Sterling Environmental Engineering, P.C.

B. MILLENS METAL RECYCLING FACILITY
290 EAST STRAND STREET
CITY OF KINGSTON, NEW YORK

CONSTRUCTION COMPLETION REPORT

Prepared for:

B. Millens Metal Recycling Facility
290 East Strand Street
Kingston, New York 12401

Prepared by:

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June 23, 2016

"Serving our clients and the environment since 1993"

B. MILLENS METAL RECYCLING FACILITY
290 EAST STRAND STREET
CITY OF KINGSTON, NEW YORK

CONSTRUCTION COMPLETION REPORT

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CERTIFICATIONS

I Mark P. Millspaugh, P.E., certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Interim Remedial Measure (IRM) was implemented and construction activities were completed in substantial conformance with the DER-approved IRM Work Plan.

059182	6/23/16	
NYS Professional Engineer #	Date	Signature

LIST OF ACRONYMS

Acronym	Definition
ADT	Aquifer Drilling & Testing, Inc.
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CFR	Code of Federal Regulations
CPP	Citizen Participation Plan
DER-10	Division of Environmental Remediation/Technical Guidance for Site Investigation and Remediation
DUSR	Data Usability Summary Report
ECs	Engineering Controls
EWP	Excavation Work Plan
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
ICs	Institutional Controls
IRM	Interim Remedial Measure
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORC	Oxygen Release Compound
OSHA	Occupational Safety and Health Administration
PPB	Parts Per Billion
PPM	Parts Per Million
RAOs	Remedial Action Objectives
RI	Remedial Investigation
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
USEPA	United States Environmental Protection Agency

1.0 BACKGROUND AND SITE DESCRIPTION

This Construction Completion Report (CCR) documents the Interim Remedial Measure (IRM) conducted in the winter of 2015-2016 at the B. Millens Sons, Inc. (Millens) site (hereinafter, the "site") located at 290 East Strand Street in the City of Kingston, Ulster County, New York (see Figure 1).

The site is identified as Tax Map parcel #'s: 56.36-1-15, 56.36-1-16, and 56.36-1-17 and New York State Department of Environmental Conservation (NYSDEC) site number 356030. The site is situated on an approximate 1.7-acre area bounded by East Strand Street to the north, railroad tracks of The Trolley Museum of New York to the south, undeveloped commercial land to the west, and North Street to the east (see Figure 2). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

The IRM was implemented in substantial conformance to the NYSDEC-approved IRM Work Plan dated November 18, 2015. The IRM Work Plan was prepared in accordance with DER-10 "Technical Guidance for Site Investigation and Remediation" (DER-10) as required by the Order of Consent and Administrative Settlement (Index No. CO 3-20141112-160), dated December 19, 2014, between Millens and the NYSDEC. The IRM outlined in the IRM Work Plan was prepared using site investigation data summarized in the Remedial Investigation Report prepared by EA Engineering, P.C. (EA) dated August 2014. The NYSDEC Commercial Use Soil Cleanup Objectives (SCOs) specified in 6 NYCRR Part 375-6.8(b) were used as a basis for remediating the site.

2.0 SUMMARY OF THE IRM

2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation (RI), the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection:

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection:

- Restore groundwater aquifer, to the extent practicable, to pre-disposal/pre-release conditions.

2.1.2 Soil RAOs

RAOs for Public Health Protection:

- Prevent ingestion/direct contact with impacted soil.

RAOs for Environmental Protection:

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

2.2 Description of Selected IRM

The following are the components of the IRM outlined in the IRM Work Plan:

1. Construction of a minimum 12 inch thick soil cover or an asphalt cover to prevent human exposure and future releases to the environment in areas where surficial soils exceed the Commercial Use Soil Cleanup Objectives (6 NYCRR 375-6.8(b)).

2. In-situ treatment of groundwater by direct injection of Oxygen Release Compound Advanced® (ORC). Impacted groundwater is present in the southeast corner of the property as shown on Figures 3-12 and 3-13 of the August 2014 RI Report prepared by EA Engineering, P.C.

3. Excavation of soils immediately offsite, impacted by prior remedial action at the Millens site and exceeding Residential SCOs, for placement beneath the protective site cover.

A list of SCOs for this project is provided in Table 1.

3.0 OPERABLE UNITS

No individually designated operable units were part of the site IRM.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the site were conducted in substantial conformance with the NYSDEC-approved IRM Work Plan dated November 18, 2015. All deviations from the IRM Work Plan are noted herein.

4.1 Governing Documents

Remedial activities completed at the site were conducted in substantial conformance with the NYSDEC-approved IRM Work Plan and supporting documents described in this section. The IRM Work Plan was prepared in accordance with DER-10 as required by the Order of Consent (Index No. CO 3-20141112-160), dated December 19, 2014, between Millens and the NYSDEC. Revised IRM construction drawings constitute an addendum to the IRM Work Plan and were approved by the NYSDEC by email correspondence dated January 7, 2016 (hereinafter, "IRM Construction Drawings").

4.1.1 Site Specific Health & Safety Plan (HASP)

Remedial work performed under the NYSDEC-approved IRM Work Plan was the subject of a site-specific Health and Safety Plan (HASP) prepared by Sterling Environmental Engineering, P.C. (STERLING) to address the safety requirements established by the Federal Occupational Safety and Health Administration (OSHA). The HASP identifies specific measures to ensure hazardous substances or conditions do not adversely impact the health and safety of construction personnel and the public for site operations. The HASP also identifies potential hazards and appropriate precautions as defined by OSHA 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response (HAZWOPER). STERLING's HASP applies to its personnel onsite during IRM-related activities. Other contractors onsite during IRM activities were responsible for the safety of their own employees.

4.1.2 Stormwater Pollution Prevention

The erosion and sediment controls for remedial construction were performed in conformance with the requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control. Sediment and erosion control measures are outlined in the *Excavation, Demolition and Erosion Control Plan* provided as Sheet 1 of the IRM Construction Drawings. Stormwater was not observed leaving the site during the implementation of the IRM.

4.1.3 Community Air Monitoring Plan (CAMP)

The Community Air Monitoring Plan (CAMP) provided real-time monitoring of particulates (i.e., dust) at the upwind and downwind perimeter of the designated work area during ground-intrusive activities and moving and placement of impacted soil. The CAMP was developed from the New York State Department of Health (NYSDOH) Generic CAMP provided in the Division of Remediation DER-10. The CAMP provided a measure of protection for the downwind community (potential receptors including residences, businesses and workers not directly involved with the subject work activities) from potential airborne site-related dust as a direct result of IRM-related work activities.

4.1.4 Soil/Materials Management Plan

Excavated offsite soils were placed in the soil placement area delineated in the *Excavation, Demolition and Erosion Control Plan* provided as Sheet 1 of the IRM Construction Drawings. Imported soil was placed in accordance with the *Final Grading Plan* provided as Sheet 2 and Sheet 3 of the IRM Construction Drawings. STERLING conducted particulate monitoring pursuant to a NYSDEC-approved CAMP, and visual dust observations were minimal. Public roadways abutting the site were swept by the site contractor as necessary.

4.1.5 Citizen Participation Plan (CPP)

Information concerning public involvement during the investigation and cleanup of the site is provided in the Citizen Participation Plan (CPP) dated March 2015. Prior to NYSDEC approval of the IRM Work Plan, the NYSDEC issued a Fact Sheet announcing the availability of the IRM Work Plan and a thirty (30) day comment period spanning from September 30, 2015 through October 30, 2015. The site will progress through the Decision Document process and complete additional work required by the final remedy. A NYSDEC approved Final Engineering Report (FER) and Site Management Plan (SMP) will be prepared for the site prior to receiving the Certificate of Completion. A Fact Sheet will be published upon issuance of the Certificate of Completion.

4.2 Remedial Program Elements

4.2.1 Contractors and Consultants

The following contractors and consultants performed the remedial work:

- Sterling Environmental Engineering, P.C. (STERLING) – Engineer of Record, performed environmental sampling, community air monitoring, design of IRM, construction oversight and certification.

- Ulster Excavating & Trucking, Inc. (Ulster Excavating) – Performed excavation and consolidation of soils, and installed protective cover system.

- Aquifer Drilling & Testing, Inc. (ADT) – Performed injection of ORC slurry and decommissioned monitoring wells MW-1, MW-2, MW-4R, and MW-7R in substantial conformance with the IRM Work Plan.

- Alpha Analytical Laboratories, Inc. – Performed analyses of soil and groundwater samples.

- Alpha Geoscience – Performed third-party validation review of laboratory results and prepared Data Usability Summary Reports (DUSRs).

Each contractor and consultant working at the site was responsible to comply with the HASP with regards to their employees.

4.2.2 Site Preparation

Documentation of agency approvals and non-agency approvals and agreements relating to the remediation project are provided in Appendix B.

A pre-construction meeting was held with NYSDEC, STERLING personnel, and remedial contractors on January 11, 2016.

The following tasks were performed on January 11, 2016, in preparation for, and as the initial step in, the remedial program.

- Mobilization of equipment and materials;
- Implementation of erosion and sedimentation controls;
- Mark-out of underground utilities;
- Mark-out of offsite excavation area; and
- Mark-out of ORC injection points.

Central Hudson Gas & Electric Corp. (CHG&E) personnel were onsite during site preparation activities to verify and mark the location of underground utilities.

4.2.3 General Site Controls

Site access was secured with existing perimeter fencing and temporary construction fencing. Silt fencing was installed and maintained at the hydraulically downgradient perimeter of the site for erosion control. Soil stockpiles were temporary and were graded before the end of each work day. There were no problems encountered with general site controls during remedial and construction activities.

4.2.4 Nuisance Controls

STERLING conducted particulate monitoring pursuant to a NYSDEC-approved CAMP, and visual dust observations were minimal. Public roadways abutting the site were swept by Ulster Excavating as necessary. No complaints relating to nuisance conditions (e.g. dust, odors, noise, traffic) caused by construction activities were received by Millens or its representatives during the implementation of the IRM.

4.2.5 Remediation Work Sequence

The following IRM activities were performed concurrently during January and February 2016 after site preparation activities were completed:

Onsite Excavation –Site soil was excavated by Ulster Excavating to achieve site grades shown in the *Final Grading Plan* provided as Sheet 2 and Sheet 3 of the IRM Construction Drawings. An approximate 12 foot wide stormwater control ditch was excavated along the southern property line of the site spanning approximately 350 feet east-west. A minimum of one (1) to two (2) feet of crushed stone were placed within the aforementioned excavation to construct the stormwater control ditch. The stormwater control ditch is intended to prevent stormwater ponding by promoting the infiltration of excess stormwater.

Offsite Excavation – The offsite excavation area was previously defined by soil sampling and analysis performed during the RI, and supplemented by three (3) soil samples collected and analyzed by STERLING. The offsite excavation area was physically delineated using marking paint by STERLING personnel, assisted by NYSDEC personnel after the area was cleared of debris and vegetation by the remedial contractor. Ulster Excavating excavated and placed impacted soil from the offsite area east of North Street in the onsite soil placement area as delineated in the *Excavation, Demolition and Erosion Control Plan* provided as Sheet 1 of the IRM Construction Drawings. Post-excavation soil sampling was conducted as described in Section 4.4.1.

Groundwater Treatment – ADT performed mixing and injection of ORC in the groundwater treatment area delineated in the IRM Work Plan. The quantity of ORC injected at each location was determined by Regenesis, manufacturer of ORC, based upon the measured concentration of Volatile Organic Compounds (VOCs) in the groundwater and other site conditions. Injection was accomplished by Geoprobe direct push injection. Field modifications were made to the quantity and location of injection points and the quantity of ORC injected at each injection point as anticipated by the IRM Work Plan based on the conditions encountered at each injection point. The actual locations of the injection points are presented in Figure 3, and the actual quantity of ORC injected at each injection point is provided in Table 2.

Prior to ORC injections, STERLING provided CHG&E with technical documents prepared by Regenesis and Plastics Pipe Institute concerning the compatibility of ORC slurry with various underground piping materials. Additionally, statements were obtained from CHG&E piping, coating, and tape distributors concerning the compatibility of ORC slurry with CHG&E's existing underground installations and these statements were submitted by STERLING to CHG&E by letter dated December 11, 2015. The data and statements provided to CHG&E indicated that the injection of ORC slurry would not affect existing underground installations in the vicinity of the treatment area. CHG&E issued a License Agreement on December 30, 2015 to provide Millens and its representatives access to CHG&E owned easements.

Well Abandonment – Monitoring wells MW-1, MW-2, and MW-7R were decommissioned by ADT by jacking the casing and grouting the boreholes in accordance with Commissioner's Policy-43 Groundwater Monitoring Well Decommissioning Policy (CP-43). The IRM Work Plan noted a steel casing near MW-13 that may be MW-3. The steel casing was removed and the surrounding area was excavated by Ulster Excavating. No evidence of MW-3 was observed. A well location map is provided as Figure 4. Monitoring Well MW-4R was observed to be irreparably damaged and was subsequently grouted in-place and removed by ADT in substantial conformance with CP-43.

Following excavation, groundwater treatment, and well abandonment activities, a protective site cover was installed by Ulster Excavating as described in Section 4.7. Monitoring Well MW-10 was damaged during the installation of the protective cover. In accordance with NYSDEC's April 22, 2016 letter concerning monitoring wells at the B. Millens Scrapyard site, Ulster Excavating located the remainder of the below grade portion of MW-10, repaired the associated well casing and installed a new protective casing on April 29, 2016. The top-of-casing elevations will be resurveyed within the calendar year following the repairs.

4.2.6 Reporting

STERLING prepared Daily Field Reports to document field activities and compliance with the IRM Work Plan and DER-10. Copies of the Daily Field Reports are available upon request. A photograph log of the IRM field activities is included in Appendix C.

4.2.7 CAMP Results

The CAMP was implemented by STERLING during ground disturbance activities associated with the remedial program between January 11 and January 19, 2016 and on February 2, 2016. As described in Section 4.1.3, CAMP particulate monitoring was conducted upwind and downwind of all ground-intrusive activities and activities involving movement or disturbance of impacted soil. A Dust Trak II particulate monitor continuously logged data every 60 seconds. Alarm limits were determined based on background levels, measured from an upwind monitoring location. An action level of 150 ug/m^3 (defined as a 15 minute average) was established by the NYSDEC-approved CAMP.

Visual dust was not observed or was minimal and no action level exceedances occurred as a result of remedial activities. Copies of all field data sheets relating to the CAMP are provided in Appendix D.

4.3 Management of Impacted Materials

The site was remediated to conform with 6 NYCRR Part 375-6(b) Commercial Use SCOs. A list of SCOs for this project is provided in Table 1. Excavation areas are shown in the remedial site plans provided as Sheets 1 through 3 of the IRM Construction Drawings. As-Built drawings, which reflect the implementation of the IRM, are provided as Appendix E.

4.3.1 Soil

Excavated offsite and onsite soils were consolidated within the boundaries of the site and placed below the protective cover system in the soil placement area (see Sheet 1 of Appendix E and Section 4.2.5). Offsite disposal of impacted soil was not planned and did not occur as a component of the remedial action outlined in the IRM Work Plan.

4.3.2 Groundwater

Purged groundwater produced during groundwater monitoring activities discussed in Section 4.4.2 was containerized in a 55 gallon drum. The 55 gallon drum is labeled and, as of the date of this report, stored in an indoor facility located on the adjacent Millens property, east of the site. Purged groundwater produced during future groundwater monitoring activities will be containerized in the 55 gallon drum, and arrangements will be made by Millens and/or its representatives to dispose of the containerized purged groundwater in accordance with applicable local and State regulations.

4.4 Remedial Performance/Documentation Sampling

Data Usability Summary Reports (DUSRs) were prepared for laboratory analytical data generated in this remedial performance evaluation program. These DUSRs are included in Appendix F, and associated laboratory analytical reports are provided in Appendix G.

4.4.1 Endpoint Soil Sampling

Tables and a figure summarizing all endpoint soil sampling are included in Tables 3A – 3C and Figure 5, respectively, and all exceedances of SCOs are highlighted.

Elevated concentrations of lead were detected in two post-excavation sidewall soil samples (PESW-2 and PESW-4) and in two post-excavation floor soil samples (PEFL-2 and PEFL-5) following initial offsite excavation activities on January 13, 2016. Additional soil was excavated from each of these areas to remove the soil exhibiting the elevated concentrations of lead. An area with an approximate 10-foot diameter (5-foot radius) was excavated at each of the identified sampling locations, as shown in Figure 5. The excavation at the floor samples was extended an additional six (6) to 12 inches. The extent of the excavation was expanded northward at sampling locations PESW-2 and PESW-4 and the excavation depth of approximately two (2) feet was maintained at these areas. Two (2) endpoint sidewall samples were collected from each expansion area at depths of six (6) inches and 18 inches. Endpoint floor and sidewall samples were only analyzed for lead and mercury, based on discussions with, and as agreed to by, the NYSDEC.

A second offsite excavation effort was completed on February 2, 2016. Concentrations of total lead and total mercury detected in endpoint samples associated with the second offsite excavation effort were below Commercial Use SCOs in floor samples PEFL-2A, PEFL-3A, and PEFL-5A. The concentration of total mercury was detected below the Commercial Use SCOs in all of the sidewall samples. Concentrations of total lead in samples PESW-9 (6") and PESW-10 (18") were above Commercial Use SCOs but were less than the lead concentrations in the previous nearby sidewall samples (PESW-4 and PESW-2, respectively). Total lead concentrations in endpoint soil samples PESW-9 (18") and PESW-10 (6") were detected below the Commercial Use SCOs.

A third offsite excavation effort was completed on February 9, 2016 north of sidewall samples PESW-9 (6") and PESW-10 (18") where elevated concentrations of lead were detected in samples collected on February 2, 2016. Excavating was continued approximately five (5) feet further northward from sidewall samples PESW-9 (6") and PESW-10 (18") while maintaining the previous excavation depth of approximately two (2) feet. Sidewall samples PESW-11A (6") and PESW-11B (6") were collected north of previous sidewall sample PESW-9 (6"). Sidewall samples PESW-12A (18") and PESW-12B (18") were collected north of previous sidewall sample PESW-10 (18"). Samples PESW-11A (6") and PESW-12A (18") were submitted to the laboratory for analysis of total lead. Samples PESW-11B (6") and PESW-12B (18") were collected within a few feet of the corresponding "A" sample, but were held by the laboratory (i.e. not analyzed), pending the results of the "A" samples.

The concentration of total lead in sample PESW-11A (6") was detected below the Commercial Use SCOs and the concentration of total lead in sample PESW-12A (18") was detected below the Residential Use SCOs. Based on these results, the corresponding "B" samples were not be analyzed and additional excavation was not conducted. The results of the offsite excavation area endpoint sample analysis were submitted to the NYSDEC and, based on the analytical results, the NYSDEC-approved backfilling the area.

