlorophenyl phenyl ether	ND		8.3	0.58	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Methylphenol	ND		17	0.60	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Nitroaniline	ND		17	0.41	ug/L		04/29/16 14:15	05/01/16 16:53	1
4-Nitrophenol	ND		17	2.5	ug/L		04/29/16 14:15	05/01/16 16:53	1
Acenaphthene	ND		8.3	0.68	ug/L		04/29/16 14:15	05/01/16 16:53	1
Acenaphthylene	ND		8.3	0.63	ug/L		04/29/16 14:15	05/01/16 16:53	1
Acetophenone	ND		8.3	0.90	ug/L		04/29/16 14:15	05/01/16 16:53	1
Anthracene	ND		8.3	0.46	ug/L		04/29/16 14:15	05/01/16 16:53	1
Atrazine	ND		8.3	0.76	ug/L		04/29/16 14:15	05/01/16 16:53	1
Benzaldehyde	**0.59**	**J ***	8.3	0.44	ug/L		04/29/16 14:15	05/01/16 16:53	1
Benzo[a]anthracene	ND		8.3	0.60	ug/L		04/29/16 14:15	05/01/16 16:53	1
Benzo[a]pyrene	ND		8.3	0.78	ug/L		04/29/16 14:15	05/01/16 16:53	1
Benzo[b]fluoranthene	ND		8.3	0.56	ug/L		04/29/16 14:15	05/01/16 16:53	1
Benzo[g,h,i]perylene	ND		8.3	0.58	ug/L		04/29/16 14:15	05/01/16 16:53	1
Benzo[k]fluoranthene	ND		8.3	1.2	ug/L		04/29/16 14:15	05/01/16 16:53	1
Bis(2-chloroethoxy)methane	ND		8.3	0.58	ug/L		04/29/16 14:15	05/01/16 16:53	1
Bis(2-chloroethyl)ether	ND		8.3	0.66	ug/L		04/29/16 14:15	05/01/16 16:53	1
Bis(2-ethylhexyl) phthalate	ND		8.3	3.6	ug/L		04/29/16 14:15	05/01/16 16:53	1
Butyl benzyl phthalate	ND		8.3	1.7	ug/L		04/29/16 14:15	05/01/16 16:53	1
Caprolactam	ND		8.3	3.6	ug/L		04/29/16 14:15	05/01/16 16:53	1
Carbazole	ND		8.3	0.50	ug/L		04/29/16 14:15	05/01/16 16:53	1
Chrysene	ND		8.3	0.55	ug/L		04/29/16 14:15	05/01/16 16:53	1

Client Sample ID: TKMW-7
Date Collected: 04/27/16 11:28
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		8.3	0.70	ug/L		04/29/16 14:15	05/01/16 16:53	1
Di-n-butyl phthalate	ND		8.3	0.51	ug/L		04/29/16 14:15	05/01/16 16:53	1
Di-n-octyl phthalate	ND		8.3	0.78	ug/L		04/29/16 14:15	05/01/16 16:53	1
Dibenzofuran	ND		17	0.85	ug/L		04/29/16 14:15	05/01/16 16:53	1
Diethyl phthalate	ND		8.3	0.36	ug/L		04/29/16 14:15	05/01/16 16:53	1
Dimethyl phthalate	ND		8.3	0.60	ug/L		04/29/16 14:15	05/01/16 16:53	1
Fluoranthene	ND		8.3	0.66	ug/L		04/29/16 14:15	05/01/16 16:53	1
Fluorene	ND		8.3	0.60	ug/L		04/29/16 14:15	05/01/16 16:53	1
Hexachlorobenzene	ND		8.3	0.85	ug/L		04/29/16 14:15	05/01/16 16:53	1
Hexachlorobutadiene	ND		8.3	1.1	ug/L		04/29/16 14:15	05/01/16 16:53	1
Hexachlorocyclopentadiene	ND		8.3	0.98	ug/L		04/29/16 14:15	05/01/16 16:53	1
Hexachloroethane	ND		8.3	0.98	ug/L		04/29/16 14:15	05/01/16 16:53	1
Indeno[1,2,3-cd]pyrene	ND		8.3	0.78	ug/L		04/29/16 14:15	05/01/16 16:53	1
Isophorone	ND		8.3	0.71	ug/L		04/29/16 14:15	05/01/16 16:53	1
N-Nitrosodi-n-propylamine	ND		8.3	0.90	ug/L		04/29/16 14:15	05/01/16 16:53	1
N-Nitrosodiphenylamine	ND		8.3	0.85	ug/L		04/29/16 14:15	05/01/16 16:53	1
Naphthalene	ND		8.3	1.3	ug/L		04/29/16 14:15	05/01/16 16:53	1
Nitrobenzene	ND		8.3	0.48	ug/L		04/29/16 14:15	05/01/16 16:53	1
Pentachlorophenol	ND		17	3.6	ug/L		04/29/16 14:15	05/01/16 16:53	1
Phenanthrene	ND		8.3	0.73	ug/L		04/29/16 14:15	05/01/16 16:53	1
Phenol	ND		8.3	0.65	ug/L		04/29/16 14:15	05/01/16 16:53	1
Pyrene	ND		8.3	0.56	ug/L		04/29/16 14:15	05/01/16 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*46 - 120*	*04/29/16 14:15*	*05/01/16 16:53*	*1*
Phenol-d5 (Surr)	*62*		*16 - 120*	*04/29/16 14:15*	*05/01/16 16:53*	*1*
p-Terphenyl-d14 (Surr)	*116*		*67 - 150*	*04/29/16 14:15*	*05/01/16 16:53*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*52 - 132*	*04/29/16 14:15*	*05/01/16 16:53*	*1*
2-Fluorobiphenyl	*90*		*48 - 120*	*04/29/16 14:15*	*05/01/16 16:53*	*1*
2-Fluorophenol (Surr)	*77*		*20 - 120*	*04/29/16 14:15*	*05/01/16 16:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		04/29/16 11:25	04/29/16 23:39	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:39	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/29/16 23:39	1
Barium	**0.038**		0.0020		mg/L		04/29/16 11:25	04/29/16 23:39	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:39	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:39	1
Calcium	**109**		0.50		mg/L		04/29/16 11:25	04/29/16 23:39	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:39	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:39	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:39	1
Iron	**0.12**		0.050		mg/L		04/29/16 11:25	04/29/16 23:39	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:39	1
Magnesium	**18.6**		0.20		mg/L		04/29/16 11:25	04/29/16 23:39	1
Manganese	**0.068**		0.0030		mg/L		04/29/16 11:25	04/29/16 23:39	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:39	1
Potassium	**3.7**		0.50		mg/L		04/29/16 11:25	04/29/16 23:39	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/29/16 23:39	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-7
Date Collected: 04/27/16 11:28
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-4
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/29/16 23:39	1
Sodium	**45.7**		1.0		mg/L		04/29/16 11:25	04/29/16 23:39	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:39	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/29/16 23:39	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		05/02/16 21:25	05/03/16 09:48	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-6
Date Collected: 04/27/16 12:08
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			05/04/16 05:48	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			05/04/16 05:48	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			05/04/16 05:48	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			05/04/16 05:48	10
1,1-Dichloroethane	ND		10	3.8	ug/L			05/04/16 05:48	10
1,1-Dichloroethene	ND		10	2.9	ug/L			05/04/16 05:48	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			05/04/16 05:48	10
1,2-Dibromo-3-Chloropropane	ND	F1	10	3.9	ug/L			05/04/16 05:48	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			05/04/16 05:48	10
1,2-Dichloroethane	ND		10	2.1	ug/L			05/04/16 05:48	10
1,2-Dichloropropane	ND		10	7.2	ug/L			05/04/16 05:48	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			05/04/16 05:48	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			05/04/16 05:48	10
2-Butanone (MEK)	ND		100	13	ug/L			05/04/16 05:48	10
2-Hexanone	ND		50	12	ug/L			05/04/16 05:48	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			05/04/16 05:48	10
Acetone	ND	* F1	100	30	ug/L			05/04/16 05:48	10
Benzene	**25**		10	4.1	ug/L			05/04/16 05:48	10
Bromodichloromethane	ND		10	3.9	ug/L			05/04/16 05:48	10
Bromoform	ND		10	2.6	ug/L			05/04/16 05:48	10
Bromomethane	ND	F1	10	6.9	ug/L			05/04/16 05:48	10
Carbon disulfide	ND		10	1.9	ug/L			05/04/16 05:48	10
Carbon tetrachloride	ND		10	2.7	ug/L			05/04/16 05:48	10
Chlorobenzene	ND		10	7.5	ug/L			05/04/16 05:48	10
Dibromochloromethane	ND		10	3.2	ug/L			05/04/16 05:48	10
Chloroethane	ND		10	3.2	ug/L			05/04/16 05:48	10
Chloroform	ND		10	3.4	ug/L			05/04/16 05:48	10
Chloromethane	ND		10	3.5	ug/L			05/04/16 05:48	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			05/04/16 05:48	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			05/04/16 05:48	10
Cyclohexane	**22**		10	1.8	ug/L			05/04/16 05:48	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			05/04/16 05:48	10
Ethylbenzene	**11**		10	7.4	ug/L			05/04/16 05:48	10
1,2-Dibromoethane	ND		10	7.3	ug/L			05/04/16 05:48	10
Isopropylbenzene	**8.9**	**J**	10	7.9	ug/L			05/04/16 05:48	10
Methyl acetate	ND		25	13	ug/L			05/04/16 05:48	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			05/04/16 05:48	10
Methylcyclohexane	**200**	**F1**	10	1.6	ug/L			05/04/16 05:48	10
Methylene Chloride	ND		10	4.4	ug/L			05/04/16 05:48	10
Styrene	ND		10	7.3	ug/L			05/04/16 05:48	10
Tetrachloroethene	ND		10	3.6	ug/L			05/04/16 05:48	10
Toluene	ND		10	5.1	ug/L			05/04/16 05:48	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			05/04/16 05:48	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			05/04/16 05:48	10
Trichloroethene	ND		10	4.6	ug/L			05/04/16 05:48	10
Trichlorofluoromethane	ND		10	8.8	ug/L			05/04/16 05:48	10
Vinyl chloride	ND		10	9.0	ug/L			05/04/16 05:48	10
Xylenes, Total	**21**		20	6.6	ug/L			05/04/16 05:48	10

Client Sample ID: TKMW-6

Date Collected: 04/27/16 12:08
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*71 - 126*		*05/04/16 05:48*	*10*
1,2-Dichloroethane-d4 (Surr)	*118*		*66 - 137*		*05/04/16 05:48*	*10*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/16 05:48*	*10*
Dibromofluoromethane (Surr)	*109*		*60 - 140*		*05/04/16 05:48*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.62	ug/L		04/29/16 14:15	05/01/16 14:58	1
bis (2-chloroisopropyl) ether	ND		4.7	0.49	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,4,5-Trichlorophenol	ND		4.7	0.45	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,4,6-Trichlorophenol	ND		4.7	0.58	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,4-Dichlorophenol	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,4-Dimethylphenol	ND		4.7	0.47	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,4-Dinitrophenol	ND		9.4	2.1	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,4-Dinitrotoluene	ND		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 14:58	1
2,6-Dinitrotoluene	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 14:58	1
2-Chloronaphthalene	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 14:58	1
2-Chlorophenol	ND		4.7	0.50	ug/L		04/29/16 14:15	05/01/16 14:58	1
2-Methylphenol	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 14:58	1
2-Methylnaphthalene	**20**		4.7	0.57	ug/L		04/29/16 14:15	05/01/16 14:58	1
2-Nitroaniline	ND		9.4	0.40	ug/L		04/29/16 14:15	05/01/16 14:58	1
2-Nitrophenol	ND		4.7	0.45	ug/L		04/29/16 14:15	05/01/16 14:58	1
3,3'-Dichlorobenzidine	ND	F1	4.7	0.38	ug/L		04/29/16 14:15	05/01/16 14:58	1
3-Nitroaniline	ND	F1	9.4	0.45	ug/L		04/29/16 14:15	05/01/16 14:58	1
4,6-Dinitro-2-methylphenol	ND		9.4	2.1	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Bromophenyl phenyl ether	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Chloro-3-methylphenol	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Chloroaniline	ND	F1	4.7	0.56	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Chlorophenyl phenyl ether	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Methylphenol	ND		9.4	0.34	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Nitroaniline	ND	F2 F1	9.4	0.24	ug/L		04/29/16 14:15	05/01/16 14:58	1
4-Nitrophenol	ND		9.4	1.4	ug/L		04/29/16 14:15	05/01/16 14:58	1
Acenaphthene	**7.6**		4.7	0.39	ug/L		04/29/16 14:15	05/01/16 14:58	1
Acenaphthylene	ND		4.7	0.36	ug/L		04/29/16 14:15	05/01/16 14:58	1
Acetophenone	ND		4.7	0.51	ug/L		04/29/16 14:15	05/01/16 14:58	1
Anthracene	**1.6**	**J**	4.7	0.26	ug/L		04/29/16 14:15	05/01/16 14:58	1
Atrazine	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 14:58	1
Benzaldehyde	ND	F1 *	4.7	0.25	ug/L		04/29/16 14:15	05/01/16 14:58	1
Benzo[a]anthracene	ND	F2	4.7	0.34	ug/L		04/29/16 14:15	05/01/16 14:58	1
Benzo[a]pyrene	ND	F2	4.7	0.44	ug/L		04/29/16 14:15	05/01/16 14:58	1
Benzo[b]fluoranthene	ND	F2	4.7	0.32	ug/L		04/29/16 14:15	05/01/16 14:58	1
Benzo[g,h,i]perylene	ND	F2	4.7	0.33	ug/L		04/29/16 14:15	05/01/16 14:58	1
Benzo[k]fluoranthene	ND	F2	4.7	0.69	ug/L		04/29/16 14:15	05/01/16 14:58	1
Bis(2-chloroethoxy)methane	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 14:58	1
Bis(2-chloroethyl)ether	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 14:58	1
Bis(2-ethylhexyl) phthalate	ND	F2	4.7	2.1	ug/L		04/29/16 14:15	05/01/16 14:58	1
Butyl benzyl phthalate	ND		4.7	0.94	ug/L		04/29/16 14:15	05/01/16 14:58	1
Caprolactam	ND	F1	4.7	2.1	ug/L		04/29/16 14:15	05/01/16 14:58	1
Carbazole	**8.3**		4.7	0.28	ug/L		04/29/16 14:15	05/01/16 14:58	1
Chrysene	ND	F2	4.7	0.31	ug/L		04/29/16 14:15	05/01/16 14:58	1