4.4.2 Groundwater Monitoring

The initial quarterly groundwater monitoring event was conducted by STERLING on March 23, 2016 to monitor the effectiveness of groundwater treatment in accordance with the NYSDEC-approved IRM Work Plan.

A table summarizing all 2016 1st Quarter Groundwater Monitoring data is included in Table 4, and all exceedances of NYSDEC guidance values are highlighted. Table 5 provides a summary of groundwater field measurements collected during previous and recent groundwater sample collection events. The results are compared to Part 703.5 Groundwater Standards and NYSDEC TOGS 1.1.1 Water Quality Standards and Guidance Values. A Well Location Map is provided as Figure 4.

Three (3) onsite and four (4) offsite groundwater monitoring wells were sampled via low flow methodology. Groundwater samples were analyzed for VOCs via United States Environmental Protection Agency (USEPA) Method 8260C. Low Flow Purging/Sampling Data Sheets are provided as Appendix H.

The following discussion details the trends in each well in comparison to reported historic results:

MW-5

Concentrations of VOCs were not detected above applicable NYSDEC Water Quality Standards at MW-5. Detected concentrations of methyl tertiary butyl ether (MTBE) decreased, compared to October 2013 groundwater data.

MW-6

VOCs were not detected above applicable NYSDEC Water Quality Standards at MW-6. This is consistent with October 2013 groundwater data.

MW-9

MTBE was detected above applicable NYSDEC Water Quality Standards at a concentration of 28 parts per billion (ppb) at MW-9. Detected concentrations of MTBE decreased from 170 ppb to 28 ppb, compared to October 2013 groundwater data. Concentrations of other VOCs were not detected above applicable NYSDEC Water Quality Standards at MW-9.

MW-11

VOCs were not detected above applicable NYSDEC Water Quality Standards at MW-11. This is consistent with October 2013 groundwater data.

MW-12

Concentrations of benzene, m,p-xylene, o-xylene, and toluene were detected above applicable NYSDEC Water Quality Standards at MW-12. Detected concentrations of benzene, ethylbenzene, MTBE, m,p-xylene, o-xylene, and toluene decreased by one (1) to two (2) orders of magnitude, compared to October 2013 sample data.

MW-13

VOCs were not detected above applicable NYSDEC Water Quality Standards at MW-13. This is consistent with October 2013 groundwater data.

MW-14

Benzene was detected above the NYSDEC Water Quality Standards of 1.0 ppb at a concentration of 1.3 ppb at MW-14. Concentrations of benzene, MTBE, m,p-xylene, and o-xylene decreased in magnitude, compared to October 2013 groundwater data.

4.5 Imported Backfill

Approximately 1,600 cubic yards of imported backfill was obtained from the Urban Precast, LLC facility located at 6 Kieffer Lane, Kingston, New York. Imported backfill obtained from this source was used as a component of the site's protective cover system. Chemical analysis of imported material obtained from this source is provided as Appendix I, and no exceedances of Unrestricted SCOs were detected. Imported material was used in vegetative portions of the protective cover system as shown in Sheet 1 of Appendix E.

Approximately 1,200 cubic yards of imported backfill consisting of crushed stone and Item 4 subbase was obtained from Callanan Industries, Inc. for the construction of the stormwater control ditch, the asphalt portion of the site's protective cover system, and backfill for the offsite excavation area east of North Street. In accordance with DER-10, chemical analysis of stone and Item 4 subbase was not conducted because stone product was imported from a NYSDEC permitted facility.

4.6 Impacted Media Remaining at the Site

Extensive sampling and analysis of soil was performed during the RI to define the lateral and vertical extent of impact and these data are summarized in the August 2014 RI Report prepared by EA Engineering, P.C. Impacted soil was reused within the boundaries of the site beneath the protective site cover within the soil placement area as shown in Sheet 1 of Appendix E.

The reuse of impacted media within the boundaries of the site and below the protective cover system aligns with the concepts of green remediation contained in DER-31. Onsite reuse minimized truck travel for disposal and ultimately saved energy, reduced emissions, and minimized wear and tear on public roads.

Impacted soil with concentrations similar to those identified in the RI Report was consolidated onsite within the soil placement area and below the protective site cover. Since impacted soil remains beneath the site after completion of the Remedial Action, Institutional and Engineering Controls (ICs/ECs) are required to protect human health and the environment. These ICs/ECs are described in the following sections. Long-term management of these ICs/ECs and residual contamination will be performed under the NYSDEC-approved SMP.

4.7 Protective Site Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a protective site cover system placed over the site. This cover system is comprised of asphalt pavement, a minimum of 12 inches of clean soil or stone within the Millens property boundary, and a minimum of 24 inches of clean soil or stone beyond the surveyed Millens property boundary. A demarcation layer consisting of orange construction fencing and/or filter fabric was used above native soils and below the protective cover system. Demarcation layer specifications are provided as Appendix J. Appendix E provides as-built cross sections for each remedial cover type used on the site. Appendix E depicts the location of each cover type built at the site. An Excavation Work Plan (EWP), which outlines the procedures required in the event

the cover system and/or underlying residual contamination are disturbed, is provided as an appendix of the SMP.

4.8 Other Engineering Controls

The IRM for the site did not require the construction of any other engineering control systems. If it is determined the onsite building will be reused or if other buildings are constructed on the site in the future, a Soil Vapor Intrusion (SVI) investigation focused on the existing or future building footprint will be completed during the heating season. Prior to conducting the investigation, a SVI investigation work plan following Final NYSDOH "Guidance for Evaluating SVI investigation in the State of New York", dated October 2006, will be submitted to the NYSDEC and NYSDOH for review and approval. The investigation will determine whether additional actions or engineering controls are necessary to prevent vapor intrusion into the building prior to its reuse.

4.9 Institutional Controls

The final remedy will likely require that an Environmental Easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to commercial uses only. A copy of the Easement and proof of filing will be provided to the NYSDEC upon filing.

4.10 Deviations from the IRM Work Plan

Deviations from the IRM Work Plan include the following:

Excavation of Onsite Soil – Onsite excavation activities were limited to the northern and southern portions of the site. Visual and olfactory observations of impacted soil were observed in the area of MW-14. Approximately 60 cubic yards of impacted soil was excavated from an area spanning approximately 80 feet east-west and 20 feet north-south with the southeastern-most corner of the excavation located at MW-14. Excavated impacted soil was placed in the soil placement area delineated in the *Excavation, Demolition and Erosion Control Plan* provided as Sheet 1 of the IRM Construction Drawings.

Excavation of Offsite Soil – The limits of the offsite excavation area were adjusted and expanded based on the analysis of endpoint soil samples. A description of the excavation limits and sampling rationale is presented in Section 4.4.4.

Installation of Protective Site Cover – Field modifications were made to components of the protective site cover. The IRM Work Plan states that the site will be covered with a minimum 12 inch thickness of soil and/or with an asphalt cap. Following consultation with and approval from the NYSDEC, excavation areas located outside of the property lines but within the site's fence line received a minimum soil cover thickness of 24 inches. These areas are located along the northern and southern portions of the site and are not part of the engineering control which will be subject to the anticipated Environmental Easement. The actual profile of the protective site cover is shown in the As-Built Drawings provided as Appendix E.

Well Abandonment – The IRM Work Plan designated monitoring wells MW-1, MW-2, and MW-7R to be decommissioned. Monitoring Well MW-4R was observed during IRM field activities to be irreparably damaged and was subsequently removed by ADT in accordance with CP-43. Monitoring Well MW-10 was damaged during the installation of the protective cover and repaired by Ulster Excavating on April 29, 2016. The top-of-casing elevations will be resurveyed during the 2016 third quarter groundwater

monitoring event. The PVC stickup associated with monitoring well MW-14 was cut and the casing was replaced to accommodate new site grades.

Asbestos Survey and Building Demolition – The IRM Work Plan included provisions for a pre-demolition asbestos survey of the onsite building and a walk-through inspection of the building if the building was to be demolished. Building demolition was not performed during the IRM and the pre-demolition asbestos survey and walk-through inspection were not performed as a result. If it is determined the onsite building will be reused, a SVI investigation will be completed during the heating season. Prior to conducting the investigation, a SVI investigation work plan following Final NYSDOH "Guidance for Evaluating SVI investigation in the State of New York", dated October 2006, will be submitted to the NYSDEC and NYSDOH for review and approval. The investigation will determine whether additional actions are necessary to prevent vapor intrusion into the building prior to its reuse.

Removal of Site Catch Basin and Pipe – Approximately 45 feet of 6" diameter pipe and the site catch basin located to the south of the existing brick building were removed by Ulster Excavating at the direction of STERLING and the NYSDEC on November 23, 2015 prior to the implementation of the IRM Work Plan. The location of the pipe and catch basin are shown on Sheet 1 of the IRM Construction Drawings. During removal, the excavation was monitored for odors, staining, free product, or other evidence of contamination. Excavated soils were observed to be consistent with surrounding site soils. No new areas of concern were identified because no odors, staining, or free product were present during the removal of the site catch basin and associated piping.

5.0 CONCLUSIONS AND RECOMMENDATIONS

A review of the groundwater monitoring data indicates an overall decrease in the detected concentrations of VOCs in onsite and offsite groundwater monitoring well locations compared to the October 2013 groundwater sampling results. These data indicate that groundwater conditions are trending toward pre-disposal/pre-release conditions. Groundwater monitoring is scheduled to continue on a quarterly basis, as prescribed by the NYSDEC-approved IRM Work Plan. The next quarterly sampling event is scheduled for June 2016.

The implementation of the IRM sufficiently prevents the migration of contaminants that would result in groundwater or surface water contamination because impacted soils identified in the August 2014 RI Report have been covered with a protective site cover system.

The planned implementation of Institutional Controls outlined in Section 4.9 will restrict the use of the site to commercial use and effectively:

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards; and
- Prevent ingestion/direct contact with impacted soil.

Therefore, RAOs outlined in Section 2.1 either have been achieved with the implementation of the IRM or will be achieved with the planned implementation of Institutional Controls. It is STERLING's opinion that the remedial work completed in accordance with the NYSDEC-approved IRM Work Plan is protective of human health and the environment and that no further remediation is necessary. On this basis, STERLING recommends that the NYSDEC issue a Decision Document identifying the completed remedial work as the final site remedy, after which STERLING will prepare and submit the required Final Engineering Report and Site Management Plan.

TABLES

TABLE 1

Commercial Use Soil Cleanup Objectives (SCOs)
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York

Parameter	Soil Cleanup Objectives [(1)] (ppm)
Metals	
Arsenic	16
Barium	400
Beryllium	590
Cadmium	9.3
Chromium (hexavalent)	400
Chromium (trivalent)	1,500
Copper	270
Total Cyanide	27
Lead	1,000
Manganese	10,000
Mercury	2.8
Nickel	310
Selenium	1,500
Silver	1,500
Zinc	10,000

(1) As provided in 6 NYCRR Part 375-6.8(b)
(2) All values in parts per million (ppm)

TABLE 1

Commercial Use Soil Cleanup Objectives (SCOs)
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York

Parameter	Soil Cleanup Objectives [(1)] (ppm)
PCBs/Pesticides	
2,4,5-TP Acid (Silvex)	500
4,4'-DDE	62
4,4'-DDT	47
4,4'-DDD	92
Aldrin	0.68
alpha-BHC	3.4
beta-BHC	3
Chlordane (alpha)	24
delta-BHC	500
Dibenzofuran	350
Dieldrin	1.4
Endosulfan I	200
Endosulfan II	200
Endosulfan sulfate	200
Endrin	89
Heptachlor	15
Lindane	9.2
Polychlorinated biphenyls	1

(1) As provided in 6 NYCRR Part 375-6.8(b)
(2) All values in parts per million (ppm)

TABLE 1

Commercial Use Soil Cleanup Objectives (SCOs)
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York

Parameter	Soil Cleanup Objectives [(1)] (ppm)
SVOCs	
Acenaphthene	500
Acenapthylene	500
Anthracene	500
Benzo(a)anthracene	5.6
Benzo(a)pyrene	1
Benzo(b)fluoranthene	5.6
Benzo(g,h,i)perylene	500
Benzo(k)fluoranthene	56
Chrysene	56
Dibenz(a,h)anthracene	0.56
Fluoranthene	500
Fluorene	500
Indeno(1,2,3-cd)pyrene	5.6
m-Cresol	500
Naphthalene	500
o-Cresol	500
p-Cresol	500
Pentachlorophenol	6.7
Phenanthrene	500
Phenol	500
Pyrene	500

(1) As provided in 6 NYCRR Part 375-6.8(b)
(2) All values in parts per million (ppm)

TABLE 1

Commercial Use Soil Cleanup Objectives (SCOs)
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York

Parameter	Soil Cleanup Objectives [(1)] (ppm)
VOCs	
1,1,1-Trichloroethane	500
1,1-Dichloroethane	240
1,1-Dichloroethene	500
1,2-Dichlorobenzene	500
1,2-Dichloroethane	30
cis-1,2-Dichloroethene	500
trans-1,2-Dichloroethene	500
1,3-Dichlorobenzene	280
1,4-Dichlorobenzene	130
1,4-Dioxane	130
Acetone	500
Benzene	44
Butylbenzene	500
Carbon tetrachloride	22
Chlorobenzene	500
Chloroform	350
Ethylbenzene	390
Hexachlorobenzene	6
Methyl ethyl ketone	500
Methyl tert-butyl ether	500

(1) As provided in 6 NYCRR Part 375-6.8(b)
(2) All values in parts per million (ppm)

TABLE 1

Commercial Use Soil Cleanup Objectives (SCOs)
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York

Methylene chloride	500
Parameter	**Soil Cleanup Objectives [(1)] (ppm)**
VOCs (Continued)	
n-Propylbenzene	500
sec-Butylbenzene	500
tert-Butylbenzene	500
Tetrachloroethene	150
Toluene	500
Trichloroethene	200
1,2,4-Trimethylbenzene	190
1,3,5-Trimethylbenzene	190
Vinyl chloride	13
Xylene (mixed)	500

(1) As provided in 6 NYCRR Part 375-6.8(b)
(2) All values in parts per million (ppm)

TABLE 2

Oxygen Release Compound (ORC) - Record of Injection
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York
January 13 - 19, 2016

Date	Boring ID	Total Depth of Boring (feet)	Injection Interval (feet)	Length of Injection Zone (ft.)	Total ORC Injected (pounds)	ORC Lbs./ft.
--	ORC-16- 1	--	--	--	--	--
--	ORC-16- 2	--	--	--	--	--
1/19/2016	ORC-16- 3	15	5-15	10	50	5
1/19/2016	ORC-16- 4	15	5-15	10	50	5
1/19/2016	ORC-16- 5	15	5-15	10	50	5
1/13/2016	ORC-16- 6	15	5-15	10	50	5
1/13/2016	ORC-16- 7	15	5-15	10	50	5
1/13/2016	ORC-16- 8	15	8-15	7	50	~7.1
1/12/2016	ORC-16- 9	15	6-14	8	70	~8.8
1/12/2016	ORC-16- 10	11 (R)	8-11	3	30 (A)	10
1/19/2016	ORC-16- 11	15	5-15	10	50	5
1/19/2016	ORC-16- 12	15	5-15	10	50	5
1/19/2016	ORC-16- 13	15	5-15	10	50	5
1/18/2016	ORC-16- 14	15	5-15	10	50	5
1/13/2016	ORC-16- 15	15	5-15	10	50	5
1/13/2016	ORC-16- 16	15	5-15	10	50	5
1/13/2016	ORC-16- 17	2 (R)	--	--	(A)	--
1/13/2016	ORC-16- 17r	15	5-15	10	50	5
1/13/2016	ORC-16- 18	15	8-15	7	50	~7.1
1/19/2016	ORC-16- 19	15	5-15	10	50	5
1/18/2016	ORC-16- 20	15	5-15	10	50	5
1/18/2016	ORC-16- 21	15	5-15	10	75	7.5
1/15/2016	ORC-16- 22	15	5-15	10	50	5
1/14/2016	ORC-16- 23	15	5-15	10	50	5
1/14/2016	ORC-16- 24	15	5-15	10	50	5
1/18/2016	ORC-16- 25	15	5-15	10	50	5
1/18/2016	ORC-16- 26	15	5-15	10	75	7.5
1/15/2016	ORC-16- 27	15	5-15	10	50	5
1/14/2016	ORC-16- 28	15	5-15	10	50	5
1/14/2016	ORC-16- 29	15	5-15	10	50	5
1/18/2016	ORC-16- 30	3 (R)	--	--	(A)	--
1/15/2016	ORC-16- 31	15	5-15	10	50	5
1/14/2016	ORC-16- 32	15	5-15	10	50	5
1/14/2016	ORC-16- 33	15	5-15	10	50	5
1/18/2016	ORC-16- 34	15	5-15	10	50	5
1/18/2016	ORC-16- 35	15	5-15	10	50	5
1/14/2016	ORC-16- 36	15	5-15	10	50	5
1/14/2016	ORC-16- 37	15	5-15	10	50	5
1/18/2016	ORC-16- 38	15	5-15	10	50	5
1/18/2016	ORC-16- 39	15	5-15	10	50	5
1/14/2016	ORC-16- 40	15	5-15	10	50	5
1/14/2016	ORC-16- 41	15	5-15	10	50	5
1/15/2016	ORC-16- 42	15	5-15	10	50	5
1/15/2016	ORC-16- 43	15	5-15	10	50	5
1/15/2016	ORC-16- 44	15	5-15	10	50	5
1/15/2016	ORC-16- 45	15	5-15	10	50	5
1/15/2016	ORC-16- 46	15	5-15	10	50	5
1/15/2016	ORC-16- 47	15	5-15	10	50	5
1/15/2016	ORC-16- 48	15	5-15	10	50	5
1/15/2016	ORC-16- 49	15	5-15	10	50	5
1/15/2016	ORC-16- 50	15	5-15	10	50	5

Notes: 1. (R) = Penetrated to refusal
2. (A) = Reduced acceptance of ORC slurry by subsurface matrix
3. -- = Not applicable/ORC not injected
4. ORC Injections were not conducted at boring ID locations ORC-16-1 and ORC-16-2 due to time constraints and determination that sufficient ORC slurry was injected to address groundwater impacts.