Client Sample ID: TKMW-6

Date Collected: 04/27/16 12:08
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-5

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND	F2	4.7	0.40	ug/L		04/29/16 14:15	05/01/16 14:58	1
Di-n-butyl phthalate	ND		4.7	0.29	ug/L		04/29/16 14:15	05/01/16 14:58	1
Di-n-octyl phthalate	ND	F2	4.7	0.44	ug/L		04/29/16 14:15	05/01/16 14:58	1
Dibenzofuran	**2.7**	**J**	9.4	0.48	ug/L		04/29/16 14:15	05/01/16 14:58	1
Diethyl phthalate	ND		4.7	0.21	ug/L		04/29/16 14:15	05/01/16 14:58	1
Dimethyl phthalate	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 14:58	1
Fluoranthene	**1.1**	**J**	4.7	0.38	ug/L		04/29/16 14:15	05/01/16 14:58	1
Fluorene	**4.0**	**J**	4.7	0.34	ug/L		04/29/16 14:15	05/01/16 14:58	1
Hexachlorobenzene	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 14:58	1
Hexachlorobutadiene	ND		4.7	0.64	ug/L		04/29/16 14:15	05/01/16 14:58	1
Hexachlorocyclopentadiene	ND		4.7	0.56	ug/L		04/29/16 14:15	05/01/16 14:58	1
Hexachloroethane	ND		4.7	0.56	ug/L		04/29/16 14:15	05/01/16 14:58	1
Indeno[1,2,3-cd]pyrene	ND	F2 F1	4.7	0.44	ug/L		04/29/16 14:15	05/01/16 14:58	1
Isophorone	ND		4.7	0.41	ug/L		04/29/16 14:15	05/01/16 14:58	1
N-Nitrosodi-n-propylamine	ND		4.7	0.51	ug/L		04/29/16 14:15	05/01/16 14:58	1
N-Nitrosodiphenylamine	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 14:58	1
Nitrobenzene	ND		4.7	0.27	ug/L		04/29/16 14:15	05/01/16 14:58	1
Pentachlorophenol	ND		9.4	2.1	ug/L		04/29/16 14:15	05/01/16 14:58	1
Phenanthrene	**8.9**		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 14:58	1
Phenol	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 14:58	1
Pyrene	**0.88**	**J**	4.7	0.32	ug/L		04/29/16 14:15	05/01/16 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*87*		*46 - 120*	*04/29/16 14:15*	*05/01/16 14:58*	*1*
Phenol-d5 (Surr)	*45*		*16 - 120*	*04/29/16 14:15*	*05/01/16 14:58*	*1*
p-Terphenyl-d14 (Surr)	*90*		*67 - 150*	*04/29/16 14:15*	*05/01/16 14:58*	*1*
2,4,6-Tribromophenol (Surr)	*119*		*52 - 132*	*04/29/16 14:15*	*05/01/16 14:58*	*1*
2-Fluorobiphenyl	*90*		*48 - 120*	*04/29/16 14:15*	*05/01/16 14:58*	*1*
2-Fluorophenol (Surr)	*69*		*20 - 120*	*04/29/16 14:15*	*05/01/16 14:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**320**		47	7.2	ug/L		04/29/16 14:15	05/02/16 20:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*	*04/29/16 14:15*	*05/02/16 20:54*	*10*
Phenol-d5 (Surr)	*40*		*16 - 120*	*04/29/16 14:15*	*05/02/16 20:54*	*10*
p-Terphenyl-d14 (Surr)	*77*		*67 - 150*	*04/29/16 14:15*	*05/02/16 20:54*	*10*
2,4,6-Tribromophenol (Surr)	*94*		*52 - 132*	*04/29/16 14:15*	*05/02/16 20:54*	*10*
2-Fluorobiphenyl	*82*		*48 - 120*	*04/29/16 14:15*	*05/02/16 20:54*	*10*
2-Fluorophenol (Surr)	*57*		*20 - 120*	*04/29/16 14:15*	*05/02/16 20:54*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		04/29/16 11:25	04/29/16 23:52	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:52	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/29/16 23:52	1
Barium	**0.22**		0.0020		mg/L		04/29/16 11:25	04/29/16 23:52	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:52	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 23:52	1

Client Sample ID: TKMW-6
Date Collected: 04/27/16 12:08
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-5
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**189**		0.50		mg/L		04/29/16 11:25	04/29/16 23:52	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:52	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 23:52	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:52	1
Iron	**25.0**		0.050		mg/L		04/29/16 11:25	04/29/16 23:52	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:52	1
Magnesium	**21.7**		0.20		mg/L		04/29/16 11:25	04/29/16 23:52	1
Manganese	**2.3**		0.0030		mg/L		04/29/16 11:25	04/29/16 23:52	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:52	1
Potassium	**13.1**		0.50		mg/L		04/29/16 11:25	04/29/16 23:52	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/29/16 23:52	1
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/29/16 23:52	1
Sodium	**192**		1.0		mg/L		04/29/16 11:25	04/29/16 23:52	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/29/16 23:52	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/29/16 23:52	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/29/16 23:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.016**		0.010		mg/L		05/02/16 21:25	05/03/16 09:49	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-5
Date Collected: 04/27/16 12:55
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 14:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 14:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 14:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 14:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 14:21	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 14:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 14:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 14:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 14:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 14:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 14:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 14:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 14:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 14:21	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 14:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 14:21	1
Acetone	**3.4**	**J ***	10	3.0	ug/L			05/04/16 14:21	1
Benzene	**1.4**		1.0	0.41	ug/L			05/04/16 14:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 14:21	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 14:21	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 14:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/04/16 14:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 14:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 14:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 14:21	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 14:21	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 14:21	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 14:21	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 14:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 14:21	1
Cyclohexane	**0.36**	**J**	1.0	0.18	ug/L			05/04/16 14:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 14:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 14:21	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 14:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 14:21	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 14:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 14:21	1
Methylcyclohexane	**0.56**	**J**	1.0	0.16	ug/L			05/04/16 14:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 14:21	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 14:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 14:21	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 14:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 14:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 14:21	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 14:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 14:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 14:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 14:21	1

Client Sample ID: TKMW-5

Date Collected: 04/27/16 12:55
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*71 - 126*		*05/04/16 14:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*		*05/04/16 14:21*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/04/16 14:21*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*		*05/04/16 14:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.9	0.64	ug/L		04/29/16 14:15	05/02/16 21:23	1
bis (2-chloroisopropyl) ether	ND		4.9	0.51	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,4,5-Trichlorophenol	ND		4.9	0.47	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,4,6-Trichlorophenol	ND		4.9	0.59	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,4-Dichlorophenol	ND		4.9	0.50	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,4-Dimethylphenol	ND		4.9	0.49	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,4-Dinitrophenol	ND		9.7	2.2	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,4-Dinitrotoluene	ND		4.9	0.44	ug/L		04/29/16 14:15	05/02/16 21:23	1
2,6-Dinitrotoluene	ND		4.9	0.39	ug/L		04/29/16 14:15	05/02/16 21:23	1
2-Chloronaphthalene	ND		4.9	0.45	ug/L		04/29/16 14:15	05/02/16 21:23	1
2-Chlorophenol	ND		4.9	0.52	ug/L		04/29/16 14:15	05/02/16 21:23	1
2-Methylphenol	ND		4.9	0.39	ug/L		04/29/16 14:15	05/02/16 21:23	1
2-Methylnaphthalene	ND		4.9	0.58	ug/L		04/29/16 14:15	05/02/16 21:23	1
2-Nitroaniline	ND		9.7	0.41	ug/L		04/29/16 14:15	05/02/16 21:23	1
2-Nitrophenol	ND		4.9	0.47	ug/L		04/29/16 14:15	05/02/16 21:23	1
3,3'-Dichlorobenzidine	ND		4.9	0.39	ug/L		04/29/16 14:15	05/02/16 21:23	1
3-Nitroaniline	ND		9.7	0.47	ug/L		04/29/16 14:15	05/02/16 21:23	1
4,6-Dinitro-2-methylphenol	ND		9.7	2.1	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Bromophenyl phenyl ether	ND		4.9	0.44	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Chloro-3-methylphenol	ND		4.9	0.44	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Chloroaniline	ND		4.9	0.57	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Chlorophenyl phenyl ether	ND		4.9	0.34	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Methylphenol	ND		9.7	0.35	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Nitroaniline	ND		9.7	0.24	ug/L		04/29/16 14:15	05/02/16 21:23	1
4-Nitrophenol	ND		9.7	1.5	ug/L		04/29/16 14:15	05/02/16 21:23	1
Acenaphthene	**7.3**		4.9	0.40	ug/L		04/29/16 14:15	05/02/16 21:23	1
Acenaphthylene	ND		4.9	0.37	ug/L		04/29/16 14:15	05/02/16 21:23	1
Acetophenone	ND		4.9	0.53	ug/L		04/29/16 14:15	05/02/16 21:23	1
Anthracene	**0.48**	**J**	4.9	0.27	ug/L		04/29/16 14:15	05/02/16 21:23	1
Atrazine	ND		4.9	0.45	ug/L		04/29/16 14:15	05/02/16 21:23	1
Benzaldehyde	ND	*	4.9	0.26	ug/L		04/29/16 14:15	05/02/16 21:23	1
Benzo[a]anthracene	ND		4.9	0.35	ug/L		04/29/16 14:15	05/02/16 21:23	1
Benzo[a]pyrene	ND		4.9	0.46	ug/L		04/29/16 14:15	05/02/16 21:23	1
Benzo[b]fluoranthene	ND		4.9	0.33	ug/L		04/29/16 14:15	05/02/16 21:23	1
Benzo[g,h,i]perylene	ND		4.9	0.34	ug/L		04/29/16 14:15	05/02/16 21:23	1
Benzo[k]fluoranthene	ND		4.9	0.71	ug/L		04/29/16 14:15	05/02/16 21:23	1
Bis(2-chloroethoxy)methane	ND		4.9	0.34	ug/L		04/29/16 14:15	05/02/16 21:23	1
Bis(2-chloroethyl)ether	ND		4.9	0.39	ug/L		04/29/16 14:15	05/02/16 21:23	1
Bis(2-ethylhexyl) phthalate	ND		4.9	2.1	ug/L		04/29/16 14:15	05/02/16 21:23	1
Butyl benzyl phthalate	ND		4.9	0.97	ug/L		04/29/16 14:15	05/02/16 21:23	1
Caprolactam	ND		4.9	2.1	ug/L		04/29/16 14:15	05/02/16 21:23	1
Carbazole	ND		4.9	0.29	ug/L		04/29/16 14:15	05/02/16 21:23	1
Chrysene	ND		4.9	0.32	ug/L		04/29/16 14:15	05/02/16 21:23	1