TABLE 3A

Summary of Sample Data Post-Inital Excavation - Floor Samples
B.Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York
January 13, 2016

*** All results reflect samples collected after initial excavation effort performed on 1/13/2016**

LOCATION			PEFL-6	PEFL-5	PEFL-4	PEFL-3	PEFL-2	PEFL-1
SAMPLE DEPTH (ft.)			1.0	1.0	2.0	2.0	2.0	2.0
	NY-Residential SCO	Units						
Polychlorinated Biphenyls								
Aroclor 1242	1	mg/kg	0.0634 U	0.0548 U	0.0378 U	0.0534 U	0.054 U	0.0453 U
Aroclor 1254	1	mg/kg	0.132	0.21	0.0378 U	0.122	0.054 U	0.0453 U
Aroclor 1260	1	mg/kg	0.103	0.169	0.0378 U	0.134	0.0327 J	0.0453 U
PCBs, Total		mg/kg	0.235	0.379	0.0378 U	0.256	0.0327 J	0.0453 U
Semivolatile Organics by GC/MS								
Acenaphthene	100	mg/kg	0.19 J	0.033 J	0.16 U	0.088 J	0.22 U	0.048 J
Fluoranthene	100	mg/kg	4.7	0.86	0.096 J	5.5	1.3	1.9
Naphthalene	100	mg/kg	1.5	1.2	0.078 J	1.1	2.6	0.24
Bis(2-ethylhexyl)phthalate		mg/kg	0.32 U	0.28 U	0.2 U	0.16 J	0.28 U	0.22 U
Butyl benzyl phthalate		mg/kg	0.15 J	0.28 U	0.2 U	0.15 J	0.28 U	0.22 U
Di-n-butylphthalate		mg/kg	0.32 U	0.28 U	0.2 U	0.27 U	0.28 U	0.22 U
Benzo(a)anthracene	1	mg/kg	2.1	0.59	0.055 J	2.5	0.74	0.92
Benzo(a)pyrene	1	mg/kg	1.7	0.65	0.054 J	1.9	0.84	0.87
Benzo(b)fluoranthene	1	mg/kg	2.2	0.94	0.079 J	2.8	1.3	1.2
Benzo(k)fluoranthene	1	mg/kg	0.92	0.38	0.12 U	1.1	0.39	0.45
Chrysene	1	mg/kg	2.1	0.65	0.066 J	2.4	0.82	1
Acenaphthylene	100	mg/kg	0.79	0.25	0.16 U	0.61	0.75	0.14 J
Anthracene	100	mg/kg	1.3	0.21	0.12 U	0.8	0.32	0.26
Benzo(ghi)perylene	100	mg/kg	1	0.62	0.048 J	1.1	1.3	0.57
Fluorene	100	mg/kg	0.57	0.056 J	0.2 U	0.15 J	0.095 J	0.074 J
Phenanthrene	100	mg/kg	4.2	0.52	0.068 J	2.1	0.69	1.1
Dibenzo(a,h)anthracene	0.33	mg/kg	0.28	0.16 J	0.12 U	0.32	0.21	0.15
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	1.2	0.64	0.046 J	1.3	1.2	0.61
Pyrene	100	mg/kg	4	0.86	0.09 J	4.4	1.3	1.5
Biphenyl		mg/kg	0.14 J	0.086 J	0.45 U	0.076 J	0.093 J	0.51 U
Dibenzofuran	59	mg/kg	0.45	0.096 J	0.2 U	0.11 J	0.12 J	0.053 J
2-Methylnaphthalene		mg/kg	0.95	0.92	0.11 J	0.79	1.1	0.21 J
Acetophenone		mg/kg	0.21 J	0.32	0.2 U	0.26 J	0.55	0.051 J
Phenol	100	mg/kg	0.09 J	0.28 U	0.2 U	0.27 U	0.28 U	0.22 U
2-Methylphenol		mg/kg	0.05 J	0.28 U	0.2 U	0.27 U	0.28 U	0.22 U
3-Methylphenol/4-Methylphenol		mg/kg	0.15 J	0.4 U	0.28 U	0.049 J	0.074 J	0.05 J
Carbazole		mg/kg	0.58	0.078 J	0.2 U	0.13 J	0.08 J	0.2 J
Total Metals								
Aluminum, Total		mg/kg	5400	9500	5800	5900	5900	5600
Antimony, Total		mg/kg	3.2 J	5.6 J	4.8 U	4.2 J	5.9 J	5.4 U
Arsenic, Total	16	mg/kg	9.2	23	5.1	15	11	3.5
Barium, Total	350	mg/kg	170	200	36	150	180	55
Beryllium, Total	14	mg/kg	0.43 J	0.8	0.3 J	0.48 J	0.41 J	0.27 J
Cadmium, Total	2.5	mg/kg	2	4.3	0.95 U	2.2	1.6	0.45 J
Calcium, Total		mg/kg	3800	4700	1500	5200	3000	1000
Chromium, Total	36	mg/kg	43	50	9.4	22	17	16
Cobalt, Total		mg/kg	7.3	17	6	7.3	7.1	6.1
Copper, Total	270	mg/kg	180	250	24	180	330	23
Iron, Total		mg/kg	25000	54000	14000	25000	30000	14000
Lead, Total	400	mg/kg	610	2300	58	550	1300	83
Magnesium, Total		mg/kg	1600	3800	2000	1800	1800	2200
Manganese, Total	2000	mg/kg	290	640	300	300	180	110
Mercury, Total	0.81	mg/kg	0.85	2.2	0.14	2.6	0.93	0.25
Nickel, Total	140	mg/kg	29	50	13	25	20	15
Potassium, Total		mg/kg	480	630	370	550	350	250 J
Selenium, Total	36	mg/kg	0.55 J	1.5 J	1.9 U	0.72 J	0.58 J	2.1 U
Silver, Total	36	mg/kg	1.5 U	0.44 J	0.95 U	1.3 U	1.3 U	1.1 U
Sodium, Total		mg/kg	130 J	150 J	190 U	110 J	140 J	69 J
Vanadium, Total		mg/kg	18	32	9.1	19	16	9.5
Zinc, Total	2200	mg/kg	750	1400	67	560	4000	140

Notes:
Only the compounds detected in one or more samples, at or above the method detection limit, are shown on the table.
Values reported for Total Chromium are assumed to be equivalent to trivalent chromium, which is the stable form of this compound in the environment.
Values highlighted in blue exceed Residential Use SCOs
"U" Qualifier indicates compound was not detected at the reported detection limit for the sample.
"J" Qualifier indicates an estimated value because the parameter was detected below the laboratory reporting limit.
Additional excavation was performed at PESW-2 and PESW-4; See Table 3C and Figure 5.

TABLE 3B

Summary of Sample Data Post-Initial Excavation - Sidewall Samples
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York
January 13, 2016

*** All results are for samples collected after initial excavation performed on 1/13/2016**

LOCATION			PESW-8	PESW-7	PESW-6	PESW-5	PESW-4	PESW-3	PESW-2	PESW-1	DUP
SAMPLE DEPTH (inches)			18"	12"	6"	12"	6"	12"	18"	12"	(PESW-7)
	NY- Residential SCO	Units									
Polychlorinated Biphenyls											
Aroclor 1242	1	mg/kg	0.0423 U	0.0424 U	0.0401 U	0.0403 U	0.0421 U	0.0414 U	0.0423 J	0.0402 U	0.0388 U
Aroclor 1254	1	mg/kg	0.19	0.0727	0.12	0.0584	0.0229 J	0.0456	0.179	0.0402 U	0.0176 J
Aroclor 1260	1	mg/kg	0.164	0.0602	0.221	0.0522	0.0264 J	0.0523	0.124	0.0402 U	0.0194 J
PCBs, Total		mg/kg	0.354	0.133	0.341	0.111	0.0493 J	0.0979	0.345 J	0.0402 U	0.037 J
Semivolatile Organics											
Acenaphthene	100	mg/kg	0.096 J	0.28 J	0.14 J	0.035 J	0.054 J	1.6 U	0.18 U	0.17 U	0.16 U
Fluoranthene	100	mg/kg	3.6	2.9	3.7	2.4	0.64	1.2 U	0.27	0.13 U	1
Naphthalene	100	mg/kg	1.7	0.53	1.2	0.51	0.19 J	0.27 J	0.23	0.21 U	0.18 J
Bis(2-ethylhexyl)phthalate		mg/kg	0.4 J	0.23 J	0.2 U	0.15 J	0.13 J	55	0.52	0.21 U	0.2 U
Butyl benzyl phthalate		mg/kg	0.43 J	0.49	0.12 J	0.18 J	0.21 U	5	0.39	0.21 U	0.2 U
Di-n-butylphthalate		mg/kg	0.44 U	0.42 U	0.2 U	0.048 J	0.21 U	2 U	0.071 J	0.21 U	0.2 U
Benzo(a)anthracene	1	mg/kg	2	1.6	1.6	1.5	0.41	1.2 U	0.17	0.13 U	0.62
Benzo(a)pyrene	1	mg/kg	1.8	1.5	1.2	1.7	0.48	1.6 U	0.17 J	0.17 U	0.69
Benzo(b)fluoranthene	1	mg/kg	3	2	1.6	3.5	0.71	1.2 U	0.27	0.13 U	1.3
Benzo(k)fluoranthene	1	mg/kg	1.2	0.7	0.71	1.4	0.24	1.2 U	0.097 J	0.13 U	0.53
Chrysene	1	mg/kg	2.2	1.6	1.6	2.2	0.69	0.24 J	0.21	0.13 U	0.78
Acenaphthylene	100	mg/kg	0.96	0.15 J	0.6	0.95	0.046 J	1.6 U	0.11 J	0.17 U	0.27
Anthracene	100	mg/kg	0.81	0.63	0.97	0.9	0.18	1.2 U	0.086 J	0.13 U	0.24
Benzo(ghi)perylene	100	mg/kg	1.9	0.9	0.76	1.3	0.48	1.6 U	0.24	0.17 U	0.52
Fluorene	100	mg/kg	0.15 J	0.27 J	0.41	0.066 J	0.065 J	2 U	0.028 J	0.21 U	0.023 J
Phenanthrene	100	mg/kg	1.4	2.1	3.2	0.51	0.61	1.2 U	0.2	0.13 U	0.21
Dibenzo(a,h)anthracene	0.33	mg/kg	0.39	0.27	0.2	0.41	0.13	1.2 U	0.045 J	0.13 U	0.16
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	1.9	0.97	0.83	1.5	0.42	1.6 U	0.21	0.17 U	0.59
Pyrene	100	mg/kg	3.3	2.5	3.1	2.5	0.63	0.22 J	0.3	0.13 U	1
Biphenyl		mg/kg	1 U	0.97 U	0.1 J	0.076 J	0.05 J	4.7 U	0.51 U	0.48 U	0.44 U
Dibenzofuran	14	mg/kg	0.18 J	0.21 J	0.33	0.12 J	0.064 J	2 U	0.028 J	0.21 U	0.035 J
2-Methylnaphthalene		mg/kg	0.96	0.23 J	0.73	0.61	0.46	0.38 J	0.34	0.25 U	0.22 J
Acetophenone		mg/kg	0.28 J	0.42 U	0.16 J	0.097 J	0.054 J	2 U	0.092 J	0.21 U	0.034 J
Phenol	100	mg/kg	0.44 U	0.42 U	0.069 J	0.21 U	0.04 J	2 U	0.072 J	0.21 U	0.2 U
2-Methylphenol		mg/kg	0.44 U	0.42 U	0.035 J	0.21 U	0.04 J	2 U	0.22 U	0.21 U	0.2 U
3-Methylphenol/4-Methylphenol		mg/kg	0.64 U	0.61 U	0.11 J	0.053 J	0.091 J	3 U	0.046 J	0.3 U	0.28 U
Carbazole		mg/kg	0.17 J	0.31 J	0.44	0.28	0.053 J	2 U	0.033 J	0.21 U	0.058 J
Total Metals											
Aluminum, Total		mg/kg	6400	4700	4400	5800	4200	5900	12000	4900	6800
Antimony, Total		mg/kg	4.4 J	1 J	6.7	6.5	12	7.2	28	5 U	4.6 U
Arsenic, Total	16	mg/kg	11	13	11	12	26	12	11	4.1	6
Barium, Total	350	mg/kg	130	58	84	150	84	210	180	26	180
Beryllium, Total	14	mg/kg	0.39 J	0.24 J	0.33 J	0.4 J	0.37 J	0.5	0.4 J	0.22 J	0.36 J
Cadmium, Total	2.5	mg/kg	2.7	0.96 J	0.81 J	1.5	0.37 J	3.3	11	0.99 U	0.08 J
Calcium, Total		mg/kg	6700	62000	15000	8000	39000	6000	14000	2000	2300
Chromium, Total	36	mg/kg	20	10	40	33	16	26	110	7.1	28
Cobalt, Total		mg/kg	7.4	5.6	7.1	8.2	9.7	8	18	5.6	7.2
Copper, Total	270	mg/kg	180	57	320	160	1200	380	590	16	50
Iron, Total		mg/kg	24000	17000	32000	37000	42000	46000	90000	13000	26000
Lead, Total	400	mg/kg	590	150	350	930	6600	620	2000	26	180
Magnesium, Total		mg/kg	2600	2700	2000	2400	4000	3100	3300	2500	2400
Manganese, Total	2000	mg/kg	390	320	320	370	450	390	670	360	330
Mercury, Total	0.81	mg/kg	1.2	0.65	0.33	0.34	0.59	0.42	1.7	0.15	0.26
Nickel, Total	140	mg/kg	28	18	26	32	24	36	82	13	18
Potassium, Total		mg/kg	460	400	360	420	560	440	940	260	300
Selenium, Total	36	mg/kg	0.64 J	2 U	0.77 J	0.68 J	1.9 J	0.82 J	1.5 J	2 U	1.9 U
Silver, Total	36	mg/kg	0.33 J	1 U	0.97 U	0.22 J	0.28 J	0.71 J	2.2	0.99 U	0.93 U
Sodium, Total		mg/kg	120 J	76 J	110 J	270	120 J	220	920	200 U	64 J
Vanadium, Total		mg/kg	25	9	13	14	12	15	21	7.8	11
Zinc, Total	2200	mg/kg	700	330	400	620	300	690	2300	53	180

Notes:
Only the compounds detected in one or more samples, at or above the method detection limit, are shown on the table.
Values reported for Total Chromium are assumed to be equivalent to trivalent chromium, which is the stable form of this compound in the environment.
Values highlighted in blue exceed Residential Use SCOs
"U" Qualifier indicates compound was not detected at the reported detection limit for the sample.
"J" Qualifier indicates an estimated value because the parameter was detected below the laboratory reporting limit.
Additional excavation was performed at PESW-2 and PESW-4; See Table 3C and Figure 5.

TABLE 3C

Summary of Endpoint Sample Data
B. Millens Sons, Inc.
290 East Stand Street, City of Kingston, New York

*** All results are for samples collected after initial excavation performed on 1/13/2016**

Initial Excavation (January 13, 2016)

SAMPLE ID			PEFL-2	PEFL-3	PEFL-5	PESW-4		PESW-2
SAMPLING DEPTH (inches)			2.0'	2.0'	1.0'	6"		18"
	NY- Residential SCO	Units						
Total Metals								
Lead, Total	400	mg/kg	1300	550	2300	6600		2000
Mercury, Total	0.81	mg/kg	0.93	2.6	2.2	0.59		1.7

Second Round Excavation (February 2, 2016)

SAMPLE ID			PEFL-2A	PEFL-3A	PEFL-5A	PESW-9	PESW-9	PESW-10	PESW-10	DUP
SAMPLING DEPTH (inches)			4.0'	4.0'	4.5'	6"	18"	6"	18"	(PEFL-2A)
	NY- Residential SCO	Units								
Total Metals										
Lead, Total	400	mg/kg	410	42	260	2900	46	810	1100	280
Mercury, Total	0.81	mg/kg	0.26	0.32	0.46	0.6	0.13	1.0	1.8	0.24

Third Round Excavation (February 9, 2016)

SAMPLE ID			PESW-11A		PESW-12A
SAMPLING DEPTH (inches)			6"		18"
	NY- Residential SCO	Units			
Total Metals					
Lead, Total	400	mg/kg	520		96

Notes:
Sample IDs grouped vertically and horizontally based on relative vicinity of sample locations. Refer to Figure 5 for sample locations.

Post-Excavation Soil samples PESW-11A (6"), and PESW-12A (18") were collected on February 9, 2016 in areas that were excavated further to remove soil with elevated lead detected in the post-excavation soil samples PESW-9 (6") and PESW-10 (18") respectively, collected on February 2, 2016

Post-Excavation Soil samples PEFL-2A, PEFL-3A, PEFL-5A, PESW-9 (6"), PESW-9 (18"), PESW-10(6"), and PESW-10 (18") were collected on February 2, 2016 in areas that were excavated further to remove soil with elevated lead detected in the post-excavation soil samples collected on January 13, 2016

Values highlighted in blue exceed Residential Use SCOs.
PESW-9 (6") was collected from the excavation side wall after excavating additional soil at the location of PESW-4 (6").
PESW-11A (6") was collected from the excavation side wall after excavating additional soil at the location of PESW-9 (6").
PESW-10 (18") was collected from the excavation side wall after excavating additional soil at the location of PESW-2 (18").
PESW-12 (18") was collected from the excavation side wall after excavating additional soil at the location of PESW-10 (18").