Client Sample ID: TKMW-5
Date Collected: 04/27/16 12:55
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.9	0.41	ug/L		04/29/16 14:15	05/02/16 21:23	1
Di-n-butyl phthalate	ND		4.9	0.30	ug/L		04/29/16 14:15	05/02/16 21:23	1
Di-n-octyl phthalate	ND		4.9	0.46	ug/L		04/29/16 14:15	05/02/16 21:23	1
Dibenzofuran	**0.56**	**J**	9.7	0.50	ug/L		04/29/16 14:15	05/02/16 21:23	1
Diethyl phthalate	ND		4.9	0.21	ug/L		04/29/16 14:15	05/02/16 21:23	1
Dimethyl phthalate	ND		4.9	0.35	ug/L		04/29/16 14:15	05/02/16 21:23	1
Fluoranthene	ND		4.9	0.39	ug/L		04/29/16 14:15	05/02/16 21:23	1
Fluorene	**2.5**	**J**	4.9	0.35	ug/L		04/29/16 14:15	05/02/16 21:23	1
Hexachlorobenzene	ND		4.9	0.50	ug/L		04/29/16 14:15	05/02/16 21:23	1
Hexachlorobutadiene	ND		4.9	0.66	ug/L		04/29/16 14:15	05/02/16 21:23	1
Hexachlorocyclopentadiene	ND		4.9	0.57	ug/L		04/29/16 14:15	05/02/16 21:23	1
Hexachloroethane	ND		4.9	0.57	ug/L		04/29/16 14:15	05/02/16 21:23	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.46	ug/L		04/29/16 14:15	05/02/16 21:23	1
Isophorone	ND		4.9	0.42	ug/L		04/29/16 14:15	05/02/16 21:23	1
N-Nitrosodi-n-propylamine	ND		4.9	0.53	ug/L		04/29/16 14:15	05/02/16 21:23	1
N-Nitrosodiphenylamine	ND		4.9	0.50	ug/L		04/29/16 14:15	05/02/16 21:23	1
Naphthalene	ND		4.9	0.74	ug/L		04/29/16 14:15	05/02/16 21:23	1
Nitrobenzene	ND		4.9	0.28	ug/L		04/29/16 14:15	05/02/16 21:23	1
Pentachlorophenol	ND		9.7	2.1	ug/L		04/29/16 14:15	05/02/16 21:23	1
Phenanthrene	**1.8**	**J**	4.9	0.43	ug/L		04/29/16 14:15	05/02/16 21:23	1
Phenol	ND		4.9	0.38	ug/L		04/29/16 14:15	05/02/16 21:23	1
Pyrene	ND		4.9	0.33	ug/L		04/29/16 14:15	05/02/16 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*104*		*46 - 120*	*04/29/16 14:15*	*05/02/16 21:23*	*1*
Phenol-d5 (Surr)	*50*		*16 - 120*	*04/29/16 14:15*	*05/02/16 21:23*	*1*
p-Terphenyl-d14 (Surr)	*109*		*67 - 150*	*04/29/16 14:15*	*05/02/16 21:23*	*1*
2,4,6-Tribromophenol (Surr)	*120*		*52 - 132*	*04/29/16 14:15*	*05/02/16 21:23*	*1*
2-Fluorobiphenyl	*93*		*48 - 120*	*04/29/16 14:15*	*05/02/16 21:23*	*1*
2-Fluorophenol (Surr)	*73*		*20 - 120*	*04/29/16 14:15*	*05/02/16 21:23*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.26**		0.20		mg/L		04/29/16 11:25	04/30/16 00:09	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/30/16 00:09	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/30/16 00:09	1
Barium	**0.32**		0.0020		mg/L		04/29/16 11:25	04/30/16 00:09	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/30/16 00:09	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/30/16 00:09	1
Calcium	**186**		0.50		mg/L		04/29/16 11:25	04/30/16 00:09	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/30/16 00:09	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/30/16 00:09	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:09	1
Iron	**2.9**		0.050		mg/L		04/29/16 11:25	04/30/16 00:09	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:09	1
Magnesium	**27.4**		0.20		mg/L		04/29/16 11:25	04/30/16 00:09	1
Manganese	**0.55**		0.0030		mg/L		04/29/16 11:25	04/30/16 00:09	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:09	1
Potassium	**10.4**		0.50		mg/L		04/29/16 11:25	04/30/16 00:09	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/30/16 00:09	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-5
Date Collected: 04/27/16 12:55
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-6
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/30/16 00:09	1
Sodium	**236**		1.0		mg/L		04/29/16 11:25	04/30/16 00:09	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/30/16 00:09	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/30/16 00:09	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.012**		0.010		mg/L		05/02/16 21:25	05/03/16 09:56	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 04/27/16 13:45
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 06:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 06:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 06:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 06:42	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 06:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 06:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 06:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 06:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 06:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 06:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 06:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 06:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 06:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 06:42	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 06:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 06:42	1
Acetone	ND	*	10	3.0	ug/L			05/04/16 06:42	1
Benzene	ND		1.0	0.41	ug/L			05/04/16 06:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 06:42	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 06:42	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 06:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/04/16 06:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 06:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 06:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 06:42	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 06:42	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 06:42	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 06:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 06:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 06:42	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 06:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 06:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 06:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 06:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 06:42	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 06:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 06:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 06:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 06:42	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 06:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 06:42	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 06:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 06:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 06:42	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 06:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 06:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 06:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 06:42	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 04/27/16 13:45
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 126		05/04/16 06:42	1
1,2-Dichloroethane-d4 (Surr)	117		66 - 137		05/04/16 06:42	1
4-Bromofluorobenzene (Surr)	89		73 - 120		05/04/16 06:42	1
Dibromofluoromethane (Surr)	112		60 - 140		05/04/16 06:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.61	ug/L		04/29/16 14:15	05/01/16 17:51	1
bis (2-chloroisopropyl) ether	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,4,5-Trichlorophenol	ND		4.7	0.45	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,4,6-Trichlorophenol	ND		4.7	0.57	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,4-Dichlorophenol	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,4-Dimethylphenol	ND		4.7	0.47	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,4-Dinitrophenol	ND		9.3	2.1	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,4-Dinitrotoluene	ND		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 17:51	1
2,6-Dinitrotoluene	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 17:51	1
2-Chloronaphthalene	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 17:51	1
2-Chlorophenol	ND		4.7	0.49	ug/L		04/29/16 14:15	05/01/16 17:51	1
2-Methylphenol	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 17:51	1
2-Methylnaphthalene	ND		4.7	0.56	ug/L		04/29/16 14:15	05/01/16 17:51	1
2-Nitroaniline	ND		9.3	0.39	ug/L		04/29/16 14:15	05/01/16 17:51	1
2-Nitrophenol	ND		4.7	0.45	ug/L		04/29/16 14:15	05/01/16 17:51	1
3,3'-Dichlorobenzidine	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 17:51	1
3-Nitroaniline	ND		9.3	0.45	ug/L		04/29/16 14:15	05/01/16 17:51	1
4,6-Dinitro-2-methylphenol	ND		9.3	2.0	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Bromophenyl phenyl ether	ND		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Chloro-3-methylphenol	ND		4.7	0.42	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Chloroaniline	ND		4.7	0.55	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Chlorophenyl phenyl ether	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Methylphenol	ND		9.3	0.34	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Nitroaniline	ND		9.3	0.23	ug/L		04/29/16 14:15	05/01/16 17:51	1
4-Nitrophenol	ND		9.3	1.4	ug/L		04/29/16 14:15	05/01/16 17:51	1
Acenaphthene	ND		4.7	0.38	ug/L		04/29/16 14:15	05/01/16 17:51	1
Acenaphthylene	ND		4.7	0.35	ug/L		04/29/16 14:15	05/01/16 17:51	1
Acetophenone	ND		4.7	0.50	ug/L		04/29/16 14:15	05/01/16 17:51	1
Anthracene	ND		4.7	0.26	ug/L		04/29/16 14:15	05/01/16 17:51	1
Atrazine	ND		4.7	0.43	ug/L		04/29/16 14:15	05/01/16 17:51	1
Benzaldehyde	**0.41**	**J ***	4.7	0.25	ug/L		04/29/16 14:15	05/01/16 17:51	1
Benzo[a]anthracene	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 17:51	1
Benzo[a]pyrene	ND		4.7	0.44	ug/L		04/29/16 14:15	05/01/16 17:51	1
Benzo[b]fluoranthene	ND		4.7	0.32	ug/L		04/29/16 14:15	05/01/16 17:51	1
Benzo[g,h,i]perylene	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 17:51	1
Benzo[k]fluoranthene	ND		4.7	0.68	ug/L		04/29/16 14:15	05/01/16 17:51	1
Bis(2-chloroethoxy)methane	ND		4.7	0.33	ug/L		04/29/16 14:15	05/01/16 17:51	1
Bis(2-chloroethyl)ether	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 17:51	1
Bis(2-ethylhexyl) phthalate	ND		4.7	2.0	ug/L		04/29/16 14:15	05/01/16 17:51	1
Butyl benzyl phthalate	ND		4.7	0.93	ug/L		04/29/16 14:15	05/01/16 17:51	1
Caprolactam	ND		4.7	2.0	ug/L		04/29/16 14:15	05/01/16 17:51	1
Carbazole	ND		4.7	0.28	ug/L		04/29/16 14:15	05/01/16 17:51	1
Chrysene	ND		4.7	0.31	ug/L		04/29/16 14:15	05/01/16 17:51	1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 04/27/16 13:45
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4.7	0.39	ug/L		04/29/16 14:15	05/01/16 17:51	1
Di-n-butyl phthalate	ND		4.7	0.29	ug/L		04/29/16 14:15	05/01/16 17:51	1
Di-n-octyl phthalate	ND		4.7	0.44	ug/L		04/29/16 14:15	05/01/16 17:51	1
Dibenzofuran	ND		9.3	0.48	ug/L		04/29/16 14:15	05/01/16 17:51	1
Diethyl phthalate	ND		4.7	0.20	ug/L		04/29/16 14:15	05/01/16 17:51	1
Dimethyl phthalate	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 17:51	1
Fluoranthene	ND		4.7	0.37	ug/L		04/29/16 14:15	05/01/16 17:51	1
Fluorene	ND		4.7	0.34	ug/L		04/29/16 14:15	05/01/16 17:51	1
Hexachlorobenzene	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 17:51	1
Hexachlorobutadiene	ND		4.7	0.63	ug/L		04/29/16 14:15	05/01/16 17:51	1
Hexachlorocyclopentadiene	ND		4.7	0.55	ug/L		04/29/16 14:15	05/01/16 17:51	1
Hexachloroethane	ND		4.7	0.55	ug/L		04/29/16 14:15	05/01/16 17:51	1
Indeno[1,2,3-cd]pyrene	ND		4.7	0.44	ug/L		04/29/16 14:15	05/01/16 17:51	1
Isophorone	ND		4.7	0.40	ug/L		04/29/16 14:15	05/01/16 17:51	1
N-Nitrosodi-n-propylamine	ND		4.7	0.50	ug/L		04/29/16 14:15	05/01/16 17:51	1
N-Nitrosodiphenylamine	ND		4.7	0.48	ug/L		04/29/16 14:15	05/01/16 17:51	1
Naphthalene	ND		4.7	0.71	ug/L		04/29/16 14:15	05/01/16 17:51	1
Nitrobenzene	ND		4.7	0.27	ug/L		04/29/16 14:15	05/01/16 17:51	1
Pentachlorophenol	ND		9.3	2.0	ug/L		04/29/16 14:15	05/01/16 17:51	1
Phenanthrene	ND		4.7	0.41	ug/L		04/29/16 14:15	05/01/16 17:51	1
Phenol	ND		4.7	0.36	ug/L		04/29/16 14:15	05/01/16 17:51	1
Pyrene	ND		4.7	0.32	ug/L		04/29/16 14:15	05/01/16 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*46 - 120*	*04/29/16 14:15*	*05/01/16 17:51*	*1*
Phenol-d5 (Surr)	*39*		*16 - 120*	*04/29/16 14:15*	*05/01/16 17:51*	*1*
p-Terphenyl-d14 (Surr)	*113*		*67 - 150*	*04/29/16 14:15*	*05/01/16 17:51*	*1*
2,4,6-Tribromophenol (Surr)	*92*		*52 - 132*	*04/29/16 14:15*	*05/01/16 17:51*	*1*
2-Fluorobiphenyl	*86*		*48 - 120*	*04/29/16 14:15*	*05/01/16 17:51*	*1*
2-Fluorophenol (Surr)	*58*		*20 - 120*	*04/29/16 14:15*	*05/01/16 17:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		04/29/16 11:25	04/30/16 00:12	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/30/16 00:12	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/30/16 00:12	1
Barium	**0.021**		0.0020		mg/L		04/29/16 11:25	04/30/16 00:12	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/30/16 00:12	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/30/16 00:12	1
Calcium	**33.4**		0.50		mg/L		04/29/16 11:25	04/30/16 00:12	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/30/16 00:12	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/30/16 00:12	1
Copper	**0.012**		0.010		mg/L		04/29/16 11:25	04/30/16 00:12	1
Iron	**0.075**		0.050		mg/L		04/29/16 11:25	04/30/16 00:12	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:12	1
Magnesium	**8.9**		0.20		mg/L		04/29/16 11:25	04/30/16 00:12	1
Manganese	ND		0.0030		mg/L		04/29/16 11:25	04/30/16 00:12	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:12	1
Potassium	**1.7**		0.50		mg/L		04/29/16 11:25	04/30/16 00:12	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/30/16 00:12	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 04/27/16 13:45
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-7
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/30/16 00:12	1
Sodium	**14.2**		1.0		mg/L		04/29/16 11:25	04/30/16 00:12	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/30/16 00:12	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/30/16 00:12	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/30/16 00:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 13:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		05/02/16 21:25	05/03/16 09:59	1

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	12DCE	BFB	DBFM
Lab Sample ID	Client Sample ID	(71-126)	(66-137)	(73-120)	(60-140)
480-99240-1	BLIND DUP	98	119	90	112
480-99240-2	TKMW-9	98	116	91	110
480-99240-3	TKMW-8	98	119	89	111
480-99240-4	TKMW-7	96	119	87	111
480-99240-5	TKMW-6	100	118	91	109
480-99240-5 MS	TKMW-6	101	116	95	109
480-99240-5 MSD	TKMW-6	102	118	99	112
480-99240-6	TKMW-5	97	112	89	103
480-99240-7	EQUIPMENT BLANK	95	117	89	112
LCS 480-299754/4	Lab Control Sample	101	113	98	110
LCS 480-299852/4	Lab Control Sample	98	108	93	104
MB 480-299754/6	Method Blank	98	117	93	110
MB 480-299852/6	Method Blank	98	111	91	107

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPH	TBP	FBP	2FP
Lab Sample ID	Client Sample ID	(46-120)	(16-120)	(67-150)	(52-132)	(48-120)	(20-120)
480-99240-1	BLIND DUP	91	38	85	99	89	56
480-99240-2	TKMW-9	77	37	88	88	76	55
480-99240-3	TKMW-8	95	35	89	98	91	53
480-99240-4	TKMW-7	91	62	116	88	90	77
480-99240-5	TKMW-6	87	45	90	119	90	69
480-99240-5 - DL	TKMW-6	80	40	77	94	82	57
480-99240-5 MS	TKMW-6	86	54	101	113	92	72
480-99240-5 MSD	TKMW-6	87	54	84	120	91	72
480-99240-6	TKMW-5	104	50	109	120	93	73
480-99240-7	EQUIPMENT BLANK	86	39	113	92	86	58
LCS 480-299050/2-A	Lab Control Sample	103	55	114	108	102	77
MB 480-299050/1-A	Method Blank	97	43	113	84	96	64

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-299754/6
Matrix: Water
Analysis Batch: 299754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 00:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 00:35	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 00:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 00:35	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 00:35	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 00:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 00:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 00:35	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 00:35	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 00:35	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 00:35	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 00:35	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 00:35	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 00:35	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 00:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 00:35	1
Acetone	ND		10	3.0	ug/L			05/04/16 00:35	1
Benzene	ND		1.0	0.41	ug/L			05/04/16 00:35	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 00:35	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 00:35	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 00:35	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/04/16 00:35	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 00:35	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 00:35	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 00:35	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 00:35	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 00:35	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 00:35	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 00:35	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 00:35	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 00:35	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 00:35	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 00:35	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 00:35	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 00:35	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 00:35	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 00:35	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 00:35	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 00:35	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 00:35	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 00:35	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 00:35	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 00:35	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 00:35	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 00:35	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 00:35	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 00:35	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 00:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 126		05/04/16 00:35	1
1,2-Dichloroethane-d4 (Surr)	117		66 - 137		05/04/16 00:35	1
4-Bromofluorobenzene (Surr)	93		73 - 120		05/04/16 00:35	1
Dibromofluoromethane (Surr)	110		60 - 140		05/04/16 00:35	1

Lab Sample ID: LCS 480-299754/4
Matrix: Water
Analysis Batch: 299754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	29.3		ug/L		117	73 - 126
1,1,2,2-Tetrachloroethane	25.0	29.0		ug/L		116	70 - 126
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	32.0		ug/L		128	52 - 148
1,1-Dichloroethane	25.0	26.7		ug/L		107	71 - 129
1,1-Dichloroethene	25.0	28.5		ug/L		114	58 - 121
1,2,4-Trichlorobenzene	25.0	26.6		ug/L		106	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	31.1		ug/L		124	56 - 134
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	27.8		ug/L		111	75 - 127
1,2-Dichloropropane	25.0	26.4		ug/L		106	76 - 120
1,3-Dichlorobenzene	25.0	25.9		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	75 - 120
2-Butanone (MEK)	125	170		ug/L		136	57 - 140
2-Hexanone	125	147		ug/L		118	65 - 127
4-Methyl-2-pentanone (MIBK)	125	146		ug/L		117	71 - 125
Acetone	125	220	*	ug/L		176	56 - 142
Benzene	25.0	26.5		ug/L		106	71 - 124
Bromodichloromethane	25.0	28.7		ug/L		115	80 - 122
Bromoform	25.0	29.0		ug/L		116	52 - 132
Bromomethane	25.0	32.3		ug/L		129	55 - 144
Carbon disulfide	25.0	27.6		ug/L		111	59 - 134
Carbon tetrachloride	25.0	30.3		ug/L		121	72 - 134
Chlorobenzene	25.0	24.8		ug/L		99	72 - 120
Dibromochloromethane	25.0	27.9		ug/L		112	75 - 125
Chloroethane	25.0	27.4		ug/L		110	69 - 136
Chloroform	25.0	27.9		ug/L		111	73 - 127
Chloromethane	25.0	23.5		ug/L		94	68 - 124
cis-1,2-Dichloroethene	25.0	27.1		ug/L		108	74 - 124
cis-1,3-Dichloropropene	25.0	26.5		ug/L		106	74 - 124
Cyclohexane	25.0	27.7		ug/L		111	59 - 135
Dichlorodifluoromethane	25.0	26.1		ug/L		105	59 - 135
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	26.7		ug/L		107	77 - 120
Isopropylbenzene	25.0	27.2		ug/L		109	77 - 122
Methyl acetate	125	155		ug/L		124	74 - 133
Methyl tert-butyl ether	25.0	27.8		ug/L		111	64 - 127
Methylcyclohexane	25.0	28.1		ug/L		112	61 - 138
Methylene Chloride	25.0	25.8		ug/L		103	57 - 132
Styrene	25.0	24.8		ug/L		99	70 - 130
Tetrachloroethene	25.0	25.7		ug/L		103	74 - 122
Toluene	25.0	25.4		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	27.0		ug/L		108	73 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-299754/4
Matrix: Water
Analysis Batch: 299754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			25.0	26.8		ug/L		107	72 - 123		
Trichloroethene			25.0	27.4		ug/L		109	74 - 123		
Trichlorofluoromethane			25.0	28.9		ug/L		115	62 - 152		
Vinyl chloride			25.0	23.5		ug/L		94	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*71 - 126*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*110*		*60 - 140*

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299754

Client Sample ID: TKMW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane	ND		250	303		ug/L		121	73 - 126		
1,1,2,2-Tetrachloroethane	ND		250	310		ug/L		124	70 - 126		
1,1,2-Trichloroethane	ND		250	279		ug/L		112	76 - 122		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	316		ug/L		127	52 - 148		
1,1-Dichloroethane	ND		250	270		ug/L		108	71 - 129		
1,1-Dichloroethene	ND		250	287		ug/L		115	58 - 121		
1,2,4-Trichlorobenzene	ND		250	267		ug/L		107	70 - 122		
1,2-Dibromo-3-Chloropropane	ND	F1	250	334		ug/L		134	56 - 134		
1,2-Dichlorobenzene	ND		250	270		ug/L		108	80 - 124		
1,2-Dichloroethane	ND		250	285		ug/L		114	75 - 127		
1,2-Dichloropropane	ND		250	266		ug/L		106	76 - 120		
1,3-Dichlorobenzene	ND		250	264		ug/L		106	77 - 120		
1,4-Dichlorobenzene	ND		250	260		ug/L		104	75 - 120		
2-Butanone (MEK)	ND		1250	1600		ug/L		128	57 - 140		
2-Hexanone	ND		1250	1490		ug/L		119	65 - 127		
4-Methyl-2-pentanone (MIBK)	ND		1250	1500		ug/L		120	71 - 125		
Acetone	ND	* F1	1250	1740		ug/L		139	56 - 142		
Benzene	25		250	294		ug/L		108	71 - 124		
Bromodichloromethane	ND		250	291		ug/L		116	80 - 122		
Bromoform	ND		250	265		ug/L		106	52 - 132		
Bromomethane	ND	F1	250	422	F1	ug/L		169	55 - 144		
Carbon disulfide	ND		250	273		ug/L		109	59 - 134		
Carbon tetrachloride	ND		250	313		ug/L		125	72 - 134		
Chlorobenzene	ND		250	251		ug/L		101	72 - 120		
Dibromochloromethane	ND		250	274		ug/L		110	75 - 125		
Chloroethane	ND		250	316		ug/L		126	69 - 136		
Chloroform	ND		250	287		ug/L		115	73 - 127		
Chloromethane	ND		250	228		ug/L		91	68 - 124		
cis-1,2-Dichloroethene	ND		250	269		ug/L		107	74 - 124		
cis-1,3-Dichloropropene	ND		250	250		ug/L		100	74 - 124		
Cyclohexane	22		250	285		ug/L		105	59 - 135		

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299754

Client Sample ID: TKMW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		250	276		ug/L		110	59 - 135
Ethylbenzene	11		250	276		ug/L		106	77 - 123
1,2-Dibromoethane	ND		250	275		ug/L		110	77 - 120
Isopropylbenzene	8.9	J	250	287		ug/L		111	77 - 122
Methyl acetate	ND		1250	1570		ug/L		125	74 - 133
Methyl tert-butyl ether	ND		250	273		ug/L		109	64 - 127
Methylcyclohexane	200	F1	250	594	F1	ug/L		158	61 - 138
Methylene Chloride	ND		250	264		ug/L		106	57 - 132
Styrene	ND		250	253		ug/L		101	70 - 130
Tetrachloroethene	ND		250	263		ug/L		105	74 - 122
Toluene	ND		250	265		ug/L		106	80 - 122
trans-1,2-Dichloroethene	ND		250	277		ug/L		111	73 - 127
trans-1,3-Dichloropropene	ND		250	261		ug/L		104	72 - 123
Trichloroethene	ND		250	276		ug/L		110	74 - 123
Trichlorofluoromethane	ND		250	301		ug/L		120	62 - 152
Vinyl chloride	ND		250	227		ug/L		91	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*71 - 126*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*109*		*60 - 140*

Lab Sample ID: 480-99240-5 MSD
Matrix: Water
Analysis Batch: 299754

Client Sample ID: TKMW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		250	313		ug/L		125	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		250	309		ug/L		123	70 - 126	0	15
1,1,2-Trichloroethane	ND		250	279		ug/L		112	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	333		ug/L		133	52 - 148	5	20
1,1-Dichloroethane	ND		250	278		ug/L		111	71 - 129	3	20
1,1-Dichloroethene	ND		250	298		ug/L		119	58 - 121	4	16
1,2,4-Trichlorobenzene	ND		250	274		ug/L		110	70 - 122	3	20
1,2-Dibromo-3-Chloropropane	ND	F1	250	344	F1	ug/L		137	56 - 134	3	15
1,2-Dichlorobenzene	ND		250	271		ug/L		109	80 - 124	1	20
1,2-Dichloroethane	ND		250	291		ug/L		117	75 - 127	2	20
1,2-Dichloropropane	ND		250	273		ug/L		109	76 - 120	2	20
1,3-Dichlorobenzene	ND		250	264		ug/L		106	77 - 120	0	20
1,4-Dichlorobenzene	ND		250	263		ug/L		105	75 - 120	1	20
2-Butanone (MEK)	ND		1250	1640		ug/L		131	57 - 140	2	20
2-Hexanone	ND		1250	1520		ug/L		122	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		1250	1520		ug/L		121	71 - 125	1	35
Acetone	ND	* F1	1250	1800	F1	ug/L		144	56 - 142	4	15
Benzene	25		250	297		ug/L		109	71 - 124	1	13
Bromodichloromethane	ND		250	298		ug/L		119	80 - 122	3	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-99240-5 MSD
Matrix: Water
Analysis Batch: 299754

Client Sample ID: TKMW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		250	281		ug/L		112	52 - 132	6	15
Bromomethane	ND	F1	250	411	F1	ug/L		165	55 - 144	2	15
Carbon disulfide	ND		250	296		ug/L		118	59 - 134	8	15
Carbon tetrachloride	ND		250	325		ug/L		130	72 - 134	4	15
Chlorobenzene	ND		250	257		ug/L		103	72 - 120	2	25
Dibromochloromethane	ND		250	281		ug/L		112	75 - 125	3	15
Chloroethane	ND		250	305		ug/L		122	69 - 136	4	15
Chloroform	ND		250	292		ug/L		117	73 - 127	2	20
Chloromethane	ND		250	234		ug/L		94	68 - 124	3	15
cis-1,2-Dichloroethene	ND		250	278		ug/L		111	74 - 124	3	15
cis-1,3-Dichloropropene	ND		250	263		ug/L		105	74 - 124	5	15
Cyclohexane	22		250	333		ug/L		125	59 - 135	16	20
Dichlorodifluoromethane	ND		250	280		ug/L		112	59 - 135	1	20
Ethylbenzene	11		250	281		ug/L		108	77 - 123	2	15
1,2-Dibromoethane	ND		250	281		ug/L		112	77 - 120	2	15
Isopropylbenzene	8.9	J	250	294		ug/L		114	77 - 122	2	20
Methyl acetate	ND		1250	1600		ug/L		128	74 - 133	2	20
Methyl tert-butyl ether	ND		250	280		ug/L		112	64 - 127	3	37
Methylcyclohexane	200	F1	250	622	F1	ug/L		170	61 - 138	5	20
Methylene Chloride	ND		250	265		ug/L		106	57 - 132	0	15
Styrene	ND		250	257		ug/L		103	70 - 130	2	20
Tetrachloroethene	ND		250	272		ug/L		109	74 - 122	3	20
Toluene	ND		250	266		ug/L		107	80 - 122	1	15
trans-1,2-Dichloroethene	ND		250	284		ug/L		114	73 - 127	2	20
trans-1,3-Dichloropropene	ND		250	267		ug/L		107	72 - 123	2	15
Trichloroethene	ND		250	282		ug/L		113	74 - 123	2	16
Trichlorofluoromethane	ND		250	309		ug/L		124	62 - 152	3	20
Vinyl chloride	ND		250	238		ug/L		95	65 - 133	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*71 - 126*
1,2-Dichloroethane-d4 (Surr)	*118*		*66 - 137*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*112*		*60 - 140*

Lab Sample ID: MB 480-299852/6
Matrix: Water
Analysis Batch: 299852

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/04/16 12:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/04/16 12:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/04/16 12:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/04/16 12:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/04/16 12:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/04/16 12:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/04/16 12:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/04/16 12:03	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-299852/6
Matrix: Water
Analysis Batch: 299852