TABLE 4

Summary of Volatile Organic Compounds Detected in Groundwater
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York
October 1 - 2, 2013 and March 23, 2016

SAMPLE ID			MW-5		MW-5		MW-6		MW-6		MW-9		MW-9		MW-11		MW-11	
SAMPLING DATE			10/2/2013		3/23/2016		10/2/2013		3/23/2016		10/2/2013		3/23/2016		10/2/2013		3/23/2016	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics																		
Benzene	1	ug/l	2.6	J	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U
Toluene	5	ug/l	4.6	J	2.5	U	0.2	U	2.5	U	0.2	U	2.5	U	0.2	U	2.5	U
Ethylbenzene	5	ug/l	0.31	J	2.5	U	0.2	U	2.5	U	0.2	U	2.5	U	0.2	U	2.5	U
Methyl tert butyl ether	10	ug/l	14		4.5		4.6	J	1.5	J	170		28		3.6	J	2.4	J
p/m-Xylene	5	ug/l	1.5	J	2.5	U	0.33	U	2.5	U	0.33	U	2.5	U	0.33	U	2.5	U
o-Xylene	5	ug/l	3.0	J	2.5	U	0.2	U	2.5	U	0.2	U	2.5	U	0.2	U	2.5	U
Acetone	50	ug/l	11	U	5.0	U	12		5.0	U	5.2	J	5.0	U	3.0	J	5.0	U

SAMPLE ID			MW-12		MW-12		MW-13		MW-13		MW-14		MW-14		DUP (MW-9)		TRIP BLANK	
SAMPLING DATE			10/1/2013		3/23/2016		10/1/2013		3/23/2016		10/1/2013		3/23/2016		3/23/2016		3/23/2016	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics																		
Benzene	1	ug/l	64		1.6		0.2	U	0.5	U	5.8		1.3		0.5	U	0.5	U
Toluene	5	ug/l	140		5.3		0.2	U	2.5	U	0.2	U	1.2	J	2.5	U	2.5	U
Ethylbenzene	5	ug/l	28		4.4		0.2	U	2.5	U	4.4	J	1.2	J	2.5	U	2.5	U
Methyl tert butyl ether	10	ug/l	700		4.6		0.29	U	2.5	U	15		5.5		28		2.5	U
p/m-Xylene	5	ug/l	100		18		0.33	U	2.5	U	15		2.7		2.5	U	2.5	U
o-Xylene	5	ug/l	55		9.9		0.2	U	2.5	U	8.1		0.92	J	2.5	U	2.5	U
Acetone	50	ug/l	22		22	R	1.4	J	5.0	U	7.6	J	5.0	U	5.0	U	22	

Notes:
NY-AWQS: New York TOGS 1.1.1 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.
Values highlighted in yellow indicate exceedance of NY-AWQS

Lab Qualifiers:
U = Not detected above the laboratory method detection limit shown.
J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifiers:
ND = Not Detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method .
R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

Table 5

Summary of Groundwater Field Measurements
B. Millens Sons, Inc.
290 East Strand Street, City of Kingston, New York

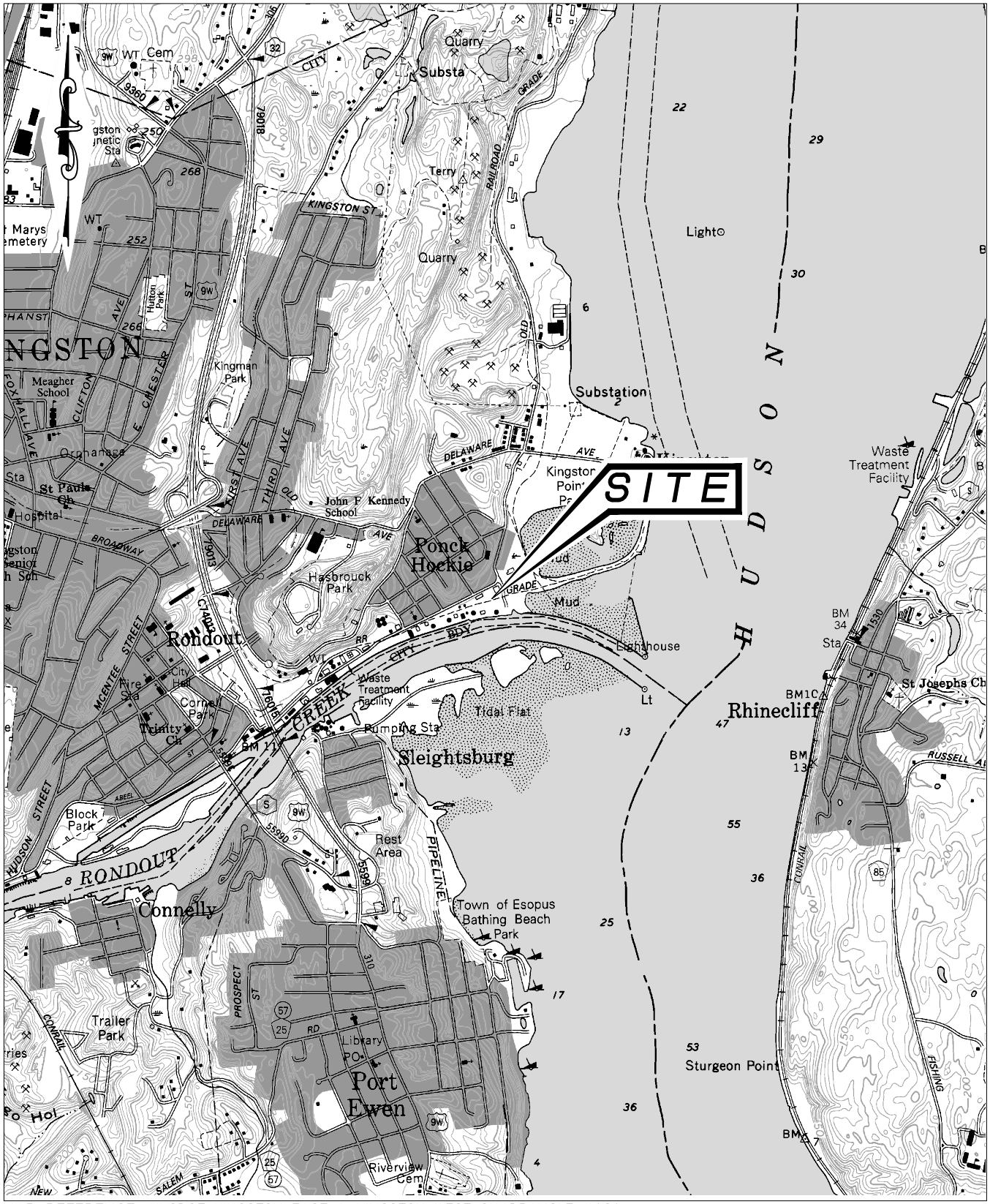
	MW-5				MW-6				MW-9				MW-10			
Parameters	10/1/2013	03/23/16	04/11/16	06/01/16	10/1/2013	03/23/16	04/11/16	06/01/16	10/01/13	03/23/16	04/11/16	06/01/16	10/01/13	03/23/16	04/11/16	06/01/16
pH	7.82	7.45	6.88	7.8	7.93	7.22	-	7.3	8	7.35	-	7.3	7.59	-	-	7.6
ORP (mV)	-139	-159.1	-57.9	-215.0	-152	-82.0	-	-91.5	-169	-90.2	-	-145.2	-53	-	-	5.9
Specific Conductivity (mS/cm[c])	0.685	0.374	0.341	0.386	0.859	0.890	-	1.081	0.778	0.665	-	0.77	0.99	-	-	0.900
DO (mg/L)	0.00	0.62	1.01	0.05	0.00	2.86	-	2.09	0.00	0.60	-	0.51	0	-	-	0.39
Temperature (°C)	9.63	10.23	9.35	20.61	8.23	10.13	-	15.71	7.18	10.27	-	16.56	4.72	-	-	13.72

	MW-11				MW-12				MW-13				MW-14			
Parameters	10/01/13	03/23/16	04/11/16	06/01/16	10/01/13	03/23/16	04/11/16	06/01/16	10/01/13	03/23/16	04/11/16	06/01/16	10/01/13	03/23/16	04/11/16	06/01/16
pH	7.87	7.4	-	7.5	12.9	12.58	12.28	12.3	7.07	7.14	-	7.3	8.97	8.92	7.64	8.9
ORP (mV)	-149	-112.3	-	-95.2	-207	-195.2	-156.0	-162.3	99.0	155.5	-	98.1	-218.0	-77.8	-145.8	-222.2
Specific Conductivity (mS/cm[c])	0.833	0.784	-	0.951	2.44	1.407	1.331	2.054	0.978	0.854	-	1.008	0.893	0.548	0.576	0.611
DO (mg/L)	0.00	1.98	-	0.35	0.00	0.39	1.13	7.73	0.00	5.19	-	4.8	0.00	0.66	1.06	0.16
Temperature (°C)	10.39	10.71	-	15.01	6.63	8.53	8.91	18.2	3.86	9.23	-	14.94	8.33	10.11	10.28	16.56

Notes:

April 2016 samples obtained via hand bailer, other samples obtained via low-flow sampling methods
- Indicates no readings taken

FIGURES



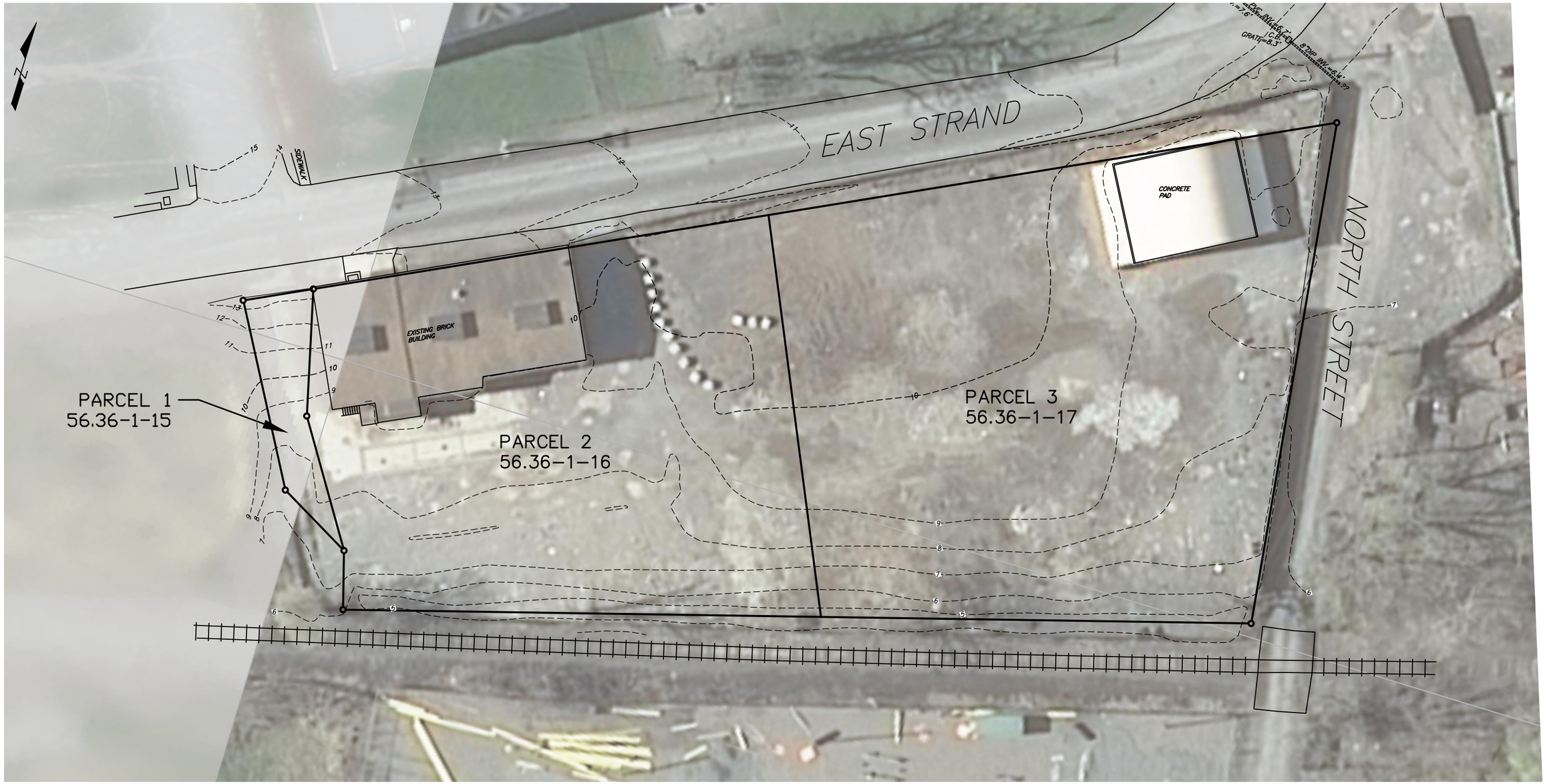
MAP REFERENCE: NYSDOT KINGSTON EAST & KINGSTON WEST QUADRANGLE, 1989.

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road ♦ Latham, New York 12110

SITE LOCATION MAP
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
27023	04/12/2016	1" = 2000'	27023006	1

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023006_F-1 - Site Loc SWEETT 4/11/2016 2:27 PM



LEGEND:

PARCEL BOUNDARY

6 EXISTING CONTOUR

0 20' 40' 80'

(IN FEET)
1 inch = 40 ft.

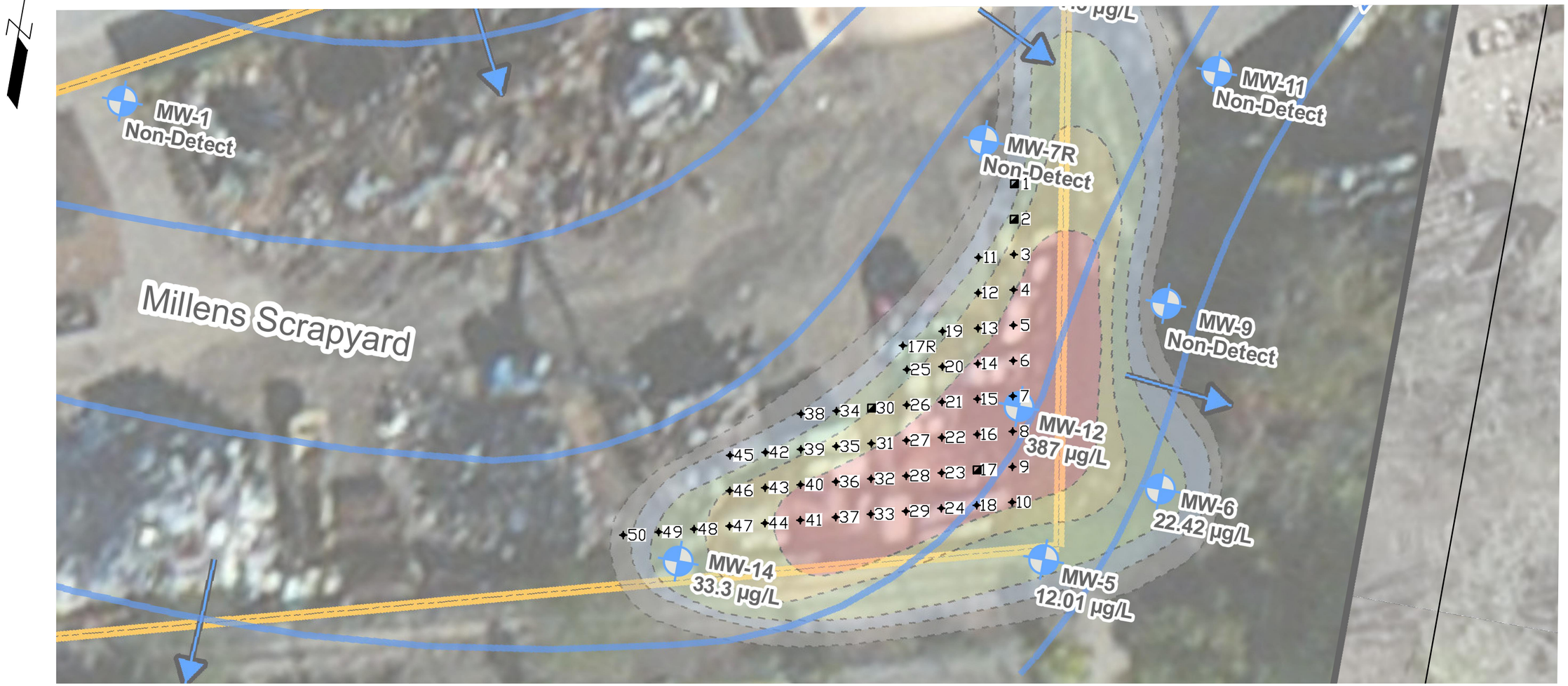
MAP REFERENCE: BASEMAP SURVEY BY RICHARD PAUL HANBACK P.L.S. DATED APRIL 15, 2016

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

SITE MAP
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	27023	DATE:	04/12/2016	SCALE:	1" = 40'	DWG. NO.	27023052	FIGURE	2

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023052_F-2 - Site Plan.dwg SWEETT 5/2/2016 12:56 PM



LEGEND:

- ✦ INJECTION POINT (TYP.)
- ◪ NO ORC INJECTED (BORING REFUSED INJECTION)

Total VOC Concentration (µg/L) August, 2014

<1	50-100
1-10	100-500
10-50	500-1,000

MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, AERIAL PHOTOGRAPHY CIRCA 2009. GROUNDWATER BTEX CONCENTRATION PLUME MAPS, REMEDIAL INVESTIGATION REPORT, EA ENGINEERING, SCIENCE, AND TECHNOLOGY INC. DATED AUGUST, 2014

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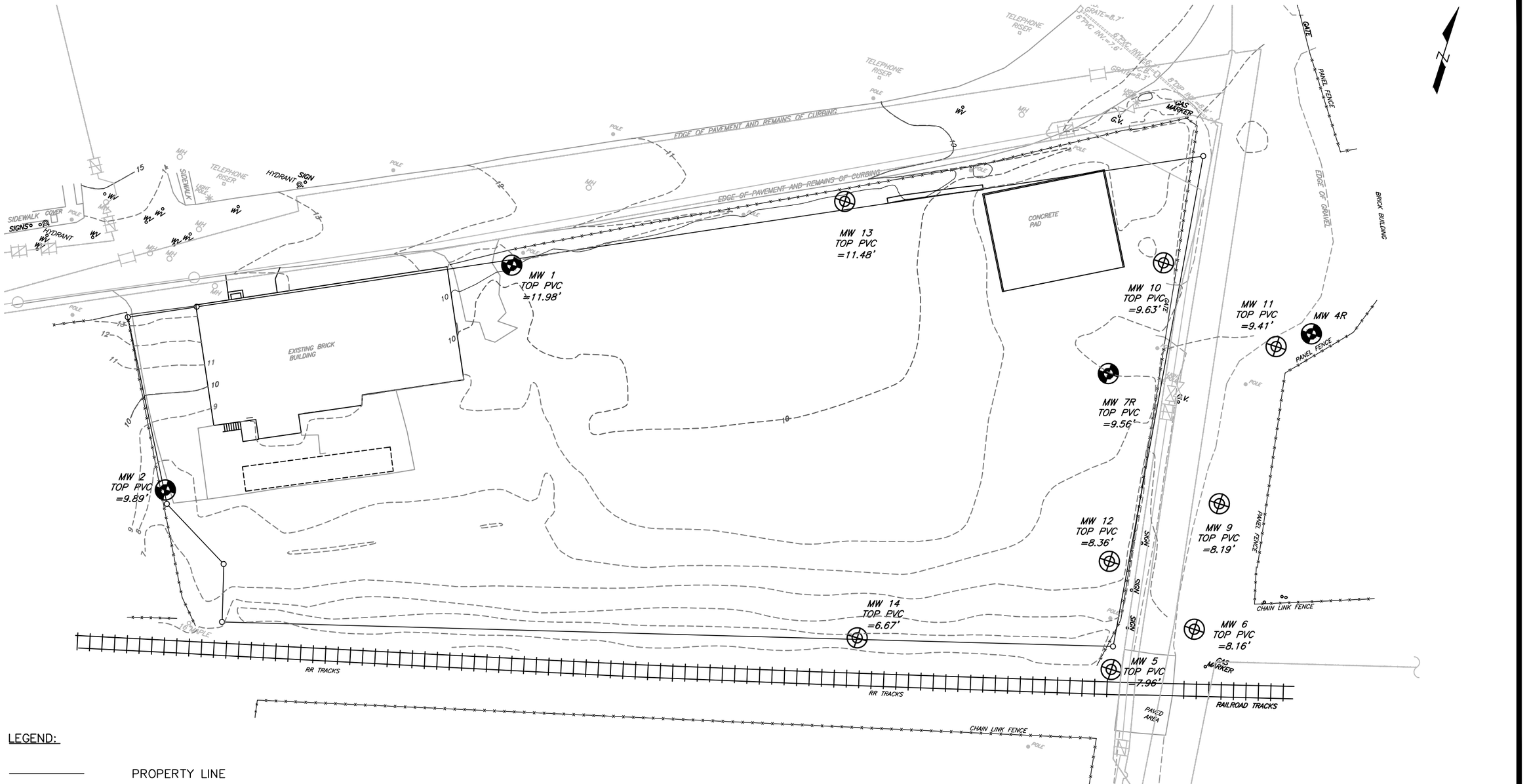
Sterling Environmental Engineering, P.C.
24 Wade Road ♦ Latham, New York 12110

ORC TREATMENT
INJECTION POINTS
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NY

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
27023	04/12/2016	1" = 30'	27023053	3



LEGEND:

- PROPERTY LINE
- CONTOUR
- EXISTING MONITORING WELL
- DECOMMISSIONED MONITORING WELL

NOTES:
1. MW# 1, 2, 4R, AND 7R DECOMMISSIONED ON OR ABOUT 1/19/2016.
2. MW-10 WAS DAMAGED BETWEEN 2/11/2016 AND 2/18/2016 AND REPAIRED ON 4/29/2016.