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/04/16 12:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/04/16 12:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/04/16 12:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/04/16 12:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/04/16 12:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/04/16 12:03	1
2-Hexanone	ND		5.0	1.2	ug/L			05/04/16 12:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/04/16 12:03	1
Acetone	ND		10	3.0	ug/L			05/04/16 12:03	1
Benzene	ND		1.0	0.41	ug/L			05/04/16 12:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/04/16 12:03	1
Bromoform	ND		1.0	0.26	ug/L			05/04/16 12:03	1
Bromomethane	ND		1.0	0.69	ug/L			05/04/16 12:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/04/16 12:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/04/16 12:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/04/16 12:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/04/16 12:03	1
Chloroethane	ND		1.0	0.32	ug/L			05/04/16 12:03	1
Chloroform	ND		1.0	0.34	ug/L			05/04/16 12:03	1
Chloromethane	ND		1.0	0.35	ug/L			05/04/16 12:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/04/16 12:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/04/16 12:03	1
Cyclohexane	ND		1.0	0.18	ug/L			05/04/16 12:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/04/16 12:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/04/16 12:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/04/16 12:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/04/16 12:03	1
Methyl acetate	ND		2.5	1.3	ug/L			05/04/16 12:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/04/16 12:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/04/16 12:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/04/16 12:03	1
Styrene	ND		1.0	0.73	ug/L			05/04/16 12:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/04/16 12:03	1
Toluene	ND		1.0	0.51	ug/L			05/04/16 12:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/04/16 12:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/04/16 12:03	1
Trichloroethene	ND		1.0	0.46	ug/L			05/04/16 12:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/04/16 12:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/04/16 12:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/04/16 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 126*		*05/04/16 12:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*05/04/16 12:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/16 12:03*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*		*05/04/16 12:03*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-299852/4
Matrix: Water
Analysis Batch: 299852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	28.0		ug/L		112	73 - 126
1,1,2,2-Tetrachloroethane	25.0	28.5		ug/L		114	70 - 126
1,1,2-Trichloroethane	25.0	25.4		ug/L		102	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.3		ug/L		121	52 - 148
1,1-Dichloroethane	25.0	25.0		ug/L		100	71 - 129
1,1-Dichloroethene	25.0	26.7		ug/L		107	58 - 121
1,2,4-Trichlorobenzene	25.0	25.1		ug/L		100	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	29.9		ug/L		119	56 - 134
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 127
1,2-Dichloropropane	25.0	24.9		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	24.7		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	75 - 120
2-Butanone (MEK)	125	153		ug/L		123	57 - 140
2-Hexanone	125	140		ug/L		112	65 - 127
4-Methyl-2-pentanone (MIBK)	125	140		ug/L		112	71 - 125
Acetone	125	188	*	ug/L		151	56 - 142
Benzene	25.0	24.8		ug/L		99	71 - 124
Bromodichloromethane	25.0	26.6		ug/L		106	80 - 122
Bromoform	25.0	27.3		ug/L		109	52 - 132
Bromomethane	25.0	34.2		ug/L		137	55 - 144
Carbon disulfide	25.0	25.8		ug/L		103	59 - 134
Carbon tetrachloride	25.0	28.8		ug/L		115	72 - 134
Chlorobenzene	25.0	24.0		ug/L		96	72 - 120
Dibromochloromethane	25.0	26.7		ug/L		107	75 - 125
Chloroethane	25.0	26.0		ug/L		104	69 - 136
Chloroform	25.0	26.1		ug/L		105	73 - 127
Chloromethane	25.0	23.1		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	24.9		ug/L		99	74 - 124
Cyclohexane	25.0	26.7		ug/L		107	59 - 135
Dichlorodifluoromethane	25.0	24.5		ug/L		98	59 - 135
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
1,2-Dibromoethane	25.0	25.7		ug/L		103	77 - 120
Isopropylbenzene	25.0	26.6		ug/L		107	77 - 122
Methyl acetate	125	145		ug/L		116	74 - 133
Methyl tert-butyl ether	25.0	25.3		ug/L		101	64 - 127
Methylcyclohexane	25.0	26.6		ug/L		106	61 - 138
Methylene Chloride	25.0	24.4		ug/L		98	57 - 132
Styrene	25.0	23.6		ug/L		94	70 - 130
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.5		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	73 - 127
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	72 - 123
Trichloroethene	25.0	25.7		ug/L		103	74 - 123
Trichlorofluoromethane	25.0	28.8		ug/L		115	62 - 152
Vinyl chloride	25.0	23.5		ug/L		94	65 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-299852/4
Matrix: Water
Analysis Batch: 299852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*98*		*71 - 126*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*60 - 140*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-299050/1-A
Matrix: Water
Analysis Batch: 299234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		04/29/16 14:15	05/01/16 13:02	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		04/29/16 14:15	05/01/16 13:02	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		04/29/16 14:15	05/01/16 13:02	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		04/29/16 14:15	05/01/16 13:02	1
2-Chlorophenol	ND		5.0	0.53	ug/L		04/29/16 14:15	05/01/16 13:02	1
2-Methylphenol	ND		5.0	0.40	ug/L		04/29/16 14:15	05/01/16 13:02	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		04/29/16 14:15	05/01/16 13:02	1
2-Nitroaniline	ND		10	0.42	ug/L		04/29/16 14:15	05/01/16 13:02	1
2-Nitrophenol	ND		5.0	0.48	ug/L		04/29/16 14:15	05/01/16 13:02	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		04/29/16 14:15	05/01/16 13:02	1
3-Nitroaniline	ND		10	0.48	ug/L		04/29/16 14:15	05/01/16 13:02	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Chloroaniline	ND		5.0	0.59	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Methylphenol	ND		10	0.36	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Nitroaniline	ND		10	0.25	ug/L		04/29/16 14:15	05/01/16 13:02	1
4-Nitrophenol	ND		10	1.5	ug/L		04/29/16 14:15	05/01/16 13:02	1
Acenaphthene	ND		5.0	0.41	ug/L		04/29/16 14:15	05/01/16 13:02	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/29/16 14:15	05/01/16 13:02	1
Acetophenone	ND		5.0	0.54	ug/L		04/29/16 14:15	05/01/16 13:02	1
Anthracene	ND		5.0	0.28	ug/L		04/29/16 14:15	05/01/16 13:02	1
Atrazine	ND		5.0	0.46	ug/L		04/29/16 14:15	05/01/16 13:02	1
Benzaldehyde	ND		5.0	0.27	ug/L		04/29/16 14:15	05/01/16 13:02	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/29/16 14:15	05/01/16 13:02	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		04/29/16 14:15	05/01/16 13:02	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/29/16 14:15	05/01/16 13:02	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/29/16 14:15	05/01/16 13:02	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/29/16 14:15	05/01/16 13:02	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-299050/1-A
Matrix: Water
Analysis Batch: 299234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		04/29/16 14:15	05/01/16 13:02	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		04/29/16 14:15	05/01/16 13:02	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		04/29/16 14:15	05/01/16 13:02	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		04/29/16 14:15	05/01/16 13:02	1
Caprolactam	ND		5.0	2.2	ug/L		04/29/16 14:15	05/01/16 13:02	1
Carbazole	ND		5.0	0.30	ug/L		04/29/16 14:15	05/01/16 13:02	1
Chrysene	ND		5.0	0.33	ug/L		04/29/16 14:15	05/01/16 13:02	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/29/16 14:15	05/01/16 13:02	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		04/29/16 14:15	05/01/16 13:02	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		04/29/16 14:15	05/01/16 13:02	1
Dibenzofuran	ND		10	0.51	ug/L		04/29/16 14:15	05/01/16 13:02	1
Diethyl phthalate	ND		5.0	0.22	ug/L		04/29/16 14:15	05/01/16 13:02	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		04/29/16 14:15	05/01/16 13:02	1
Fluoranthene	ND		5.0	0.40	ug/L		04/29/16 14:15	05/01/16 13:02	1
Fluorene	ND		5.0	0.36	ug/L		04/29/16 14:15	05/01/16 13:02	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		04/29/16 14:15	05/01/16 13:02	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		04/29/16 14:15	05/01/16 13:02	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		04/29/16 14:15	05/01/16 13:02	1
Hexachloroethane	ND		5.0	0.59	ug/L		04/29/16 14:15	05/01/16 13:02	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/29/16 14:15	05/01/16 13:02	1
Isophorone	ND		5.0	0.43	ug/L		04/29/16 14:15	05/01/16 13:02	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		04/29/16 14:15	05/01/16 13:02	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		04/29/16 14:15	05/01/16 13:02	1
Naphthalene	ND		5.0	0.76	ug/L		04/29/16 14:15	05/01/16 13:02	1
Nitrobenzene	ND		5.0	0.29	ug/L		04/29/16 14:15	05/01/16 13:02	1
Pentachlorophenol	ND		10	2.2	ug/L		04/29/16 14:15	05/01/16 13:02	1
Phenanthrene	ND		5.0	0.44	ug/L		04/29/16 14:15	05/01/16 13:02	1
Phenol	ND		5.0	0.39	ug/L		04/29/16 14:15	05/01/16 13:02	1
Pyrene	ND		5.0	0.34	ug/L		04/29/16 14:15	05/01/16 13:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*97*		*46 - 120*	*04/29/16 14:15*	*05/01/16 13:02*	*1*
Phenol-d5 (Surr)	*43*		*16 - 120*	*04/29/16 14:15*	*05/01/16 13:02*	*1*
p-Terphenyl-d14 (Surr)	*113*		*67 - 150*	*04/29/16 14:15*	*05/01/16 13:02*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*52 - 132*	*04/29/16 14:15*	*05/01/16 13:02*	*1*
2-Fluorobiphenyl	*96*		*48 - 120*	*04/29/16 14:15*	*05/01/16 13:02*	*1*
2-Fluorophenol (Surr)	*64*		*20 - 120*	*04/29/16 14:15*	*05/01/16 13:02*	*1*

Lab Sample ID: LCS 480-299050/2-A
Matrix: Water
Analysis Batch: 299234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	16.0	15.4		ug/L		96	30 - 140
bis (2-chloroisopropyl) ether	16.0	15.7		ug/L		98	28 - 136
2,4,5-Trichlorophenol	16.0	15.7		ug/L		98	65 - 126
2,4,6-Trichlorophenol	16.0	15.7		ug/L		98	64 - 120
2,4-Dichlorophenol	16.0	16.0		ug/L		100	64 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-299050/2-A
Matrix: Water
Analysis Batch: 299234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	16.0	14.7		ug/L		92	57 - 120
2,4-Dinitrophenol	32.0	26.2		ug/L		82	42 - 153
2,4-Dinitrotoluene	16.0	15.2		ug/L		95	65 - 154
2,6-Dinitrotoluene	16.0	16.5		ug/L		103	74 - 134
2-Chloronaphthalene	16.0	14.8		ug/L		92	41 - 124
2-Chlorophenol	16.0	14.8		ug/L		92	48 - 120
2-Methylphenol	16.0	14.0		ug/L		88	39 - 120
2-Methylnaphthalene	16.0	15.2		ug/L		95	34 - 122
2-Nitroaniline	16.0	16.7		ug/L		104	67 - 136
2-Nitrophenol	16.0	15.4		ug/L		97	59 - 120
3,3'-Dichlorobenzidine	32.0	38.0		ug/L		119	33 - 140
3-Nitroaniline	16.0	15.2		ug/L		95	28 - 130
4,6-Dinitro-2-methylphenol	32.0	30.0		ug/L		94	64 - 159
4-Bromophenyl phenyl ether	16.0	15.4		ug/L		96	71 - 126
4-Chloro-3-methylphenol	16.0	16.1		ug/L		100	64 - 120
4-Chloroaniline	16.0	12.4		ug/L		78	10 - 130
4-Chlorophenyl phenyl ether	16.0	15.1		ug/L		95	71 - 122
4-Methylphenol	16.0	13.8		ug/L		86	39 - 120
4-Nitroaniline	16.0	18.4		ug/L		115	47 - 130
4-Nitrophenol	32.0	22.3		ug/L		70	16 - 120
Acenaphthene	16.0	15.4		ug/L		96	60 - 120
Acenaphthylene	16.0	15.7		ug/L		98	63 - 120
Acetophenone	16.0	15.3		ug/L		96	45 - 120
Anthracene	16.0	16.7		ug/L		105	58 - 148
Atrazine	32.0	39.3		ug/L		123	56 - 179
Benzaldehyde	32.0	99.1	E *	ug/L		310	30 - 140
Benzo[a]anthracene	16.0	17.0		ug/L		106	55 - 151
Benzo[a]pyrene	16.0	16.6		ug/L		103	60 - 145
Benzo[b]fluoranthene	16.0	17.6		ug/L		110	54 - 140
Benzo[g,h,i]perylene	16.0	16.7		ug/L		104	66 - 152
Benzo[k]fluoranthene	16.0	17.5		ug/L		109	51 - 153
Bis(2-chloroethoxy)methane	16.0	16.0		ug/L		100	50 - 128
Bis(2-chloroethyl)ether	16.0	15.1		ug/L		95	51 - 120
Bis(2-ethylhexyl) phthalate	16.0	18.1		ug/L		113	53 - 158
Butyl benzyl phthalate	16.0	18.8		ug/L		118	58 - 163
Caprolactam	32.0	11.8		ug/L		37	14 - 130
Carbazole	16.0	17.9		ug/L		112	59 - 148
Chrysene	16.0	17.4		ug/L		109	69 - 140
Dibenz(a,h)anthracene	16.0	16.7		ug/L		104	57 - 148
Di-n-butyl phthalate	16.0	17.9		ug/L		112	58 - 149
Di-n-octyl phthalate	16.0	19.0		ug/L		118	55 - 167
Dibenzofuran	16.0	15.9		ug/L		99	49 - 137
Diethyl phthalate	16.0	16.7		ug/L		104	59 - 146
Dimethyl phthalate	16.0	17.0		ug/L		106	59 - 141
Fluoranthene	16.0	17.9		ug/L		112	55 - 147
Fluorene	16.0	16.2		ug/L		102	55 - 143
Hexachlorobenzene	16.0	14.5		ug/L		90	14 - 130
Hexachlorobutadiene	16.0	12.4		ug/L		78	14 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-299050/2-A
Matrix: Water
Analysis Batch: 299234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	16.0	12.4		ug/L		77	13 - 130
Hexachloroethane	16.0	13.3		ug/L		83	14 - 130
Indeno[1,2,3-cd]pyrene	16.0	16.9		ug/L		105	69 - 146
Isophorone	16.0	16.1		ug/L		100	48 - 133
N-Nitrosodi-n-propylamine	16.0	15.5		ug/L		97	56 - 120
N-Nitrosodiphenylamine	16.0	15.6		ug/L		98	25 - 125
Naphthalene	16.0	15.0		ug/L		94	35 - 130
Nitrobenzene	16.0	15.5		ug/L		97	45 - 123
Pentachlorophenol	32.0	27.8		ug/L		87	39 - 136
Phenanthrene	16.0	17.0		ug/L		106	57 - 147
Phenol	16.0	8.86		ug/L		55	17 - 120
Pyrene	16.0	17.2		ug/L		107	58 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*103*		*46 - 120*
Phenol-d5 (Surr)	*55*		*16 - 120*
p-Terphenyl-d14 (Surr)	*114*		*67 - 150*
2,4,6-Tribromophenol (Surr)	*108*		*52 - 132*
2-Fluorobiphenyl	*102*		*48 - 120*
2-Fluorophenol (Surr)	*77*		*20 - 120*

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299234

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	ND		15.6	13.4		ug/L		86	30 - 140
bis (2-chloroisopropyl) ether	ND		15.6	14.6		ug/L		94	28 - 136
2,4,5-Trichlorophenol	ND		15.6	15.7		ug/L		101	65 - 126
2,4,6-Trichlorophenol	ND		15.6	15.0		ug/L		97	64 - 120
2,4-Dichlorophenol	ND		15.6	13.8		ug/L		89	64 - 120
2,4-Dimethylphenol	ND		15.6	13.3		ug/L		85	57 - 120
2,4-Dinitrophenol	ND		31.2	36.7		ug/L		118	42 - 153
2,4-Dinitrotoluene	ND		15.6	15.6		ug/L		100	62 - 148
2,6-Dinitrotoluene	ND		15.6	16.5		ug/L		106	65 - 154
2-Chloronaphthalene	ND		15.6	13.0		ug/L		84	41 - 124
2-Chlorophenol	ND		15.6	13.6		ug/L		87	48 - 120
2-Methylphenol	ND		15.6	13.9		ug/L		89	39 - 120
2-Methylnaphthalene	20		15.6	33.6		ug/L		85	34 - 122
2-Nitroaniline	ND		15.6	15.4		ug/L		99	67 - 136
2-Nitrophenol	ND		15.6	12.6		ug/L		81	59 - 120
3,3'-Dichlorobenzidine	ND	F1	31.2	ND	F1	ug/L		0	33 - 140
3-Nitroaniline	ND	F1	15.6	ND	F1	ug/L		0	69 - 129
4,6-Dinitro-2-methylphenol	ND		31.2	29.1		ug/L		93	64 - 159
4-Bromophenyl phenyl ether	ND		15.6	14.4		ug/L		92	71 - 126
4-Chloro-3-methylphenol	ND		15.6	14.6		ug/L		94	64 - 120
4-Chloroaniline	ND	F1	15.6	ND	F1	ug/L		0	60 - 124
4-Chlorophenyl phenyl ether	ND		15.6	14.1		ug/L		91	48 - 145

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299234

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methylphenol	ND		15.6	13.5		ug/L		87	36 - 120
4-Nitroaniline	ND	F2 F1	15.6	4.23	J F1	ug/L		27	64 - 135
4-Nitrophenol	ND		31.2	26.7		ug/L		86	16 - 120
Acenaphthene	7.6		15.6	22.6		ug/L		96	60 - 120
Acenaphthylene	ND		15.6	15.3		ug/L		98	63 - 120
Acetophenone	ND		15.6	14.8		ug/L		95	45 - 120
Anthracene	1.6	J	15.6	16.9		ug/L		99	58 - 148
Atrazine	ND		31.2	30.3		ug/L		97	56 - 179
Benzaldehyde	ND	F1 *	31.2	90.4	E F1	ug/L		290	30 - 140
Benzo[a]anthracene	ND	F2	15.6	14.8		ug/L		95	55 - 151
Benzo[a]pyrene	ND	F2	15.6	14.5		ug/L		93	60 - 145
Benzo[b]fluoranthene	ND	F2	15.6	15.7		ug/L		101	54 - 140
Benzo[g,h,i]perylene	ND	F2	15.6	14.0		ug/L		90	66 - 152
Benzo[k]fluoranthene	ND	F2	15.6	13.7		ug/L		88	51 - 153
Bis(2-chloroethoxy)methane	ND		15.6	14.4		ug/L		92	50 - 128
Bis(2-chloroethyl)ether	ND		15.6	14.0		ug/L		90	51 - 120
Bis(2-ethylhexyl) phthalate	ND	F2	15.6	15.2		ug/L		98	53 - 158
Butyl benzyl phthalate	ND		15.6	17.5		ug/L		112	58 - 163
Caprolactam	ND	F1	31.2	ND	F1	ug/L		0	30 - 140
Carbazole	8.3		15.6	26.1		ug/L		114	59 - 148
Chrysene	ND	F2	15.6	14.6		ug/L		93	69 - 140
Dibenz(a,h)anthracene	ND	F2	15.6	14.0		ug/L		90	57 - 158
Di-n-butyl phthalate	ND		15.6	16.5		ug/L		106	58 - 149
Di-n-octyl phthalate	ND	F2	15.6	16.7		ug/L		107	55 - 167
Dibenzofuran	2.7	J	15.6	17.8		ug/L		97	49 - 137
Diethyl phthalate	ND		15.6	16.6		ug/L		107	59 - 146
Dimethyl phthalate	ND		15.6	16.6		ug/L		106	59 - 141
Fluoranthene	1.1	J	15.6	16.9		ug/L		101	55 - 147
Fluorene	4.0	J	15.6	19.4		ug/L		99	55 - 143
Hexachlorobenzene	ND		15.6	13.5		ug/L		87	38 - 131
Hexachlorobutadiene	ND		15.6	9.86		ug/L		63	14 - 130
Hexachlorocyclopentadiene	ND		15.6	10.2		ug/L		66	13 - 130
Hexachloroethane	ND		15.6	11.7		ug/L		75	14 - 130
Indeno[1,2,3-cd]pyrene	ND	F2 F1	15.6	14.3		ug/L		92	69 - 146
Isophorone	ND		15.6	13.4		ug/L		86	48 - 133
N-Nitrosodi-n-propylamine	ND		15.6	15.2		ug/L		97	56 - 120
N-Nitrosodiphenylamine	ND		15.6	15.7		ug/L		101	25 - 125
Naphthalene	160	E	15.6	166	E 4	ug/L		18	35 - 130
Nitrobenzene	ND		15.6	13.8		ug/L		89	45 - 123
Pentachlorophenol	ND		31.2	38.0		ug/L		122	39 - 136
Phenanthrene	8.9		15.6	24.2		ug/L		98	57 - 147
Phenol	ND		15.6	9.18		ug/L		59	17 - 120
Pyrene	0.88	J	15.6	17.6		ug/L		107	58 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*86*		*46 - 120*
Phenol-d5 (Surr)	*54*		*16 - 120*
p-Terphenyl-d14 (Surr)	*101*		*67 - 150*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299234

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299050

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*113*		*52 - 132*
2-Fluorobiphenyl	*92*		*48 - 120*
2-Fluorophenol (Surr)	*72*		*20 - 120*

Lab Sample ID: 480-99240-5 MSD
Matrix: Water
Analysis Batch: 299234

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl	ND		14.8	13.1		ug/L		89	30 - 140	2	20
bis (2-chloroisopropyl) ether	ND		14.8	14.3		ug/L		96	28 - 136	2	24
2,4,5-Trichlorophenol	ND		14.8	14.2		ug/L		96	65 - 126	11	18
2,4,6-Trichlorophenol	ND		14.8	14.6		ug/L		99	64 - 120	3	19
2,4-Dichlorophenol	ND		14.8	13.4		ug/L		90	64 - 120	3	19
2,4-Dimethylphenol	ND		14.8	13.1		ug/L		89	57 - 120	1	42
2,4-Dinitrophenol	ND		29.7	34.5		ug/L		116	42 - 153	6	22
2,4-Dinitrotoluene	ND		14.8	14.5		ug/L		98	62 - 148	8	20
2,6-Dinitrotoluene	ND		14.8	15.3		ug/L		103	65 - 154	7	15
2-Chloronaphthalene	ND		14.8	12.8		ug/L		86	41 - 124	2	21
2-Chlorophenol	ND		14.8	13.1		ug/L		88	48 - 120	4	25
2-Methylphenol	ND		14.8	13.2		ug/L		89	39 - 120	5	27
2-Methylnaphthalene	20		14.8	33.9		ug/L		92	34 - 122	1	21
2-Nitroaniline	ND		14.8	15.5		ug/L		104	67 - 136	1	15
2-Nitrophenol	ND		14.8	12.7		ug/L		86	59 - 120	1	18
3,3'-Dichlorobenzidine	ND	F1	29.7	ND	F1	ug/L		0	33 - 140	NC	25
3-Nitroaniline	ND	F1	14.8	1.42	J F1	ug/L		10	69 - 129	NC	19
4,6-Dinitro-2-methylphenol	ND		29.7	28.1		ug/L		95	64 - 159	4	15
4-Bromophenyl phenyl ether	ND		14.8	13.6		ug/L		92	71 - 126	5	15
4-Chloro-3-methylphenol	ND		14.8	14.0		ug/L		94	64 - 120	5	27
4-Chloroaniline	ND	F1	14.8	ND	F1	ug/L		0	60 - 124	NC	22
4-Chlorophenyl phenyl ether	ND		14.8	13.5		ug/L		91	48 - 145	5	16
4-Methylphenol	ND		14.8	13.1		ug/L		88	36 - 120	3	24
4-Nitroaniline	ND	F2 F1	14.8	5.88	J F1 F2	ug/L		40	64 - 135	33	24
4-Nitrophenol	ND		29.7	18.7		ug/L		63	16 - 120	35	48
Acenaphthene	7.6		14.8	21.8		ug/L		96	60 - 120	4	24
Acenaphthylene	ND		14.8	14.6		ug/L		99	63 - 120	5	18
Acetophenone	ND		14.8	14.4		ug/L		97	45 - 120	3	20
Anthracene	1.6	J	14.8	16.3		ug/L		99	58 - 148	4	15
Atrazine	ND		29.7	28.0		ug/L		94	56 - 179	8	20
Benzaldehyde	ND	F1 *	29.7	88.0	E F1	ug/L		297	30 - 140	3	20
Benzo[a]anthracene	ND	F2	14.8	12.1	F2	ug/L		82	55 - 151	20	15
Benzo[a]pyrene	ND	F2	14.8	10.7	F2	ug/L		72	60 - 145	30	15
Benzo[b]fluoranthene	ND	F2	14.8	11.0	F2	ug/L		74	54 - 140	35	15
Benzo[g,h,i]perylene	ND	F2	14.8	9.83	F2	ug/L		66	66 - 152	35	15
Benzo[k]fluoranthene	ND	F2	14.8	10.4	F2	ug/L		70	51 - 153	27	22
Bis(2-chloroethoxy)methane	ND		14.8	14.5		ug/L		98	50 - 128	1	17
Bis(2-chloroethyl)ether	ND		14.8	13.9		ug/L		94	51 - 120	0	21
Bis(2-ethylhexyl) phthalate	ND	F2	14.8	11.7	F2	ug/L		79	53 - 158	26	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-99240-5 MSD
Matrix: Water
Analysis Batch: 299234

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	ND		14.8	15.4		ug/L		104	58 - 163	13	16
Caprolactam	ND	F1	29.7	ND	F1	ug/L		0	30 - 140	NC	20
Carbazole	8.3		14.8	25.1		ug/L		114	59 - 148	4	20
Chrysene	ND	F2	14.8	11.7	F2	ug/L		79	69 - 140	21	15
Dibenz(a,h)anthracene	ND	F2	14.8	9.93	F2	ug/L		67	57 - 158	34	15
Di-n-butyl phthalate	ND		14.8	15.5		ug/L		104	58 - 149	7	15
Di-n-octyl phthalate	ND	F2	14.8	12.5	F2	ug/L		84	55 - 167	29	16
Dibenzofuran	2.7	J	14.8	16.8		ug/L		95	49 - 137	5	15
Diethyl phthalate	ND		14.8	15.5		ug/L		104	59 - 146	7	15
Dimethyl phthalate	ND		14.8	14.7		ug/L		99	59 - 141	12	15
Fluoranthene	1.1	J	14.8	15.9		ug/L		100	55 - 147	6	15
Fluorene	4.0	J	14.8	18.8		ug/L		99	55 - 143	3	15
Hexachlorobenzene	ND		14.8	12.4		ug/L		83	38 - 131	9	15
Hexachlorobutadiene	ND		14.8	10.4		ug/L		70	14 - 130	5	44
Hexachlorocyclopentadiene	ND		14.8	10.1		ug/L		68	13 - 130	1	49
Hexachloroethane	ND		14.8	11.3		ug/L		76	14 - 130	4	46
Indeno[1,2,3-cd]pyrene	ND	F2 F1	14.8	9.97	F1 F2	ug/L		67	69 - 146	36	15
Isophorone	ND		14.8	13.2		ug/L		89	48 - 133	1	17
N-Nitrosodi-n-propylamine	ND		14.8	14.8		ug/L		100	56 - 120	3	31
N-Nitrosodiphenylamine	ND		14.8	15.6		ug/L		105	25 - 125	1	15
Naphthalene	160	E	14.8	168	E 4	ug/L		30	35 - 130	1	29
Nitrobenzene	ND		14.8	13.5		ug/L		91	45 - 123	3	24
Pentachlorophenol	ND		29.7	37.6		ug/L		127	39 - 136	1	37
Phenanthrene	8.9		14.8	24.1		ug/L		102	57 - 147	1	15
Phenol	ND		14.8	8.54		ug/L		58	17 - 120	7	34
Pyrene	0.88	J	14.8	16.1		ug/L		103	58 - 136	9	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*87*		*46 - 120*
Phenol-d5 (Surr)	*54*		*16 - 120*
p-Terphenyl-d14 (Surr)	*84*		*67 - 150*
2,4,6-Tribromophenol (Surr)	*120*		*52 - 132*
2-Fluorobiphenyl	*91*		*48 - 120*
2-Fluorophenol (Surr)	*72*		*20 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-299013/1-A
Matrix: Water
Analysis Batch: 299362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299013

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		04/29/16 11:25	04/29/16 22:47	1
Antimony	ND		0.020		mg/L		04/29/16 11:25	04/29/16 22:47	1
Arsenic	ND		0.015		mg/L		04/29/16 11:25	04/29/16 22:47	1
Barium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 22:47	1
Beryllium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 22:47	1
Cadmium	ND		0.0020		mg/L		04/29/16 11:25	04/29/16 22:47	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-299013/1-A
Matrix: Water
Analysis Batch: 299362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 299013

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50		mg/L		04/29/16 11:25	04/29/16 22:47	1
Chromium	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 22:47	1
Cobalt	ND		0.0040		mg/L		04/29/16 11:25	04/29/16 22:47	1
Copper	ND		0.010		mg/L		04/29/16 11:25	04/29/16 22:47	1
Iron	ND		0.050		mg/L		04/29/16 11:25	04/29/16 22:47	1
Lead	ND		0.010		mg/L		04/29/16 11:25	04/29/16 22:47	1
Magnesium	ND		0.20		mg/L		04/29/16 11:25	04/29/16 22:47	1
Manganese	ND		0.0030		mg/L		04/29/16 11:25	04/29/16 22:47	1
Nickel	ND		0.010		mg/L		04/29/16 11:25	04/29/16 22:47	1
Potassium	ND		0.50		mg/L		04/29/16 11:25	04/29/16 22:47	1
Selenium	ND		0.025		mg/L		04/29/16 11:25	04/29/16 22:47	1
Silver	ND		0.0060		mg/L		04/29/16 11:25	04/29/16 22:47	1
Sodium	ND		1.0		mg/L		04/29/16 11:25	04/29/16 22:47	1
Thallium	ND		0.020		mg/L		04/29/16 11:25	04/29/16 22:47	1
Vanadium	ND		0.0050		mg/L		04/29/16 11:25	04/29/16 22:47	1
Zinc	ND		0.010		mg/L		04/29/16 11:25	04/29/16 22:47	1

Lab Sample ID: LCS 480-299013/2-A
Matrix: Water
Analysis Batch: 299362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299013

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.85		mg/L		98	80 - 120
Antimony	0.400	0.394		mg/L		99	80 - 120
Arsenic	0.400	0.422		mg/L		105	80 - 120
Barium	0.200	0.203		mg/L		101	80 - 120
Beryllium	0.400	0.384		mg/L		96	80 - 120
Cadmium	0.400	0.384		mg/L		96	80 - 120
Calcium	20.0	19.11		mg/L		96	80 - 120
Chromium	0.400	0.399		mg/L		100	80 - 120
Cobalt	0.400	0.387		mg/L		97	80 - 120
Copper	0.400	0.383		mg/L		96	80 - 120
Iron	20.0	19.68		mg/L		98	80 - 120
Lead	0.400	0.403		mg/L		101	80 - 120
Magnesium	20.0	20.42		mg/L		102	80 - 120
Manganese	0.400	0.387		mg/L		97	80 - 120
Nickel	0.400	0.381		mg/L		95	80 - 120
Potassium	10.0	9.83		mg/L		98	80 - 120
Selenium	0.400	0.393		mg/L		98	80 - 120
Silver	0.0500	0.0417		mg/L		83	80 - 120
Sodium	10.0	9.91		mg/L		99	80 - 120
Thallium	0.400	0.401		mg/L		100	80 - 120
Vanadium	0.400	0.392		mg/L		98	80 - 120
Zinc	0.400	0.428		mg/L		107	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299362

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299013

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	ND		10.0	10.21		mg/L		100	75 - 125
Antimony	ND		0.400	0.412		mg/L		103	75 - 125
Arsenic	ND		0.400	0.454		mg/L		110	75 - 125
Barium	0.22		0.200	0.429		mg/L		103	75 - 125
Beryllium	ND		0.400	0.392		mg/L		98	75 - 125
Cadmium	ND		0.400	0.397		mg/L		99	75 - 125
Calcium	189		20.0	204.0	4	mg/L		75	75 - 125
Chromium	ND		0.400	0.398		mg/L		99	75 - 125
Cobalt	ND		0.400	0.402		mg/L		101	75 - 125
Copper	ND		0.400	0.403		mg/L		101	75 - 125
Iron	25.0		20.0	46.31		mg/L		107	75 - 125
Lead	ND		0.400	0.413		mg/L		103	75 - 125
Magnesium	21.7		20.0	41.72		mg/L		100	75 - 125
Manganese	2.3		0.400	2.57	4	mg/L		78	75 - 125
Nickel	ND		0.400	0.393		mg/L		98	75 - 125
Potassium	13.1		10.0	22.88		mg/L		98	75 - 125
Selenium	ND		0.400	0.406		mg/L		102	75 - 125
Silver	ND		0.0500	0.0443		mg/L		89	75 - 125
Sodium	192		10.0	201.3	4	mg/L		92	75 - 125
Thallium	ND		0.400	0.395		mg/L		99	75 - 125
Vanadium	ND		0.400	0.403		mg/L		101	75 - 125
Zinc	ND		0.400	0.425		mg/L		106	75 - 125