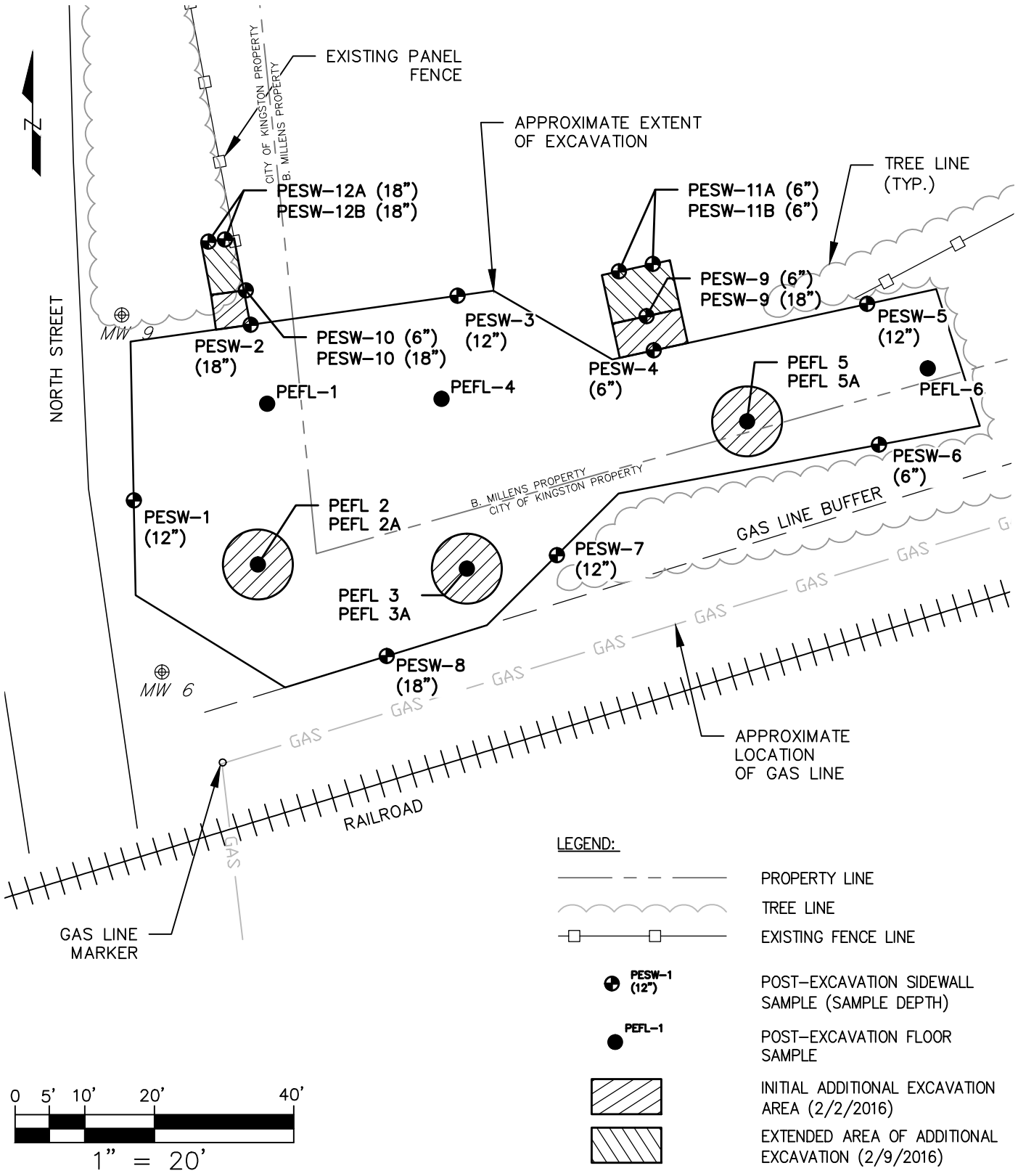
MAP REFERENCE: BASEMAP SURVEY BY RICHARD PAUL HANBACK P.L.S. DATED NOVEMBER 19, 2015
GAS MAIN LOCATION FROM CENTRAL HUDSON KINGSTON DISTRICT MAPS, SHEETS 5 AND 6 LAST REVISED MAY, 7 2013

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road ♦ Latham, New York 12110

WELL LOCATION MAP
B. MILLENS & SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	27023	DATE:	04/12/2016	SCALE:	1" = 40'	DWG. NO.	27023103	FIGURE	4

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023103_F-4 - Well Location Map (CCR).dwg SWEETT 6/6/2016 2:46 PM



MAP REFERENCE: SITE PLAN; MILLENS STAGING AREA BY MJ ENGINEERING AND LAND SURVEYING DATED MAY 18, 2010.

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road ♦ Latham, New York 12110

END POINT SAMPLE LOCATIONS
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	27023	DATE:	04/12/2016	SCALE:	1" = 20'	DWG. NO.	27023054	FIGURE	5

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023054_F-4 - Sampling Record Plan SWEETT 4/26/2016 1:32 PM

APPENDIX A

SURVEY MAP, METES AND BOUNDS

NOTES:

THIS MAP IS CERTIFIED TO:
BARNEY MILLENS
B. MILLENS AND SONS, INC.

TAX GRID # 510800-56.36-1-15 B. MILLENS AND SONS, INC.
TAX GRID # 510800-56.36-1-16 BARNEY MILLENS
TAX GRID # 510800-56.36-1-17 BARNEY MILLENS

SURVEY SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.

REFERENCE DEED
LIBER 1246, PAGE 1108 BARNEY MILLENS
LIBER 1182, PAGE 475 BARNEY MILLENS
LIBER 1246, PAGE 1108 B. MILLENS AND SONS, INC.

TOTAL AREA = 1.46 ACRES
63581.28 SQUARE FEET

NOT ALL TREES ARE SHOWN HEREON.

VERTICAL DATUM IS NAVD 88.

ONE FOOT CONTOUR INTERVAL.

I HEREBY CERTIFY THAT THIS SURVEY MAP WAS PREPARED BY ME AND WAS MADE FROM AN ACTUAL FIELD SURVEY COMPLETED BY ME ON NOVEMBER 24, 2015.

SURVEYED FROM RECORD DESCRIPTIONS AND AS IN POSSESSION.

ACCEPTANCE BY ANY CODE ENFORCEMENT OFFICER OF ANY COPIES OF THIS SURVEY MAP THAT DO NOT CONTAIN THE SURVEYOR'S SIGNATURE AND EMBOSSED SEAL IS A VIOLATION OF ARTICLE 145 – SECTION 7209, 1., A. OF THE NEW YORK STATE EDUCATION LAW.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

ONLY SURVEY MAPS WITH THE LAND SURVEYOR'S EMBOSSED SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE SURVEYOR'S ORIGINAL WORK AND OPINION.

CERTIFICATIONS ON THIS SURVEY MAP SIGNIFY THAT THE MAP WAS PREPARED IN ACCORDANCE WITH CURRENT OR EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE N.Y.S. ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC. THE CERTIFICATION IS LIMITED TO PERSONS FOR WHOM THE SURVEY MAP IS PREPARED, OR CERTIFIED TO ON THIS SURVEY MAP.

THE CERTIFICATIONS HEREIN ARE NOT TRANSFERABLE.

THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED. IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATION.

SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

SILT FENCE SHOWN HEREON IS TO BE REMOVED.

INFRASTRUCTURE ASSOCIATED WITH UTILITY PAINT SHOWN HEREON IS NOT FIELD VERIFIED. NOT ALL PAINT IS SHOWN.

LEGEND OF SYMBOLS

NO PHYSICAL BOUNDS
STONEWALL
CHAIN LINK FENCE
STONEWALL REMAINS
WIRE FENCE REMAINS
STOCKADE FENCE
UTILITY POLE
OVERHEAD UTILITY WIRES
LIGHT POLE
CULVERT
MONITOR WELL
CONTOUR INDEX
CONTOUR
TAX PARCEL LINES
WATER VALVE
CATCH BASIN
FIRE HYDRANT
ELECTRIC BOX
SIGNS
TELEPHONE BOX
TREE

LIST OF ABBREVIATIONS

I.R.S. = IRON ROD SET
W.V. = WATER VALVE
CONC. = CONCRETE
COV. = COVER
RET. = RETAINING
ELEC. = ELECTRIC
MW = MONITOR WELL
D.I.P. = DUCTILE IRON PIPE
EASE. = EASEMENT
P.V.C. = POLYVINYL CHLORIDE
APPROX. = APPROXIMATE
A.C. = AIR CONDITIONER
O.H. = OVERHEAD
WRS. = OVERHEAD WIRES
CB = CATCH BASIN
INV. = INVERT
MH = MANHOLE
GV = GAS VALVE
DOC. = DOCUMENT

N.Y.S. GRID EAST
DATUM NAVD88
SCALE 1" = 20'

A BOUNDARY LINE
AND
AS-BUILT SURVEY MAP
PREPARED FOR
BARNEY MILLENS
AND
B. MILLENS AND SONS, INC.

SITUATED IN THE
CITY OF KINGSTON ULSTER COUNTY, N.Y.
SCALE 1" = 20' APRIL 15, 2016

PREPARED BY
RICHARD PAUL HANBACK
N.Y.S. LAND SURVEYOR
191 NORTON ROAD
RED HOOK NEW YORK 12571
{PHONE} 845 - 758 - 4177
LEGENDLANDSURVEYING.COM
Hanback@frontiernet.net

APPENDIX B

REMEDIATION RELATED PERMITS AND APPROVALS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

DEC 0 3 2015

Richard Sher
B. Millens & Sons, Inc.
P.O. Box 8031
Kingston, NY 12401

Re: Underground Injection Control (UIC) Program Regulation
B. Millens & Sons, Inc. (**Reference UICID: 16NY11199008**)
230/290 East Strand Street
Kingston, NY 12401
Ulster County
Authorization to Inject

Dear Mr. Sher:

This letter serves to inform you that the U.S. Environmental Protection Agency is in receipt of inventory information addressing wells authorized by rule located at the above-referenced facility in accordance with 40 Code of Federal Regulations (CFR) §144.26. The operation of fifty (50) Underground Injection Control wells to inject oxygen releasing compound to remediate VOCs in groundwater (the VOCs of concern are benzene and methyl tert-butyl ether (MTBE)) at NYSDEC BCP Site No. 356030 is authorized by rule, pursuant to 40 CFR §144.24.

Should any conditions change in the operation of any of the wells listed above (such as injectate composition, closure of the well, injection of cooling water greater than 150 degrees Fahrenheit, construction of additional wells, etc.) you are required to notify this office within five (5) days. Any accidental spills into a well should be reported within twenty-four (24) hours after the event. Change in operation information should be addressed to:

Nicole Foley Kraft, Chief
Groundwater Compliance Section
United States Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
Re: 16NY11199008
Attn: Robert Ferri

Should you own or operate **other** facilities using underground injection wells, please use the enclosed inventory form (EPA Form 7520-16) and instructions, copy for multiple facilities, and submit them to the address listed above. The form can also be found on the internet at:

http://www2.epa.gov/sites/production/files/2015-10/documents/7520-16_508c.pdf

Failure to respond to this letter truthfully and accurately within the time provided may subject you to sanctions authorized by federal law. Please also note that all information submitted by you may be used in an administrative, civil judicial, or criminal action. In addition, making a knowing submission of materially false information to the U.S. Government may be a criminal offense.

Should you have any questions, please contact Robert Ferri of my staff at (212) 637-4227 or ferri.robert@epa.gov.

Sincerely,

Nicole Foley Kraft, Chief
Groundwater Compliance Section

Enclosure

cc: Thomas Rudolph, P.E., Regional Water Engineer
NYSDEC, Region 3
100 Hillside Avenue, Suite 1W
White Plains, NY 10603

Ed Moore, Supervisor
NYSDEC, Region 3 Division of Env. Remediation
21 South Putt Corners Road
New Paltz, NY 12561

Carol Smith, M.D., M.P.H.
Ulster County Health Dept.
300 Flatbush Avenue
Kingston, NY 12401

Mark P. Millspaugh, P.E.
Sterling Environmental Engineering, P.C.
24 Wase Road
Latham, NY 12110

USEPA REGION II SUPPLEMENTAL INSTRUCTIONS FOR COMPLETING INVENTORY OF INJECTION WELLS

EPA FORM 7520-16 (Rev. 8-01)

SECTION 2. FACILITY ID NUMBER: Leave blank. EPA will assign an ID number.

SECTION 3. TRANSACTION TYPE: Check either First Time Entry or Entry Change. If this is the first time you have submitted this form for your injection wells(s), check First Time Entry and fill in all the appropriate information. If you are modifying information you sent in before, check Entry Change, fill in the Facility Name and Location and fill in the information that has changed. (Note: If the facility name has changed, in the blank space in the upper left hand corner write the prior facility name under which the form was first submitted, and the date it was submitted.)

SECTION 4. FACILITY NAME AND LOCATION: If you know the latitude and longitude of your facility, fill in line 4C and 4D. You do not need to fill in 4E, Township/Range. If you know the Numeric County Code, fill in line 4I, otherwise just write in the name of the County.

SECTION 5. LEGAL CONTACT: Under 5A, if the Legal Contact you are identifying owns the land, check Owner. If the Legal Contact owns and/or operates the business but someone else owns the land, check Operator. Under 5I, "Private" means privately owned. "Public" means owned by local/municipal government. "State" and Federal" mean owned by state/federal government.

SECTION 6. WELL INFORMATION: Under 6A CLASS AND TYPE, use the attached table "USEPA Region II List of Class V Injection Well Types" to determine the **CLASS V** "TYPE". Enter the appropriate Type Code in 6A (the Type Code does not have to fit within the two boxes on the Inventory Form). Select the Class V well type(s) that most accurately fit the well(s) at your facility. When reviewing the attached table and making your determination, be sure to consider all of the fluids entering the well or having the potential to enter the well. For example, Storm Water Drainage Wells located in industrial areas which are susceptible to spills, leaks or other chemical discharges are inventoried as Industrial Drainage Wells. If Cesspools and Septic Systems are receiving fluids other than sanitary waste (human excreta), that should be noted in the Additional Information below.

IMPORTANT: ADDITIONAL INFORMATION

In order to ensure that the **Class V** Well(s) at your facility are accurately inventoried you must also submit on a separate piece of paper: (1) a brief description characterizing your facility and the types of activities conducted; (2) a brief description of what you use each of your injection well(s) for; (3) a brief description of the types of fluids that enter, or have the potential to enter, each of your injection well(s). (Note: wells with the same information may be grouped).

If you require assistance, please contact EPA Region II at (212) 637-3093.

USEPA REGION II LIST OF
CLASS V INJECTION WELL TYPES

TYPE CODE	NAME	DESCRIPTION
	INDUSTRIAL/COMMERCIAL/UTILITY DISPOSAL WELLS	
5X28	MOTOR VEHICLE WASTE DISPOSAL WELLS	- wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work.
5W20	INDUSTRIAL PROCESS WATER & WASTE DISPOSAL WELLS	- used to dispose of a wide variety of wastes and wastewater from industrial, commercial, or utility processes. Industries include refineries, chemical plants, smelters, pharmaceutical plants, laundromats and dry cleaners, tanneries, carwashes, laboratories, funeral homes, etc. Specify industry and waste stream.
5A19	COOLING WATER RETURN FLOW WELLS	- used to inject water which was used in a cooling process.
	DRAINAGE WELLS	
5D4	INDUSTRIAL DRAINAGE WELL	- wells located in industrial areas which primarily receive storm water runoff but are susceptible to spills, leaks, or other chemical discharges.
5D2	STORM WATER DRAINAGE WELLS	- receive storm water runoff from paved areas, including parking lots, streets, residential subdivisions, building roofs, highways, etc.
5F1	AGRICULTURAL DRAINAGE WELLS	- receive irrigation tailwaters, other field drainage, animal yard, feedlot, or dairy runoff, etc.
5D3	IMPROVED SINKHOLES	- receive storm water runoff from developments located in karst topographic areas.
5G30	SPECIAL DRAINAGE WELLS	- used for disposing water from sources other than direct precipitation–such as landslide control drainage wells, potable water tank overflow drainage wells, swimming pool drainage wells, and lake level control drainage wells.