Lab Sample ID: 480-99240-5 MSD
Matrix: Water
Analysis Batch: 299362

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299013

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	ND		10.0	10.42		mg/L		102	75 - 125	2	20
Antimony	ND		0.400	0.418		mg/L		105	75 - 125	1	20
Arsenic	ND		0.400	0.459		mg/L		111	75 - 125	1	20
Barium	0.22		0.200	0.427		mg/L		102	75 - 125	1	20
Beryllium	ND		0.400	0.398		mg/L		99	75 - 125	1	20
Cadmium	ND		0.400	0.401		mg/L		100	75 - 125	1	20
Calcium	189		20.0	203.4	4	mg/L		72	75 - 125	0	20
Chromium	ND		0.400	0.403		mg/L		101	75 - 125	1	20
Cobalt	ND		0.400	0.407		mg/L		102	75 - 125	1	20
Copper	ND		0.400	0.406		mg/L		102	75 - 125	1	20
Iron	25.0		20.0	46.26		mg/L		107	75 - 125	0	20
Lead	ND		0.400	0.420		mg/L		105	75 - 125	2	20
Magnesium	21.7		20.0	41.40		mg/L		99	75 - 125	1	20
Manganese	2.3		0.400	2.51	4	mg/L		65	75 - 125	2	20
Nickel	ND		0.400	0.398		mg/L		99	75 - 125	1	20
Potassium	13.1		10.0	22.83		mg/L		97	75 - 125	0	20
Selenium	ND		0.400	0.413		mg/L		103	75 - 125	2	20
Silver	ND		0.0500	0.0442		mg/L		88	75 - 125	0	20
Sodium	192		10.0	204.3	4	mg/L		122	75 - 125	1	20
Thallium	ND		0.400	0.402		mg/L		101	75 - 125	2	20

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-99240-5 MSD — **Client Sample ID: TKMW-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299362 — **Prep Batch: 299013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	ND		0.400	0.402		mg/L		101	75 - 125	0	20
Zinc	ND		0.400	0.426		mg/L		106	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-299049/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299430 — **Prep Batch: 299049**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		05/02/16 09:10	05/02/16 12:51	1

Lab Sample ID: LCS 480-299049/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299430 — **Prep Batch: 299049**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00637		mg/L		95	80 - 120

Lab Sample ID: LCSD 480-299049/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299430 — **Prep Batch: 299049**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00667	0.00638		mg/L		96	80 - 120	0	20

Lab Sample ID: 480-99240-5 MS — **Client Sample ID: TKMW-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299430 — **Prep Batch: 299049**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00683		mg/L		102	80 - 120

Lab Sample ID: 480-99240-5 MSD — **Client Sample ID: TKMW-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299430 — **Prep Batch: 299049**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00677		mg/L		101	80 - 120	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 480-299514/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 299620 — **Prep Batch: 299514**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		05/02/16 21:25	05/03/16 09:39	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 480-299514/2-A
Matrix: Water
Analysis Batch: 299620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 299514

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.254		mg/L		102	90 - 110

Lab Sample ID: 480-99240-5 MS
Matrix: Water
Analysis Batch: 299620

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299514

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.016		0.100	0.115		mg/L		99	90 - 110

Lab Sample ID: 480-99240-5 MSD
Matrix: Water
Analysis Batch: 299620

Client Sample ID: TKMW-6
Prep Type: Total/NA
Prep Batch: 299514

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.016		0.100	0.117		mg/L		101	90 - 110	2	15

Lab Sample ID: 480-99240-6 MS
Matrix: Water
Analysis Batch: 299620

Client Sample ID: TKMW-5
Prep Type: Total/NA
Prep Batch: 299514

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.012		0.100	0.113		mg/L		102	90 - 110

GC/MS VOA

Analysis Batch: 299754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	8260C	
480-99240-2	TKMW-9	Total/NA	Water	8260C	
480-99240-3	TKMW-8	Total/NA	Water	8260C	
480-99240-4	TKMW-7	Total/NA	Water	8260C	
480-99240-5	TKMW-6	Total/NA	Water	8260C	
480-99240-5 MS	TKMW-6	Total/NA	Water	8260C	
480-99240-5 MSD	TKMW-6	Total/NA	Water	8260C	
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	8260C	
LCS 480-299754/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-299754/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 299852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-6	TKMW-5	Total/NA	Water	8260C	
LCS 480-299852/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-299852/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 299050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	3510C	
480-99240-2	TKMW-9	Total/NA	Water	3510C	
480-99240-3	TKMW-8	Total/NA	Water	3510C	
480-99240-4	TKMW-7	Total/NA	Water	3510C	
480-99240-5 - DL	TKMW-6	Total/NA	Water	3510C	
480-99240-5	TKMW-6	Total/NA	Water	3510C	
480-99240-5 MS	TKMW-6	Total/NA	Water	3510C	
480-99240-5 MSD	TKMW-6	Total/NA	Water	3510C	
480-99240-6	TKMW-5	Total/NA	Water	3510C	
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	3510C	
LCS 480-299050/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-299050/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 299234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	8270D	299050
480-99240-2	TKMW-9	Total/NA	Water	8270D	299050
480-99240-3	TKMW-8	Total/NA	Water	8270D	299050
480-99240-4	TKMW-7	Total/NA	Water	8270D	299050
480-99240-5	TKMW-6	Total/NA	Water	8270D	299050
480-99240-5 MS	TKMW-6	Total/NA	Water	8270D	299050
480-99240-5 MSD	TKMW-6	Total/NA	Water	8270D	299050
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	8270D	299050
LCS 480-299050/2-A	Lab Control Sample	Total/NA	Water	8270D	299050
MB 480-299050/1-A	Method Blank	Total/NA	Water	8270D	299050

Analysis Batch: 299371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-5 - DL	TKMW-6	Total/NA	Water	8270D	299050

GC/MS Semi VOA (Continued)

Analysis Batch: 299371 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-6	TKMW-5	Total/NA	Water	8270D	299050

Metals

Prep Batch: 299013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	3005A	
480-99240-2	TKMW-9	Total/NA	Water	3005A	
480-99240-3	TKMW-8	Total/NA	Water	3005A	
480-99240-4	TKMW-7	Total/NA	Water	3005A	
480-99240-5	TKMW-6	Total/NA	Water	3005A	
480-99240-5 MS	TKMW-6	Total/NA	Water	3005A	
480-99240-5 MSD	TKMW-6	Total/NA	Water	3005A	
480-99240-6	TKMW-5	Total/NA	Water	3005A	
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	3005A	
LCS 480-299013/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-299013/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 299049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	7470A	
480-99240-2	TKMW-9	Total/NA	Water	7470A	
480-99240-3	TKMW-8	Total/NA	Water	7470A	
480-99240-4	TKMW-7	Total/NA	Water	7470A	
480-99240-5	TKMW-6	Total/NA	Water	7470A	
480-99240-5 MS	TKMW-6	Total/NA	Water	7470A	
480-99240-5 MSD	TKMW-6	Total/NA	Water	7470A	
480-99240-6	TKMW-5	Total/NA	Water	7470A	
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	7470A	
LCS 480-299049/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-299049/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 480-299049/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 299362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	6010C	299013
480-99240-2	TKMW-9	Total/NA	Water	6010C	299013
480-99240-3	TKMW-8	Total/NA	Water	6010C	299013
480-99240-4	TKMW-7	Total/NA	Water	6010C	299013
480-99240-5	TKMW-6	Total/NA	Water	6010C	299013
480-99240-5 MS	TKMW-6	Total/NA	Water	6010C	299013
480-99240-5 MSD	TKMW-6	Total/NA	Water	6010C	299013
480-99240-6	TKMW-5	Total/NA	Water	6010C	299013
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	6010C	299013
LCS 480-299013/2-A	Lab Control Sample	Total/NA	Water	6010C	299013
MB 480-299013/1-A	Method Blank	Total/NA	Water	6010C	299013

Analysis Batch: 299430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	7470A	299049

Metals (Continued)

Analysis Batch: 299430 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-2	TKMW-9	Total/NA	Water	7470A	299049
480-99240-3	TKMW-8	Total/NA	Water	7470A	299049
480-99240-4	TKMW-7	Total/NA	Water	7470A	299049
480-99240-5	TKMW-6	Total/NA	Water	7470A	299049
480-99240-5 MS	TKMW-6	Total/NA	Water	7470A	299049
480-99240-5 MSD	TKMW-6	Total/NA	Water	7470A	299049
480-99240-6	TKMW-5	Total/NA	Water	7470A	299049
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	7470A	299049
LCS 480-299049/2-A	Lab Control Sample	Total/NA	Water	7470A	299049
LCSD 480-299049/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	299049
MB 480-299049/1-A	Method Blank	Total/NA	Water	7470A	299049

General Chemistry

Prep Batch: 299514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	9012B	
480-99240-2	TKMW-9	Total/NA	Water	9012B	
480-99240-3	TKMW-8	Total/NA	Water	9012B	
480-99240-4	TKMW-7	Total/NA	Water	9012B	
480-99240-5	TKMW-6	Total/NA	Water	9012B	
480-99240-5 MS	TKMW-6	Total/NA	Water	9012B	
480-99240-5 MSD	TKMW-6	Total/NA	Water	9012B	
480-99240-6	TKMW-5	Total/NA	Water	9012B	
480-99240-6 MS	TKMW-5	Total/NA	Water	9012B	
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	9012B	
LCS 480-299514/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 480-299514/1-A	Method Blank	Total/NA	Water	9012B	

Analysis Batch: 299620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99240-1	BLIND DUP	Total/NA	Water	9012B	299514
480-99240-2	TKMW-9	Total/NA	Water	9012B	299514
480-99240-3	TKMW-8	Total/NA	Water	9012B	299514
480-99240-4	TKMW-7	Total/NA	Water	9012B	299514
480-99240-5	TKMW-6	Total/NA	Water	9012B	299514
480-99240-5 MS	TKMW-6	Total/NA	Water	9012B	299514
480-99240-5 MSD	TKMW-6	Total/NA	Water	9012B	299514
480-99240-6	TKMW-5	Total/NA	Water	9012B	299514
480-99240-6 MS	TKMW-5	Total/NA	Water	9012B	299514
480-99240-7	EQUIPMENT BLANK	Total/NA	Water	9012B	299514
LCS 480-299514/2-A	Lab Control Sample	Total/NA	Water	9012B	299514
MB 480-299514/1-A	Method Blank	Total/NA	Water	9012B	299514

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: BLIND DUP

Lab Sample ID: 480-99240-1

Date Collected: 04/27/16 08:00

Matrix: Water

Date Received: 04/28/16 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299754	05/04/16 03:59	CDC	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299234	05/01/16 15:27	DMR	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/29/16 23:29	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:02	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:43	MDL	TAL BUF

Client Sample ID: TKMW-9

Lab Sample ID: 480-99240-2

Date Collected: 04/27/16 09:35

Matrix: Water

Date Received: 04/28/16 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299754	05/04/16 04:26	CDC	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299234	05/01/16 15:56	DMR	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/29/16 23:32	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:04	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:45	MDL	TAL BUF

Client Sample ID: TKMW-8

Lab Sample ID: 480-99240-3

Date Collected: 04/27/16 10:38

Matrix: Water

Date Received: 04/28/16 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299754	05/04/16 04:53	CDC	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299234	05/01/16 16:25	DMR	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/29/16 23:36	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:06	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:46	MDL	TAL BUF

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: TKMW-7

Date Collected: 04/27/16 11:28
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299754	05/04/16 05:21	CDC	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299234	05/01/16 16:53	DMR	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/29/16 23:39	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:08	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:48	MDL	TAL BUF

Client Sample ID: TKMW-6

Date Collected: 04/27/16 12:08
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	299754	05/04/16 05:48	CDC	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299234	05/01/16 14:58	DMR	TAL BUF
Total/NA	Prep	3510C	DL		299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D	DL	10	299371	05/02/16 20:54	PJQ	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/29/16 23:52	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:13	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:49	MDL	TAL BUF

Client Sample ID: TKMW-5

Date Collected: 04/27/16 12:55
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299852	05/04/16 14:21	SMY	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299371	05/02/16 21:23	PJQ	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/30/16 00:09	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:19	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:56	MDL	TAL BUF

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Client Sample ID: EQUIPMENT BLANK

Date Collected: 04/27/16 13:45
Date Received: 04/28/16 15:00

Lab Sample ID: 480-99240-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299754	05/04/16 06:42	CDC	TAL BUF
Total/NA	Prep	3510C			299050	04/29/16 14:15	JIL	TAL BUF
Total/NA	Analysis	8270D		1	299234	05/01/16 17:51	DMR	TAL BUF
Total/NA	Prep	3005A			299013	04/29/16 11:25	BAE	TAL BUF
Total/NA	Analysis	6010C		1	299362	04/30/16 00:12	AMH	TAL BUF
Total/NA	Prep	7470A			299049	05/02/16 09:10	TAS	TAL BUF
Total/NA	Analysis	7470A		1	299430	05/02/16 13:21	TAS	TAL BUF
Total/NA	Prep	9012B			299514	05/02/16 21:25	JJK	TAL BUF
Total/NA	Analysis	9012B		1	299620	05/03/16 09:59	MDL	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

Method Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-99240-1	BLIND DUP	Water	04/27/16 08:00	04/28/16 15:00
480-99240-2	TKMW-9	Water	04/27/16 09:35	04/28/16 15:00
480-99240-3	TKMW-8	Water	04/27/16 10:38	04/28/16 15:00
480-99240-4	TKMW-7	Water	04/27/16 11:28	04/28/16 15:00
480-99240-5	TKMW-6	Water	04/27/16 12:08	04/28/16 15:00
480-99240-6	TKMW-5	Water	04/27/16 12:55	04/28/16 15:00
480-99240-7	EQUIPMENT BLANK	Water	04/27/16 13:45	04/28/16 15:00

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Turnkey	Project Manager: Chris Baron	Date: 4/27/16	Chain of Custody Number: 290025
Address: 2558 Hamburg Turnpike	Telephone Number (Area Code)/Fax Number: 716 856-0599	Lab Number:	Page 1 of 1
City: Buffalo / State: NY / Zip Code: 14218	Site Contact: Paul W Werthman	Lab Contact: B Fischer	
Project Name and Location (State): 11 Evan Street Site	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 0333-015-003			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TCL VOCs	TCL SVOCs	Mercury	TAL Metals	Cyanide	Special Instructions/ Conditions of Receipt
Blind Dup	4/27/16	8:00		X			X		X		X		X	X	X	X	X	
TKMW-9		9:35		X			X		X		X		X	X	X	X	X	See note 1
TKMW-8		10:38		X			X		X		X		X	X	X	X	X	
TKMW-7		11:28		X			X		X		X		X	X	X	X	X	
TKMW-6 (MS/MSD)		12:08		X			X		X		X		X	X	X	X	X	
TKMW-5		12:55		X			X		X		X		X	X	X	X	X	
Equipment Blank	~~4/27~~	13:45		X			X		X		X		X	X	X	X	X	

480-99240 Chain of Custody

note 1 → please filter and preserve ~~and~~ hold 1 Liter unpreserved amber for TAL Metals

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard

QC Requirements (Specify)

1. Relinquished By: Paul W Werthman	Date: 4/27/16	Time:	1. Received By: Brad Hill	Date: 4/28/16	Time: 1205
2. Relinquished By: Brad Hill	Date: 4/28/16	Time: 1500	2. Received By: Anna Krow TA	Date: 04/28/16	Time: 1500
3. ~~Relinquished~~ By	Date:	Time:	3. Received By	Date:	Time:

Comments

Temp 2.2 3.6 2.8 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/5/2016

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-99240-1

Login Number: 99240
List Number: 1
Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	TURNKEY
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

APPENDIX D

DATA USABILITY SUMMARY REPORT

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

August 25, 2016

Heidi Higgins
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike Suite 300
Buffalo, NY 14218

RE: **D**ata **U**sability **S**ummary **R**eport for the 11 Evan St, Batavia, NY MGP Site
TAL SDG Nos. 480-98326-1 and 480-99240-1

Dear Mr. Boron:

Review has been completed for the data generated by TestAmerica Laboratories (TA) that pertain to samples collected 04/13/16 and 04/27/16 at the 11 Evan Street site. Five aqueous samples, five soil samples and field duplicates of each matrix were processed for TCL volatiles, TCL semivolatiles, TAL metals, and total cyanide. The analytical protocols utilized are those of the USEPA SW846.