DOMESTIC WASTEWATER DISPOSAL WELLS		
5W9	UNTREATED SEWAGE WASTE DISPOSAL	- receive raw sewage wastes from pumping trucks or other vehicles which collect such wastes from single or multiple sources. (No treatment)
5W10	LARGE CAPACITY CESSPOOLS	- large capacity cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes, containing human excreta, which have an open bottom and sometimes perforated sides. Includes non-residential cesspools which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential cesspools.
5W11	SEPTIC SYSTEM (UNDIFFERENTIAT-ED DISPOSAL METHOD)	- used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank to an undetermined final discharge point. Includes non-residential septic systems which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential septic systems. (Primary Treatment)
5W31	SEPTIC SYSTEMS (WELL DISPOSAL METHOD)	- used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank to a well-- examples of wells include dry wells, seepage pits, cavitettes, etc. The largest surface dimension is less than or equal to the depth dimension. Includes non-residential septic systems which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential septic systems. (Primary Treatment)
5W32	SEPTIC SYSTEMS (DRAIN FIELD DISPOSAL METHOD)	- used to inject the waste or effluent from a multiple dwelling, business establishment , community or regional business establishment septic tank to a drainfield--examples of drainfields include drain or tile lines, and trenches. Includes non-residential septic systems which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential septic systems. (Primary Treatment)
5W12	DOMESTIC WASTEWATER TREATMENT PLANT EFFLUENT DISPOSAL	- dispose of treated sewage or domestic effluent from small package plants up to large municipal treatment plants. Final discharge points may include drywells or leachfields. (Secondary or further treatment)

GEOTHERMAL REINJECTION WELLS		
5A5	ELECTRIC POWER REINJECTION WELLS	- reinject geothermal fluids used to generate electric power.
5A6	DIRECT HEAT REINJECTION WELLS	- reinject geothermal fluids used to provide heat for large buildings or developments.
5A7	HEAT/PUMP/AIR CONDITIONING RETURN FLOW WELLS	- reinject groundwater used to heat or cool a building in a heat pump system.
5A8	GROUNDWATER AQUACULTURE RETURN FLOW WELLS	- reinject groundwater or geothermal fluids used to support aquaculture. Non-geothermal aquaculture disposal wells are also included in this category (e.g., Marine aquariums in Hawaii use relatively cool sea water).
RECHARGE WELLS		
5R21	AQUIFER RECHARGE WELLS	- used to recharge depleted aquifers and may inject fluids from a variety of sources such as lakes, streams, domestic wastewater treatment plants, other aquifers, etc.
5B22	SALINE WATER INTRUSION BARRIER WELLS	- used to inject water into fresh water aquifers to prevent intrusion of salt water into fresh water aquifers.
5S23	SUBSIDENCE CONTROL WELLS	- used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with overdraft of fresh water and not used for the purpose of oil or natural gas production.
OIL FIELD PRODUCTION WASTE DISPOSAL WELLS		
5X17	AIR SCRUBBER WASTE DISPOSAL WELLS	- inject waste from air scrubbers used to remove sulfur from crude oil which is burned in steam generation for thermal oil recovery projects. (If injection is used directly for enhanced recovery and not just disposal it is a Class II well.)
5X18	WATER SOFTENER REGENERATION BRINE DISPOSAL WELLS	- inject regeneration waste from water softeners which are used to improve the quality of brines used for enhanced recovery. (If injection is used directly for enhanced recovery and not just disposal it is a Class II well.)

MINERAL AND FOSSIL FUEL RECOVERY RELATED WELLS		
5X13	MINING, SAND, OR OTHER BACKFILL WELLS	- used to inject a mixture of water and sand, mill tailings, and other solids into mined out portions of subsurface mines whether what is injected is radioactive waste or not. Also includes special wells used to control mine fires and acid mine drainage wells.
5X14	SOLUTION MINING WELLS	- used for in situ solution mining in conventional mines, such as slopes leaching.
5X15	IN-SITU FOSSIL FUEL RECOVERY WELLS	- used for in situ recovery of coal, lignite, oil shale, and tar sands.
5X16	SPENT BRINE RETURN FLOW WELLS	- used to reinject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts.
MISCELLANEOUS WELLS		
5X25	EXPERIMENTAL TECHNOLOGY WELL	- wells used in experimental or unproven technologies such as pilot scale in situ solution mining wells in previously unmined areas.
5X26	AQUIFER REMEDIATION RELATED WELLS	- wells used to prevent, control, or remediate aquifer pollution, including but not limited to Superfund sites.
5X29	ABANDONED DRINKING WATER WELLS	- used for disposal of fluids. Specify well purpose and injected fluids.
5X27	OTHER WELLS	- any other unspecified Class V wells. Specify well type/purpose and injected fluids.

SOURCE: Prepared by EPA Region II. Based on 1987 *Report to Congress* on Class V Wells; and 40 C.F.R. §144.81.

May 11, 2004 (3:47pm)G:/User/Share/DECADIV\DECA-WCB\GWCS\Well Class Type Table for Inventory Form5.wpd

Type or print all information. See reverse for instructions.

OMB No. 2040-0042 Approval Expires 11/30/2014

INVENTORY OF INJECTION WELLS

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF GROUND WATER AND DRINKING WATER

(This information is collected under the authority of the Safe Drinking Water Act)

1. DATE PREPARED *(Year, Month, Day)*

2. FACILITY ID NUMBER

3. TRANSACTION TYPE *(Please mark one of the following)*

- ☐ Deletion
- ☐ First Time Entry
- ☐ Entry Change
- ☐ Replacement

4. FACILITY NAME AND LOCATION

A. NAME *(last, first, and middle initial)*

B. STREET ADDRESS/ROUTE NUMBER

C. LATITUDE — DEG | MIN | SEC

D. LONGITUDE — DEG | MIN | SEC

E. TOWNSHIP/RANGE

TOWNSHIP	RANGE	SECT	1/4 SECT

F. CITY/TOWN

G. STATE

H. ZIP CODE

I. NUMERIC COUNTY CODE

J. INDIAN LAND *(mark "x")* ☐ Yes ☐ No

5. LEGAL CONTACT:

A. TYPE *(mark "x")* ☐ Owner ☐ Operator

B. NAME *(last, first, and middle initial)*

C. PHONE *(area code and number)*

D. ORGANIZATION

E. STREET/P.O. BOX

F. CITY/TOWN

G. STATE

H. ZIP CODE

I. OWNERSHIP *(mark "x")*

☐ PRIVATE ☐ PUBLIC ☐ SPECIFY OTHER
☐ STATE ☐ FEDERAL

6. WELL INFORMATION:

A. CLASS AND TYPE	B. NUMBER OF WELLS: COMM	B. NUMBER OF WELLS: NON-COMM	C. TOTAL NUMBER OF WELLS	D. WELL OPERATION STATUS: UC	AC	TA	PA	AN
			0					
			0					
			0					
			0					
			0					
			0					
			0					

COMMENTS *(Optional):*

KEY:

DEG = Degree
MIN = Minute
SEC = Second

SECT = Section
1/4 SECT = Quarter Section

COMM = Commercial
NON-COMM = Non-Commercial

AC = Active
UC = Under Construction
TA = Temporarily Abandoned
PA = Permanently Abandoned and Approved by State
AN = Permanently Abandoned and not Approved by State

INSTRUCTIONS AND DEFINITIONS

SECTION 1. DATE PREPARED: Enter date in order of year, month, and day.

SECTION 2. FACILITY ID NUMBER: In the first two spaces, insert the appropriate U.S. Postal Service State Code. In the third space, insert one of the following one letter alphabetic identifiers:

D - DUNS Number,
G - GSA Number, or
S - State Facility Number.

In the remaining spaces, insert the appropriate nine digit DUNS, GSA, or State Facility Number. For example, A Federal facility (GSA - 123456789) located in Virginia would be entered as : VAG123456789.

SECTION 3. TRANSACTION TYPE: Place an "x" in the applicable box. See below for further instructions.

Deletion. Fill in the Facility ID Number.
First Time Entry. Fill in all the appropriate information.
Entry Change. Fill in the Facility ID Number and the information that has changed.
Replacement.

SECTION 4. FACILITY NAME AND LOCATION:

A. **Name.** Fill in the facility's official or legal name.
B. **Street Address.** Self Explanatory.
C. **Latitude.** Enter the facility's latitude (all latitudes assume North Except for American Samoa).
D. **Longitude.** Enter the facility's longitude (all longitudes assume West except Guam).
E. **Township/Range.** Fill in the complete township and range. The first 3 spaces are numerical and the fourth is a letter (N,S,E,W) specifying a compass direction. A township is North or South of the baseline, and a range is East or West of the principal meridian (e.g., 132N, 343W).
F. **City/Town.** Self Explanatory.
G. **State.** Insert the U.S. Postal Service State abbreviation.
H. **Zip Code.** Insert the five digit zip code plus any extension.

SECTION 4. FACILITY NAME & LOCATION (CONT'D.):

I. **Numeric County Code.** Insert the numeric county code from the Federal Information Processing Standards Publication (FIPS Pub 6-1) June 15, 1970, U.S. Department of Commerce, National Bureau of Standards. For Alaska, use the Census Division Code developed by the U.S. Census Bureau.
J. **Indian Land.** Mark an "x" in the appropriate box (Yes or No) to indicate if the facility is located on Indian land.

SECTION 5. LEGAL CONTACT:

A. **Type.** Mark an "x" in the appropriate box to indicate the type of legal contact (Owner or Operator). For wells operated by lease, the operator is the legal contact.
B. **Name.** Self Explanatory.
C. **Phone.** Self Explanatory.
D. **Organization.** If the legal contact is an individual, give the name of the business organization to expedite mail distribution.
E. **Street/P.O. Box.** Self Explanatory.
F. **City/Town.** Self Explanatory.
G. **State.** Insert the U.S. Postal Service State abbreviation.
H. **Zip Code.** Insert the five digit zip code plus any extension.
I. **Ownership.** Place an "x" in the appropriate box to indicate ownership status.

SECTION 6. WELL INFORMATION:

A. **Class and Type.** Fill in the Class and Type of injection wells located at the listed facility. Use the most pertinent code (specified below) to accurately describe each type of injection well. For example, 2R for a Class II Enhanced Recovery Well, or 3M for a Class III Solution Mining Well, etc.
B. **Number of Commercial and Non-Commercial Wells.** Enter the total number of commercial and non-commercial wells for each Class/Type, as applicable.
C. **Total Number of Wells.** Enter the total number of injection wells for each specified Class/Type.
D. **Well Operation Status.** Enter the number of wells for each Class/Type under each operation status (see key on other side).

INJECTION WELL CLASS AND TYPE CODES

CLASS I Industrial, Municipal, and Radioactive Waste Disposal Wells used to inject waste below the lowermost Underground Source of Drinking Water (USDW).

TYPE	1I	Non-Hazardous Industrial Disposal Well.
	1M	Non-Hazardous Municipal Disposal Well.
	1H	Hazardous Waste Disposal Well injecting below the lowermost USDW.
	1R	Radioactive Waste Disposal Well.
	1X	Other Class I Wells.

CLASS II Oil and Gas Production and Storage Related Injection Wells.

TYPE	2A	Annular Disposal Well.
	2D	Produced Fluid Disposal Well.
	2H	Hydrocarbon Storage Well.
	2R	Enhanced Recovery Well.
	2X	Other Class II Wells.

CLASS III Special Process Injection Wells.

TYPE	3G	*In Situ* Gasification Well
	3M	Solution Mining Well.
	3S	Sulfur Mining Well by Frasch Process.
	3T	Geothermal Well.
	3U	Uranium Mining Well.
	3X	Other Class III Wells.

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

TYPE	4H	Hazardous Facility Injection Well.
	4R	Remediation Well at RCRA or CERCLA site.

CLASS V Any Underground Injection Well not included in Classes I through IV.

TYPE	5A	Industrial Well.
	5B	Beneficial Use Well.
	5C	Fluid Return Well.
	5D	Sewage Treatment Effluent Well.
	5E	Cesspools (non-domestic).
	5F	Septic Systems.
	5G	Experimental Technology Well.
	5H	Drainage Well.
	5I	Mine Backfill Well.
	5J	Waste Discharge Well.

LICENSE AGREEMENT

THIS LICENSE, made as of this 30th day of December 2015 granted by **CENTRAL HUDSON GAS & ELECTRIC CORPORATION** having its principal office at 284 South Avenue Poughkeepsie, NY 12601 (hereinafter referred to as "Central Hudson") to Millens Metal Recycling of Kingston, LLC with an address 4 Kieffer Lane, Kingston, NY 12401, (hereinafter referred to as "Licensee").

Licensee has requested that Central Hudson Gas & Electric Corporation ("Central Hudson") allow Licensee to have access to a specific portion of Central Hudson's gas transmission line easement corridor for the specific purpose(s) set forth below. Licensee has represented to Central Hudson that Licensee will exercise due care in conducting the specific purpose(s) allowed by this License.

Permission and license ("License") has been granted to Licensee, from the owner(s) of premises (as defined below) as per the Limited Property Access Agreement by and between The City of Kingston, and Millens Recycling of Kingston, LLC, and The Trolley Museum of New York, dated December 9, 2015. **The Premises is** located in the City of Kingston, County of Ulster State of New York, more particularly described as Ulster County Real Property Tax Map Parcel Section 57.29 Block 1 Lot 35. **Central Hudson hereby grants permission and a temporary license to Licensee** to use a portion of said premises included within the confines of an easement acquired by Central Hudson from New York Central Rail Road Company by instrument dated November 15, 1956 and recorded on March 6, 1957 in the Office of the Clerk of the County of Ulster in Liber 994 of Deeds at page 238.

This Easement is further identified by Central Hudson as Right of Way # 270 on the AH gas transmission line. The portion of the Easement to which this License applies is shown and identified on the plan attached as Exhibit A, and the License granted herein shall not relate or apply to any other portion of the Premises. The portion of the Premises to which the License relates is hereinafter referred to as the "License Area."

Licensee's use of the License Area pursuant to this License is limited to the following purpose(s): To **excavate impacted surface soils above transmission pipe approximate depth of excavation to be 12 (twelve) to 24 inches** to be located within the Easement (such excavation hereinafter referred to as the "Permitted Structure").

This License for the Permitted Structure is granted subject to the following terms and conditions:

1. This License is a non-exclusive License and shall in no way be construed to contravene, limit or restrict the right, at all times, of Central Hudson to have access to and the use of the Premises, Easement and License Area for any reason whatsoever. This shall include the right to perform routine and emergency maintenance (including trimming, cutting and mowing of vegetation) and the right to inspect the Easement at its convenience

through foot, vehicular or aerial patrols without prior written notification to Licensee, as well as the exercise of any other rights granted pursuant to the Easement.

2. Unless previously revoked by Central Hudson, the term of this License for the Permitted Use shall commence on the date first set forth below as the date of Licensee's acceptance, and shall continue for a period of **two (2) months**. Upon written notification to Central Hudson at least thirty (30) days prior to the termination date of this Agreement; Licensee shall have the option to extend this Agreement. Extensions shall not be for a term longer than **two (2) months** and shall be subject to and in accordance with the terms and conditions as originally set forth in this License.

   Notwithstanding the foregoing, this License shall be revocable at will by Central Hudson, its successors or assigns upon 30 days written notice to Licensee. This License may be terminated by Licensee at any time upon written notice to Central Hudson. Upon termination or revocation of this License, Central Hudson, at its discretion, may require Licensee to return the License Area to its pre-encroachment and pre-permitted use condition ("Original Condition"). All costs involved in restoring the License Area to its Original Condition (e.g., removing the Permitted Structure and/or any other structures, encroachments and/or obstructions shall be borne by Licensee). Specifically, within thirty (30) days of the date of written notice of revocation by Central Hudson and/or termination by Licensee, Licensee shall remove the Permitted Structure from the License Area at Licensee's sole cost and expense and shall restore the easement area to its Original Condition. If Licensee shall transfer, convey, sell or change title to the Premises, the Permitted Structure and all other structures, encroachments and/or obstructions located within the Easement Area shall, on or before the date of any such transfer, conveyance, sale or change of title, be removed by Licensee at Licensee's sole cost and expense.

3. The Permitted Structure shall not be structurally changed or altered, nor shall it be enlarged, enhanced or expanded, nor shall it be relocated to any other site within the Easement without in each instance Licensee securing the prior written consent of Central Hudson. Should the Permitted Structure be dismantled, demolished, destroyed and/or substantially damaged or destroyed, it shall not be restored, rebuilt or reconstructed without the prior written consent of Central Hudson. If at any time the Permitted Structure is substantially damaged or destroyed and Central Hudson fails or refuses to grant to Licensee consent to have the Permitted Structure restored, rebuilt or reconstructed, then Licensee shall, at Licensee's sole cost and expense, promptly dismantle the Permitted Structure, remove it from the License Area, and restore the License Area to its Original Condition. The consents of Central Hudson as provided for in this paragraph 3, may be granted or denied in Central Hudson's sole discretion for any reason or no reason.

4. This License shall not be assigned by Licensee nor sub-licensed by Licensee, without the prior written consent of Central Hudson, which such consent may be granted or denied in Central Hudson's sole discretion.

5. The use of the License Area pursuant to this License shall not interfere with, obstruct or endanger Central Hudson's use of the Premises, Easement or License Area in any way whatsoever. The determination of whether any use of the License Area is interfering with, obstructing or endangering Central Hudson's use of the Premises, Easement, or License Area shall be made by Central Hudson in its sole discretion and any such decision by Central Hudson shall be binding on Licensee.
6. The Licensee shall furnish and maintain, for the duration of this License, a homeowners insurance policy naming Central Hudson Gas & Electric Corporation as an additional insured

7. All costs and expenses associated with the use, operation, maintenance and removal of the Permitted Structure shall be borne by and be the sole responsibility of Licensee.

8. Licensee and Licensee's acknowledge that Central Hudson's gas transmission line traverses through this easement and in that regard, Licensee shall adhere, where applicable, to the specifications and conditions as contained in the attached Appendix A

9. In the event of a default by Licensee of any of its obligations pursuant to the terms and provisions of this License, including the failure to remove the Permitted Structure and/or any other structure, obstruction or encroachments placed within the confines of the Easement, upon demand by Central Hudson to remove same and/or after termination and/or revocation of this License in accordance with paragraph "2" thereof, Central Hudson shall be entitled to (i) exercise self-help in that Central Hudson may enter the Premises and License Area and disassemble and remove the Permitted Structure, at the cost and expense of Licensee, and place the disassembled Permitted Structure (other than any fixed foundation) on any portion of the Premises located outside the Easement, or (ii) seek an immediate restraining order and injunction enjoining and directing Licensee, its successors or assigns to comply with the terms and provisions of this License including the removal of the Permitted Structure and/or any other obstruction, encroachment or structure from the easement area, at Licensee's sole cost and expense. Licensee agrees that a default in the terms and provisions of this covenant, and particularly, its obligation to remove the Permitted Structure and/or other obstruction, encroachment or structure after revocation and/or termination in accordance with paragraph "2" hereof, will cause Central Hudson irreparable injury and harm, no adequate remedy at law exists and that Central Hudson shall be entitled to enjoin and restrain such default and failure to remove. The right of Central Hudson to pursue the self-help remedy or to seek a restraining order and/or injunction in accordance with this paragraph, shall be in addition to any and all other rights or remedies Central Hudson may have at law, or in equity by statute or otherwise, and all such rights shall be cumulative.

10. Licensee hereby agrees that Central Hudson owes no duty to Licensee or Licensee's invitees to keep the Permitted Structure, Premises, Easement or License Area safe, that Central Hudson does not give any assurance that the Permitted Structure, Premises, Easement or License Area are safe, and that Central Hudson is not responsible or liable

for any injury or death to the person (or damage to any property) using or entering the Permitted Structure, Premises, Easement or License Area.

11. To the fullest extent permitted by law, Licensee hereby agrees to indemnify, defend (at the option of Central Hudson) and hold harmless Central Hudson, its directors, officers, shareholders, agents, servants, employees and contractors from and against any and all losses, charges, claims, demands, suits, actions, costs, expenses (including reasonable attorney's fees), damages, causes of action, judgments, and liabilities for personal injury (including death to any person) and/or for damage or injury to the property of any person (including Central Hudson's property) incident to or which may arise from or is alleged to arise in any manner from the exercise of Licensee's rights under this License or in any manner related to the use of the Permitted Use, Property or License Area by Licensee or any person authorized, hired or employed by Licensee or any person entering the Property or License Area with Licensee's knowledge or permission or using the facilities thereon, and that such indemnification shall apply irrespective of any partial negligence or alleged partial negligence on the part of Central Hudson or its employees, agents or contractors, except to the extent, if any, that the provisions of applicable law or statute prohibit Licensee from indemnifying Central Hudson by reason of the negligence of Central Hudson, its employees, agents or contractors. Licensee shall nevertheless remain liable hereunder on account of the negligence of a party other than Central Hudson, whether or not Licensee is partially negligent. Licensee shall not, however, be obligated to indemnify and hold harmless Central Hudson for damages to the extent such damages are determined to be solely caused by Central Hudson's negligence. In the event Central Hudson requests that Licensee provide the defense of any such matter as provided for above, Central Hudson shall have a reasonable right of approval with respect to Licensee's choice of attorneys.

12. Should Licensee intend or be contractually bound to transfer, convey, sell or change title to the Premises, then thirty (30) days prior to any such transfer, conveyance, sale or change of title, Licensee shall notify Central Hudson, in writing, of such intended transfer, conveyance, sale or change of title and provide the name and address of the intended transferee, purchaser and/or successor. Licensee agrees and acknowledges that Central Hudson shall have the right to contact or communicate with any such transferee, purchaser and/or successor as to matters relating to the Permitted Structure and this License.

13. This License and the terms, provisions, benefits and rights contained herein shall inure to the benefit of Central Hudson, its successors, transferees and/or assigns. Central Hudson shall have the right to record this Agreement in the Office of the County Clerk for Ulster County, New York. The cost of any such recording shall be paid by Central Hudson.

Please indicate Licensee's acceptance of the above terms and conditions by signing and having notarized both originals and returning them to Central Hudson. One License Agreement executed by Central Hudson will be returned to you.

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

By: Jessica D. Caserto
~~Anthony Campagiorni~~ Jessica D. Caserto
~~Vice President - Business Development & Governmental Affairs~~ Director - Real Property Services

The foregoing License and the terms and conditions set forth herein are hereby accepted this 30th day of December 2015.

BY: Richard Shur
Print Name: Richard Shur
Title: ~~Owner~~ Vice President

ACKNOWLEDGMENT OF LICENSOR:

STATE OF NEW YORK)
) SS:
COUNTY OF DUTCHESS)

On the ~~30th~~ 4th day of January, 20~~15~~ 16 before me, the undersigned, a Notary Public in and for said State, personally appeared Jessica D. Casello personally known to me or proved to me on the basis of satisfactory evidence to be the individual described whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the persons upon behalf of which the individual acted, executed the instrument.

Notary Public

LUKE E. MANGELS
Notary Public, State of New York
No. 01MA6276168
Qualified in Dutchess County
Commission Expires
2/11/17

ACKNOWLEDGMENT OF LICENSEE:

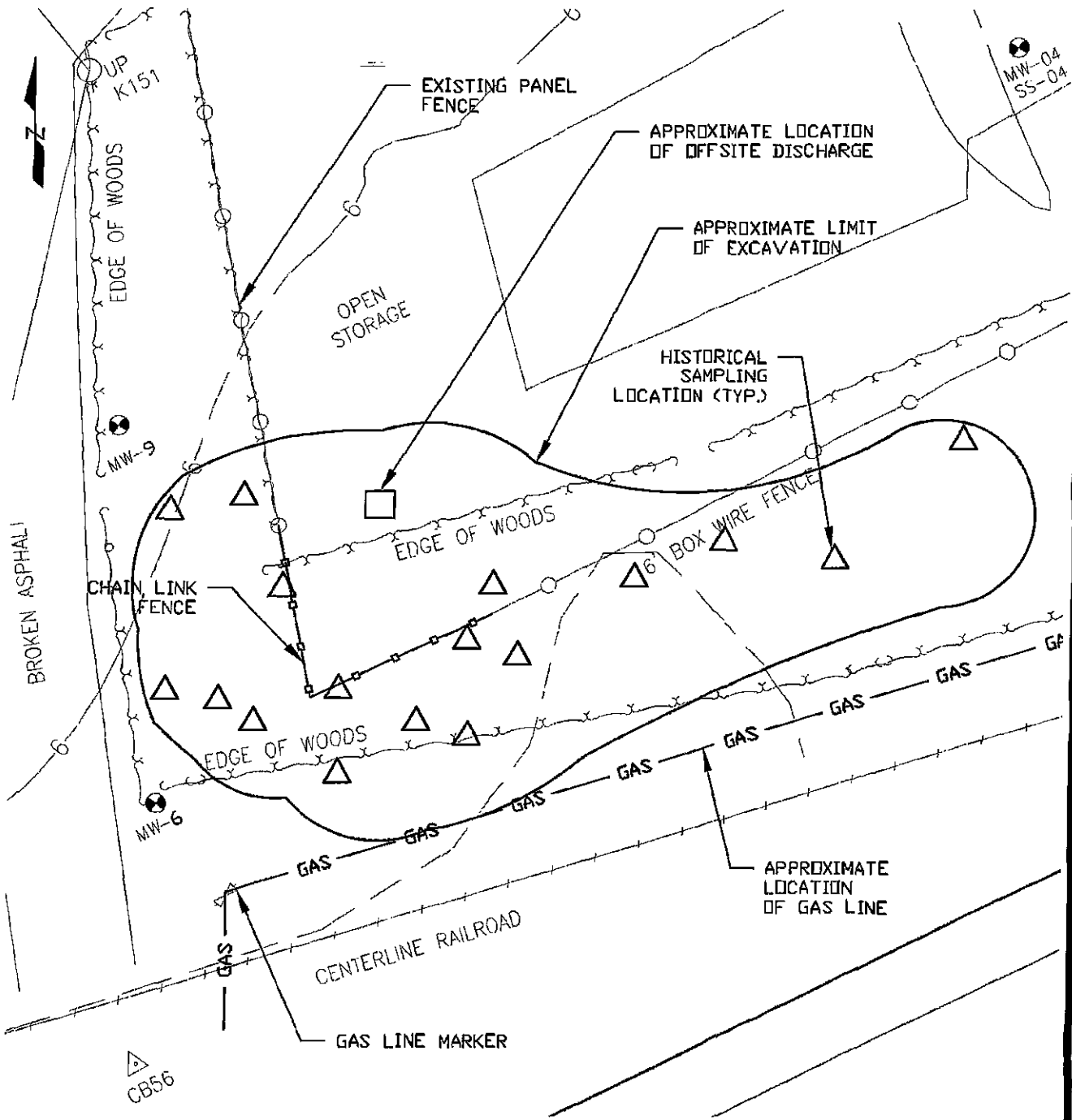
STATE OF NEW YORK)
) SS:
COUNTY OF Ulster)

On the 30th day of December 2015 before me, the undersigned, a Notary Public in and for said State, personally appeared Richard Sher personally known to me or proved to me on the basis of satisfactory evidence to be the individual described whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the persons upon behalf of which the individual acted, executed the instrument.

ASHLEY L. RANIERI NOTARY PUBLIC STATE OF NEW YORK NO. 01RA6326938 QUALIFIED IN DUTCHESS COUNTY COMM. EXP. 06/29/2019

Ashley L. Ranieri
Notary Public

"Exhibit A"



MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, AERIAL PHOTOGRAPHY CIRCA 2009. SITE PLAN; MILLENS STAGING AREA BY MJ ENGINEERING AND LAND SURVEYING DATED MAY 18, 2010

NOTES: ORIGINAL GRADES TO BE RESTORED FOLLOWING EXCAVATION.

FIGURE 1

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

OFF-SITE EXCAVATION AREA
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NY

PROJ. No.:	27023	DATE:	11/12/15	SCALE:	1" = 20'	DWG. NO.	27023020	FIGURE	1

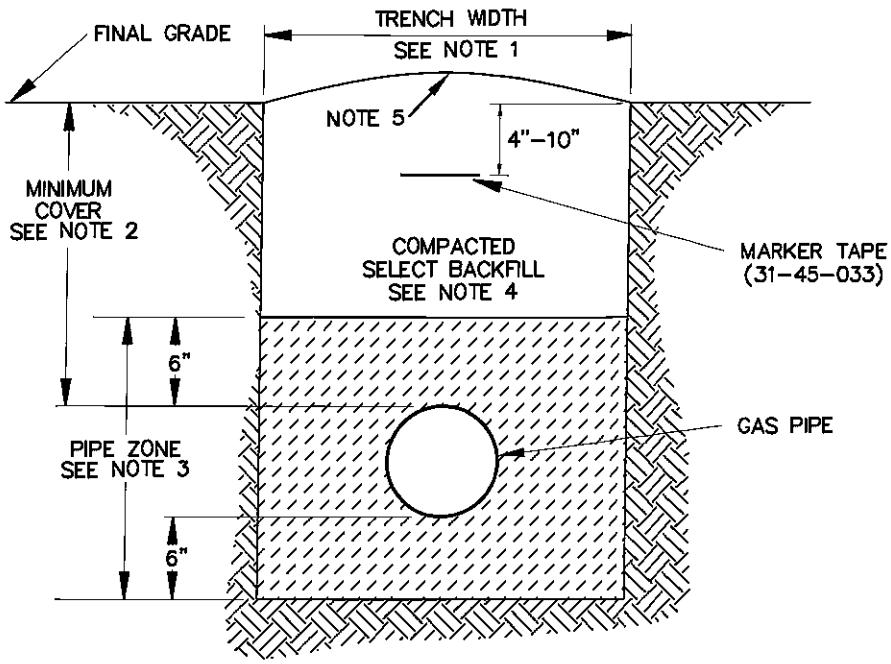
S:\Drawings\27023 - Millens Scrap Metal Recycling\27023020 - Figure 1 - Central Hudson SWEET 11/12/2015 12:32 PM

Appendix A
CHG&E Requirements
For Construction Near the AH Gas Transmission Line

Central Hudson requires a minimum of twelve inches of clearance between the gas main and any new utility as shown on Gas Construction Standard G.01.03.004.0 (see attached). Typically, our gas mains have at least three feet of cover. However, it is uncertain at this time the exact depth of pipe due to erosion or other construction activities since this line's original installation.

Before any excavation is performed, the site contractor must follow several requirements:

- Dig Safely NY shall be called for a mark-out request. Central Hudson must be contacted at least 48 hours in advance of when any excavation work will be within 25 feet of the gas transmission line.
- Dig Safely NY may also be called in advance for a "design" mark-out request for verification of pipe location.
- When excavation work will be within 10-feet of the gas transmission line, a Central Hudson representative must be present on site.
- Whenever any gas main is exposed, the Central Hudson representative shall have access to fully inspect the main and perform any required preventive maintenance. The site contractor shall hand clean all trench spoil off the surface of the pipeline.
- A hand dug test hole must be completed within the area of crossing utilities to verify the depth and diameter of the pipe and record for survey purposes to better facilitate the development's design. The excavation depth shall be at least 12-inches below the pipe invert elevation. The excavation width shall be at least 12-inches on either side of the pipeline.
- Central Hudson crews (or their designees) shall be allowed two full days unrestricted by inclement weather to accomplish their inspection, evaluation, and repair work to the exposed pipe. The site contractor shall maintain the excavation as necessary during this period, including maintaining safety fencing around it.
- The marked location of the gas main shall be maintained throughout construction.
- Any exposed sections of gas main must be sufficiently supported as per Gas Construction Standard G.01.07.003.0 (see attached).
- Backfill requirements for the exposed gas main shall follow Gas Construction Standard G.01.03.002.0 (see attached).
- Central Hudson's pipe shall not be damaged. This includes the pipe's coating. Any damage done to the steel or coating shall be repaired immediately by Central Hudson. The site contractor shall be responsible for all costs incurred to complete the repair.
- All costs to perform the work above shall be incurred by the site contractor except for any preventative maintenance of the gas main by Central Hudson.



NOTES:

1. THE MINIMUM TRENCH WIDTH SHALL BE AS FOLLOWS:

PIPE SIZE	TRENCH WIDTH
3/4"–2"	12"
3"–16"	PIPE O.D.+12"

2. MINIMUM DEPTH OF COVER FROM FINAL GRADE TO TOP OF PIPE SHALL BE AS FOLLOWS :

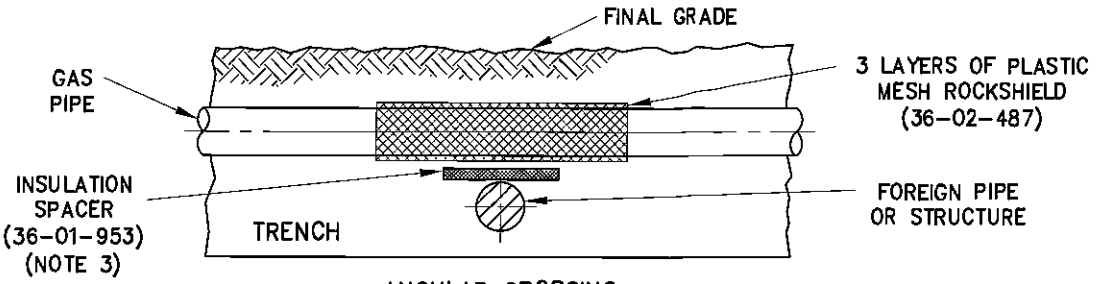
	IN EARTH	IN ROCK
TRANSMISSION MAINS & SERVICES	36"	24"

* OTHER DEPTHS MAY BE REQUIRED BY THE PUBLIC AUTHORITY. FOR NAVIGABLE WATER CROSSINGS, CONSULT WITH GAS & MECHANICAL ENGINEERING.

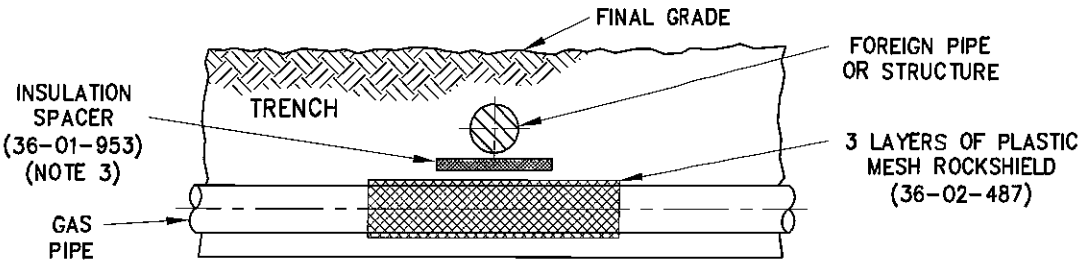
3. SANDPADDING IS REQUIRED IN THE PIPE ZONE. REFER TO GAS CONSTRUCTION STANDARD G 01 03 005.0 FOR DEFINITION OF SAND PAD. IT SHALL BE THOROUGHLY COMPACTED IN 12" LIFTS OR AS REQUIRED BY THE GOVERNING AUTHORITY.
4. COMPACTED SELECT BACKFILL MAY BE ON–SITE MATERIAL PROVIDED IT CONTAINS NO ROCKS OR STONES OVER 6" IN DIAMETER, ROOTS, STUMPS OR CONSTRUCTION DEBRIS. IT SHALL BE THOROUGHLY COMPACTED IN 12" LIFTS OR AS REQUIRED BY THE GOVERNING AUTHORITY.
5. THE BACKFILLED TRENCH SHALL BE CROWNED SLIGHTLY TO ALLOW FOR FUTURE SETTLEMENT.
6. REFER TO GAS CONSTRUCTION STANDARD G 02 01 037.0 TO DETERMINE THE NEED FOR TRENCH SHORING OR SLOPING.
7. FOR MINIMUM CLEARANCES OF PIPE TO UNDERGROUND OBSTRUCTIONS, REFER TO STANDARD G 01 03 004.0.
8. IN STEEP TERRAIN, TRENCH BREAKERS AND EROSION CONTROL MAY BE REQUIRED. CONSULT WITH GAS & MECHANICAL ENGINEERING.

GAS STANDARDS	CENTRAL HUDSON GAS & ELECTRIC CORP.	DATE 8/06
DRAWN. JML CLEAR JEC ENGR. TDH APP. HWS	TRENCHING AND BACKFILL REQUIREMENTS TRANSMISSION PIPING	ISSUE 4 APP. JJB APP. JPL

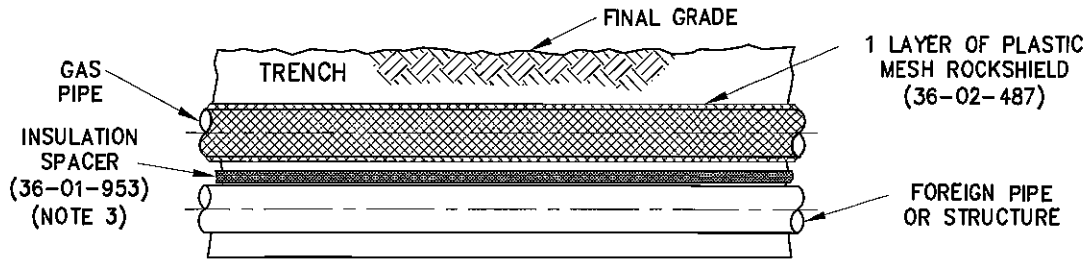
CAD DRAWING
DO NOT REVISE MANUALLY



ANGULAR CROSSING
(ABOVE FOREIGN PIPE OR STRUCTURE)



ANGULAR CROSSING
(BELOW FOREIGN PIPE OR STRUCTURE)



PARALLEL INSTALLATION
(HORIZONTAL OR VERTICAL ARRANGEMENT)

NOTES:

1. ALL GAS TRANSMISSION AND DISTRIBUTION MAINS AND SERVICES SHALL BE CONSTRUCTED WITH A CLEARANCE OF NOT LESS THAN 12", WHENEVER PRACTICAL, FROM ANY SUBSURFACE STRUCTURE NOT DIRECTLY ASSOCIATED WITH THE PIPELINE.
2. WHEN 12" OF CLEARANCE IS NOT PRACTICAL, A MINIMUM CLEARANCE OF 4" SHALL BE MAINTAINED AND THE PIPELINE PROTECTED FROM DAMAGE AS DETAILED ABOVE.
3. AN INSULATION SPACER SHALL BE INSTALLED WITH STEEL PIPE TO PREVENT ELECTRICAL CONTACT WITH STRUCTURE.