The data packages submitted contain full deliverables for validation, and this usability report is generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers, using guidance from the USEPA Region 2 validation SOPs, the USEPA National Functional Guidelines for Data Review, the specific laboratory methodologies, and professional judgment, as affects the usability of the data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations
* Preparation and Calibration/Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Calibration/Low Level Standards
* ICP Serial Dilution
* Instrument IDLs
* Sample Result Verification

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data package.

In summary, most sample results are usable either as reported, with edit, or with qualification. However, the results for four semivolatile target analytes are rejected in one aqueous sample due to an apparent matrix effect.

Data completeness, accuracy, precision, representativeness, and the analytical method comparability are acceptable.

Included with this report are listings of sample identifications covered in this report and laboratory EDDs that reflect qualifications recommended within this report.

The following text discusses quality issues of concern.

Sample Receipt/Chain-of-Custody

Writeovers and scratch outs on the custody form should have been initialed.

Blind Field Duplicates

Blind field duplicate evaluations were performed on TKMW-7(2-5) and TKMW-8. Correlations fall within validation guidelines, with the following exceptions, the results for which have been qualified as estimated in in the indicated parent sample and its associated field duplicate:

- iron in TKMW-8
- calcium and copper in TKMW-7(2-5)
- detected concentrations of semivolatile analytes in the parent sample TKMW-7(2-5) are more than twice those in the field duplicate

TCL Volatile Analyses by EPA 8260C

Matrix spikes were processed on TKMW-6, TKMW-5(9-11'), and TKMW-8(5.5-7.5'), and show recoveries and correlations within validation guidelines, with the following exceptions, results for which are qualified as indicated in the parent sample:

Parent Sample	Analyte	Outlying % Recoveries
TKMW-8(5.5-7.5')	1,1,2,2-tetrachloroethane	59,63
	1,1,2-trichloroethane	71,73
	1,2-dibromo-3-chloropropane	46,49
	2-butanone	51,56
	2-hexanone	50,57
	4-methyl-2-pentanone	54,58
	cis-1,3-dichloropropane	75,75
	1,2-dibromoethane	71,71

TKMW-7(2-5) exhibited a low internal standard (IS) recovery, and the results for the seven quantitatively associated compounds have been qualified as estimated in value in that sample. The blind duplicate of that sample did not exhibit the same outlying response, and can be considered usable without qualification for that location.

The detection of methylene chloride in TKMW-5(9-11) is considered contamination and has been edited to non-detection due to presence of that compound in the associated blank.

The detections of acetone in the aqueous samples are qualified as estimated, with a possible high bias, due to elevated recoveries (176% And 151%) in the associated LCSs.

Calibration standards show acceptable responses.

Some of the aqueous samples foamed when run undiluted. They were therefore processed at dilution with subsequent proportionally elevated reporting limits.

TCL Semivolatiles by EPA 8270C

Surrogate and internal standard responses are within required range. Blanks show no contamination. Holding times were met.

Results for analytes reported with the "E" flag have been derived from the dilution analyses of the samples.

The matrix spikes of TKMW-8(5.5-7.5) were performed at dilution due to sample viscosity, and the accuracy evaluation is therefore not available.

The matrix spikes of TKMW-6 produced no recovery for 3,3-dichlorobenzidine, 3-nitroaniline, 4-chloroaniline, and caprolactum. Therefore, the results for those four compounds have been rejected in that parent sample. The results for naphthalene, 4-nitroaniline, and indeno(1,2,3-cd)perylene have been qualified as estimated in the parent sample due to low recoveries (27% to 67%) and an outlying duplicate correlation of 36%), in those matrix spikes.

Calibration standards showed acceptable responses, with the exception of those for benzaldehyde and pentachlorophenol (22%D and 42%D) in the calibration associated with the soil samples. The results for those two compounds have been qualified as estimated in the soil samples.

TAL Metals by EPA 6010C, 6020, 7470, and 7471

TAL metals matrix spikes of TKMW-6 and TKMW-8(5.5-7.5') show acceptable recoveries and correlations, with the following exceptions, the results for which are qualified as estimated in the indicated parent sample:

Parent Sample	Element	Outlying % Recoveries	Outlying %RPD
TKMW-8 (5.5-7.5')	antimony	54,60	
	barium	159,168	
	manganese	800,129	83
	potassium	228,222	
	mercury	68,66	

The ICP serial dilution evaluations of TKMW-6 and TKMW-8(5.5-7.5') show acceptable correlations.

Instrument performance was compliant. Blanks how no contamination affecting sample reported results.

Wet Chemistry Analyses for Total Cyanide by 9012

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

Cyanide matrix spikes of TKMW-6 and TKMW-8(5.5-7.5') show acceptable accuracy and precision.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Client and Laboratory Sample IDs

Sample Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-98326-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-98326-1	TKMW-5 (9-11')	Solid	04/13/16 12:50	04/14/16 11:55
480-98326-2	TKMW-6 (8-10')	Solid	04/13/16 12:00	04/14/16 11:55
480-98326-3	TKMW-7 (2-5')	Solid	04/13/16 11:20	04/14/16 11:55
480-98326-4	TKMW-8 (5.5-7.5')	Solid	04/13/16 10:30	04/14/16 11:55
480-98326-5	TKMW-9 (5-7)	Solid	04/13/16 10:05	04/14/16 11:55
480-98326-6	BLIND DUP	Solid	04/13/16 08:00	04/14/16 11:55

Sample Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 11 Evan St., Batavia, NY

TestAmerica Job ID: 480-99240-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-99240-1	BLIND DUP	Water	04/27/16 08:00	04/28/16 15:00
480-99240-2	TKMW-9	Water	04/27/16 09:35	04/28/16 15:00
480-99240-3	TKMW-8	Water	04/27/16 10:38	04/28/16 15:00
480-99240-4	TKMW-7	Water	04/27/16 11:28	04/28/16 15:00
480-99240-5	TKMW-6	Water	04/27/16 12:08	04/28/16 15:00
480-99240-6	TKMW-5	Water	04/27/16 12:55	04/28/16 15:00
480-99240-7	EQUIPMENT BLANK	Water	04/27/16 13:45	04/28/16 15:00

APPENDIX E

FISH & WILDLIFE RESOURCE IMPACT ANALYSIS DECISION KEY

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key	If YES Go to:	If NO Go to:
1. Is the site or area of concern a discharge or spill event?	13	2
2. Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3. Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4	9
4. Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5. Has the contamination gone off-site?	6	14
6. Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7. Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8. Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9. Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10. Is the lack of resources due to the contamination?	3.10.1	14
11. Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12. Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13. Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14. No Fish and Wildlife Resources Impact Analysis needed.		

APPENDIX F

LAND USE EVALUATION

APPENDIX F
LAND USE EVALUATION

NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land be factored into the evaluation of remedial alternatives. The regulations identify 16 criteria that must be considered. These criteria and the resultant outcome for the Batavia Former MGP Site at 11 Evans Avenue, Batavia, NY are presented below.

1. *Current use and historical and/or recent development patterns:* The Batavia Former MGP Site was used as a manufacture gas plant from 1855 to the early 1900s. The Site was also used as a flour mill, bakery, county office, and grocery through 1931. The Site is currently used as a commercial office (family medical practice) which is housed in the former shell of the MGP gas holder which was renovated for commercial use. The Site is zoned commercial as is the future anticipate use and/or redevelopment. **Accordingly, commercial site use/redevelopment would be consistent with historic site use.**

2. *Applicable zoning laws and maps:* The Site is located in an area of the City of Batavia zoned commercial. **Continued use in a commercial capacity is therefore consistent with current zoning.**

3. *Brownfield opportunity areas as designated set forth in GML 970-r:* The Brownfield Opportunity Areas Program provides municipalities and community based organizations with assistance, to complete revitalization plans and implementation strategies for areas or communities affected by the presence of brownfield sites, and site assessments for strategic sites. The Batavia Former MGP Site is located within City of Batavia Brownfield Opportunity Area (BOA) Nomination Study Area. As such, the site is in a location where environmental impacts are ubiquitous. **Reuse in a restricted capacity is expected in areas where background conditions preclude achieving unrestricted use soil cleanup objectives.**

4. *Applicable comprehensive community master plans, local waterfront revitalization plans as provided for in EL article 42, or any other applicable land use plan formally adopted by a municipality:* The Site does not fall within the boundaries of a formal community master plan or local waterfront revitalization program. **The current and future use of the site are consistent with current zoning (commercial) and will not require rezoning or change in use.**

APPENDIX F
LAND USE EVALUATION

5. *Proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural, and recreational areas:* The Site is surrounded by commercial and recreational (ice rink) within the downtown area of the City of Batavia. Land use beyond the Site boundaries includes mostly mixed business/commercial/retail. **Maintaining use of the site in a commercial capacity is consistent with surrounding property and zoning.**

6. *Any written and oral comments submitted by members of the public on the proposed use as part of the activities performed pursuant to the citizen participation plan:* **No comments have been received from the public relevant to site use concerns.**

7. *Environmental justice concerns, which include the extent to which the proposed use may reasonably be expected to cause or increase a disproportionate burden on the community in which the site is located, including low-income minority communities, or to result in a disproportionate concentration of commercial or industrial uses in what has historically been a mixed use or residential community:* **Nearby and adjacent property is actively used in a non-residential capacity. Maintaining use of the site in a commercial capacity does not pose environmental justice issues.**

8. *Federal or State land use designations:* The property is located within the BOA Nomination Area within the City of Batavia. Urban land typically contains ubiquitous contaminants. **Reuse in a restricted capacity is typical in areas where background conditions preclude achieving unrestricted use soil cleanup objectives.**

9. *Population growth patterns and projections:* The City of Batavia, encompassing 5.2 square miles, has a population of 15,274 persons, a decrease of 2.4% from the 2010 U.S. census. A declining population indicates a surplus housing market**. Reuse of the Site in a non-residential capacity does not materially affect opportunities for residential growth.**

10. *Accessibility to existing infrastructure:* Evans Street provides access to the Site off of Ellicott Street, a main east-west orientated street in the City of Batavia. Utilities (sewer, water, electric, gas) are present along Evans Avenue service the Site. **Existing infrastructure supports current and future use in a commercial capacity**.

APPENDIX F
LAND USE EVALUATION

11. Proximity of the site to important cultural resources, including federal or State historic or heritage sites or Native American religious sites: **No such resources or sites are known to be present on or near the property.**

12. *Natural resources, including proximity of the site to important federal, State or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species:* According to the NYSDEC Environmental Resource Mapper, State or Federal wetlands do not exist on the subject property. A Federal wetland is located approximately 0.3 miles to the southwest and Tonawanda Creek located approximately 0.1 miles northwest of the Site. **The absence of significant ecological resources on or adjacent to the Site indicates that cleanup to restricted use conditions will not pose an ecological threat.**

13. *Potential vulnerability of groundwater to contamination that might emanate from the site, including proximity to wellhead protection and groundwater recharge areas and other areas identified by the Department and the State's comprehensive groundwater remediation and protection program established set forth in ECL article 15 title 31:* Groundwater at the Site is assigned Class "GA" by 6NYCRR Part 701.15. Nine (9) environmental monitoring wells exist on the Site. Groundwater data obtained during the RI indicate some impact to the eastern portion of the Site. Detected constituents consist of VOCs, naphthalene and naturally occurring metals. Although VOCs are present at low-level part per billion range detections, they are expected to naturally attenuate. The City of Batavia obtains its drinking water from two pumping wells along Cedar Street, over one-mile away from the Site, and the Tonawanda River. Water is processed in the City of Batavia Filtration Plant prior to distribution. **Site cleanup up to restricted use conditions will not pose a drinking water threat.**

14. *Proximity to flood plains:* According to the Federal Emergency Management Agency website, the Site is in a Zone A4, which is an area inundated by 100 year flooding, for which no base flood zone elevation have been established. However the majority of the Site is covered with Hardscape (e.g., building, concrete and asphalt) which would prevent significant soil erosion due to flooding. **As such, cleanup to commercial standards does not pose a threat to surface water.**

15. *Geography and geology:* The Site is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief and gentle slope toward Lake Ontario, except in the immediate vicinity of major drainage ways. According to the Soil Survey of Genesee County, the native soils present in the

APPENDIX F
LAND USE EVALUATION

vicinity of the Site are Palmyra gravelly loam, which are described as nearly level soil occupying the tops of large outwash terraces. The deposits are generally 30 to 70 feet thick consisting mainly of gravel and partly of sand. The Site is primarily covered with hardscape and fill material/remains of the former MGP operations are present in the subsurface, which is not uncommon for urban environments. **Geography and geology are consistent with a commercial use and will not be affected by the planned commercial cleanup and continued commercial use of the property.**

16. *Current institutional controls applicable to the site:* **No institutional controls are present that would affect redevelopment options.**

Based on the above analysis, continued use of the site in a commercial capacity is consistent with past and current development and zoning on and around the site, and does not pose additional environmental or human health risk.