GAS STANDARDS	CENTRAL HUDSON GAS & ELECTRIC CORP.	DATE 2/06
DRAWN. JML CLEAR. JEC/LRC ENGR. LRC APP. HWS	PROTECTION OF GAS PIPE FOR BELOW GRADE CLEARANCES 4" TO 12"	ISSUE 3 APP. JJB APP. JPL

CAD DRAWING
DO NOT REVISE MANUALLY

Previously I-A-7.3

Temporary Support and Proper Re-Embedment of Exposed or Disturbed Underground Gas Facilities

This standard applies in all situations where vertical and/or lateral support of existing underground gas mains or services of any type or size has been compromised. This occurs whenever such facilities are exposed by excavation for a linear distance in excess of ten (10) feet (three feet for cast iron) or for all exposures that include a fitting, a connection, or an appurtenance of any kind. This standard is also applicable in cases where embedment material has been disturbed, even though exposure has not occurred.

Acceptable means of temporary support are provided as well as sound, permanent embedment procedures once the initiating cause of the exposure or disturbance has been corrected. In the case of cast iron facilities, see also Standard G 02 01 013.0 (Mandatory Replacement).

I. General

(A) As stated in New York State Industrial Code Rule #53 (12 NYCRR53), anyone performing excavation or demolition (hereinafter referred to as "Excavator") is required to use extreme caution and provide:

- notification of the proposed excavation work to Central Hudson at least 48 hours, but no more than 10 days, prior to construction, and
- all necessary shoring, sheathing, and/or support to assure that no damage occurs in the event of exposure.

(B) Mains and services encountered in the Central Hudson Gas System will be of nominal size and consist of any one or combination of the following pipe materials.

- Steel
- Wrought Iron
- Cast Iron
- Plastic (HDPE)

The mains and services may include valves, fittings, drips, leak clamps, test stations, cathodic protection installations, blow offs, and/or any other such appurtenances.

(C) The location of the underground gas facilities within the proposed construction area will be provided to the Excavator by Central Hudson prior to start of work. If known, the size and material of the facilities will also be provided.

II. Temporary Support

(A) Any gas main or service undermined by excavation (or exposed to the extent that lateral and/or vertical support is jeopardized) as described in the first paragraph on sheet 1 must be provided with immediate, temporary support. Such support is meant for short duration only. Permanent re-embedment (and/or mandatory replacement followed by re-embedment where applicable in cast iron situations) should occur as soon as possible after exposure.

The engineering sketches provided at the end of this standard show the specific technical details of temporary support systems for steel pipe, cast and wrought iron pipe, and plastic pipe. Although only flat-surfaced, wooden structural support members are depicted, other materials may also be acceptable. Steel I-beams, box beams, channel, and pipe may be utilized provided the steel is in sound condition (no visible deformation, warps, bends, or significant corrosion), that it has a minimum dimension of 6" in the direction of support, that the thickness of the load bearing portion is no less than 1/4", and that at least two square feet of surface area distribute the load to the ground on either side of the excavation. In the case of pipe, I-beams, and channel, this requires flat lumber (1-1/2" minimum thickness) or plate (1/2" minimum thickness) between the support member and the ground. For pipe, chocks or stakes are also necessary to prevent rolling.

Previously I-A-7.3

If wooden supports are to be used, structural grade, flat-surfaced lumber as shown in the sketches (and sized in the tables thereon) is preferred. The lumber must be in as-new condition, with no visible signs of distress (splintering, cracks, splits, rot, holes, appreciable knots, excessive dryness, etc.) and visibly straight and true. Pole stock may also be used, as long as it meets the same criteria for condition, signs of distress, and dimensional consistency. Pole stock must be at least 10" in diameter for support of piping 8" or less, and at least 12" in diameter for 10" and greater piping. Also, as with using steel pipe for support, pole stock must be laid on at least two square feet of flat plate (1/2" minimum thickness) or lumber (minimum of 1-1/2" thickness) on each side of the excavation and be chocked or staked to prevent rolling. When using wood, any type (oak, pine, etc.) is acceptable, as long as the form it takes was obviously meant for structural duty (e.g. strapping twelve layers of 1/2" plywood or 8 layers of 1 x 6 board together to make a 6" x 6" support is not appropriate).

The use of any other material for temporary support of exposed underground gas facilities is not allowed without Engineering consultation and approval.

(B) Structural members used for the temporary support of underground gas facilities shall not be used to support any other structure or pipe.

(C) Maximum excavation spans for support members and maximum spacing of slings (3/8" wire rope or 3/8" guy wire) are shown in the engineering sketches. Engineering shall be consulted if these limits can not be met.

(D) The ground upon which support member(s) will rest shall be level and firm to provide a uniform bearing surface. If the surface is uneven, not firm, or non-uniform, it shall be leveled and compacted until acceptable.

(E) Where a fitting, compression coupling, gas service, repair clamp, valve, drip or any other appurtenance is included on the exposed gas facility, an additional cross member and sling shall be installed to support the piping at this location.

(F) Unless an appurtenance is present, any cast iron or wrought iron pipe exposed for less than three (3) feet, or steel or plastic pipe exposed for less than ten (10) feet does not require temporary support. A cross member and sling shall be provided, though, wherever such exposed appurtenance(s) exist.

(G) The engineering sketches indicate that slings shall be 3/8" wire rope or guy wire. The use of substitute material is not allowed without Engineering consultation and approval.

(H) Once a gas main and/or service has been undermined/exposed, no further construction is allowed in the area until:

- appropriate temporary support has been installed as specified herein.
- sufficient tension has been applied to the sling(s) to assure that no deflection from the original pipe location and route is possible (excessive tension has been applied if the pipe is observed to begin to rise).

(I) Slings shall be re-tensioned regularly as necessary to maintain continuous support. The original position of the gas main and/or service must remain as found.

III. Re-Embedment of Underground Gas Facilities

(A) The excavator shall provide, if specified by Central Hudson, 24 hour minimum notification prior to backfilling exposed/suspended/disturbed underground gas facilities so that Central Hudson has the opportunity for inspection. If damage to facilities or associated coatings or appurtenances is observed, repairs shall be accomplished before backfilling/re-embedment is completed.

(B) When using select granular material to embed and/or backfill gas facilities, proceed as follows:

(1) Backfill material in the pipe zone (6" below, around,and above underground gas facilities) shall be select granular material, such as sand or stone dust, free of stones, rock, or other such objects which could damage the pipe, coating, or appurtenances.

(2) Backfill material shall be placed adjacent to the gas facilities and worked under them in such a way as not to damage or disturb them. Under no circumstances shall backfill material be dropped directly upon gas facilities.

(3) All backfill material up to and including the pipe zone shall be placed in 6" lifts. Each lift shall be thoroughly compacted to acceptable industry standards. Placement and compaction of backfill above the pipe zone can be accomplished in 12" lifts.

(4) Water settlement is the preferred means of compaction up to and including the pipe zone. This method eliminates air pockets and voids and provides solid embedment and support to the gas facilities. Where freezing weather or lack of water prevents this method, mechanical compaction with mechanized tamping machines is an acceptable alternate method.

(C) Flowable fill, a structural material much like concrete in appearance and physical characteristics whose main constituent is coal-fired flyash, may also be used to embed and/or backfill gas facilities. Its application may be cost effective for larger projects, or when tamping must be avoided, and/or when re-embedment is complicated by physical or schedule constraints. It may be placed in the pipe zone and the area above the pipe zone. Proceed as follows:

(1) Flowable fill material shall be placed adjacent to the gas facilities and allowed to flow under them so as not to damage or disturb them. Under no circumstances shall it be poured directly upon gas facilities.

(2) Flowable fill shall be a mixture of class F coal-fired flyash (such as is produced at the Danskammer Generating Station), cement, fine aggregate, and water with an unconstrained compressive strength of no more than 175 psi. It shall be placed by personnel familiar with its application, using appropriate equipment. At sites where flowable fill can be directly off-loaded from a ready-mix type delivery

truck, each cubic yard of mixture shall consist of approximately 100 lbs. of cement, 250 lbs. of flyash, 2,850 lbs. of sand, and 500 lbs. of water. This material cures in about 24 hours (consult Gas & Mechanical Engineering if accelerated cure rates are necessary). In the event the site is inaccessible to a delivery truck and pumping is required, each cubic yard of mixture shall consist of approximately 100 lbs. of cement, 2,000 lbs. of flyash, and 725 lbs. of water (no sand shall be used).

(3) Neither placement in lifts nor tamping is required since flowable fill does not settle or shrink.

(D) Once satisfactory backfill placement and compaction has been accomplished up to and including the centerline of the gas facilities, the temporary support system can be removed. Such removal shall be performed so as not to damage the pipe, coating, or appurtenances. When flowable fill is utilized, temporary supports must remain until the material has cured.

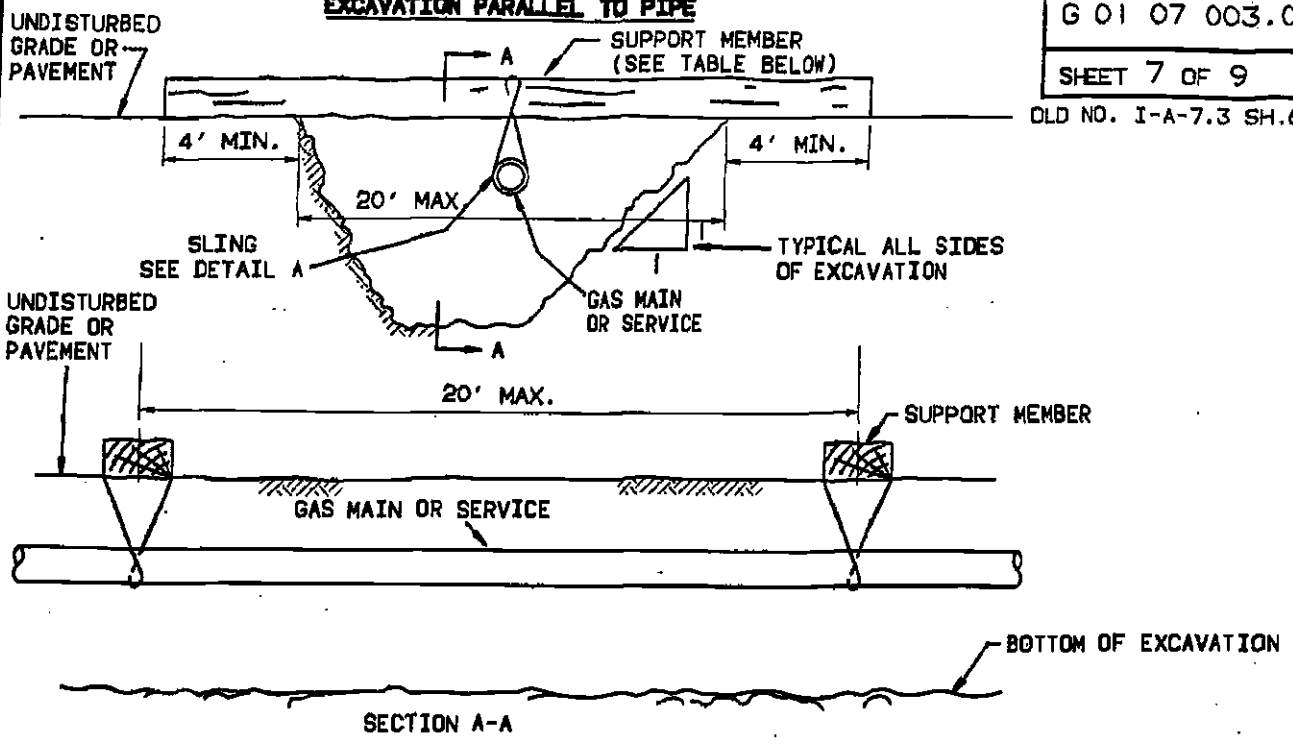
(E) If specified by Central Hudson, the Excavator shall allow Central Hudson sufficient time to perform a leak survey on the gas main(s) and/or service(s) prior to any backfill material being placed above the gas pipe.

G 01 07 003.0

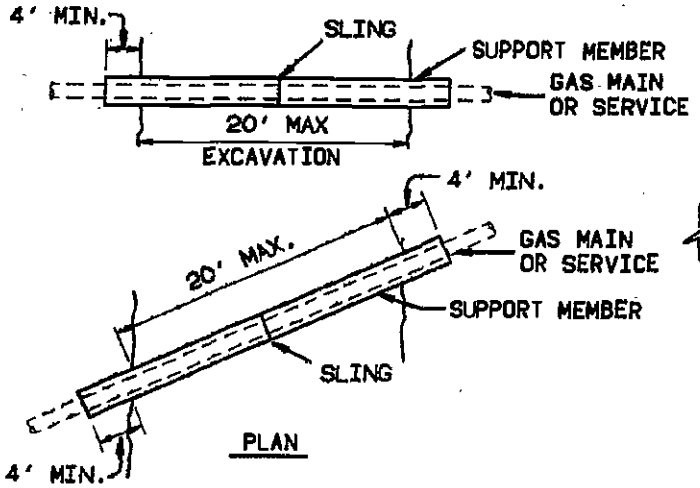
SHEET 7 OF 9

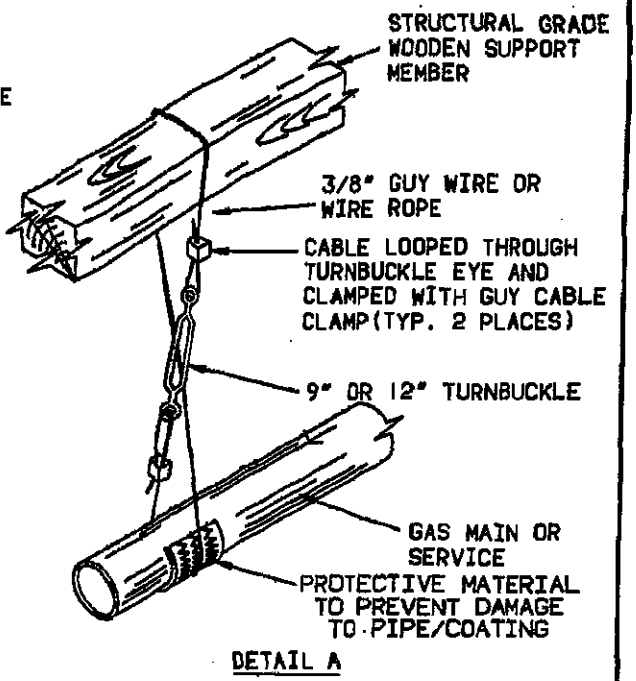
OLD NO. I-A-7.3 SH.6

EXCAVATION PARALLEL TO PIPE



EXCAVATION CROSSING PIPE AT VARIOUS ANGLES





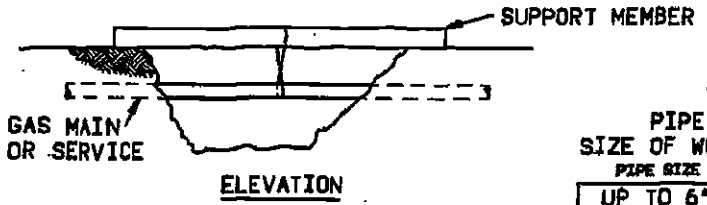


TABLE
PIPE SIZE Vs.
SIZE OF WOODEN SUPPORTS

PIPE SIZE	SUPPORT SIZE
UP TO 6"	6" x 6"
8" TO 10"	8" x 8"
12" TO 16"	10" x 10"

GAS STANDARDS	CENTRAL HUDSON GAS & ELECTRIC CORP.	DATE 5/96
DRAWN. TCJ CLEAR BM ENGR. CGR APP.	GAS CONSTRUCTION TEMPORARY SUPPORT AND PROPER RE-EMBEDMENT OF EXPOSED OR DISTURBED UNDERGROUND GAS FACILITIES STEEL PIPE	ISSUE 3 APP. APP.

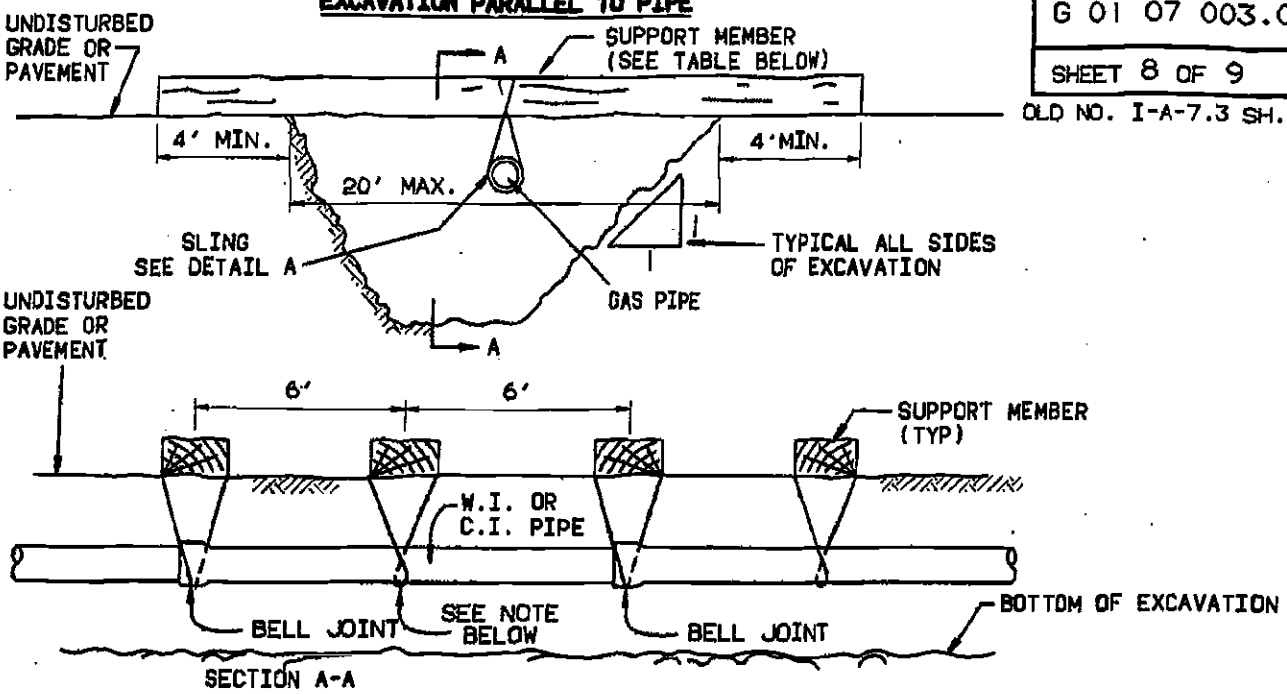
REDRAWN ON CAD BY ICON / CDI 2/94

G 01 07 003.0

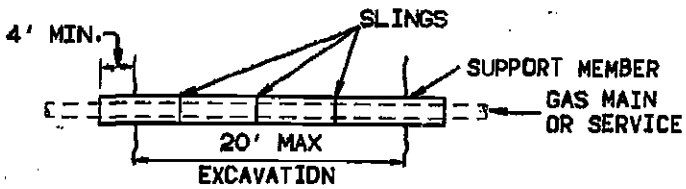
SHEET 8 OF 9

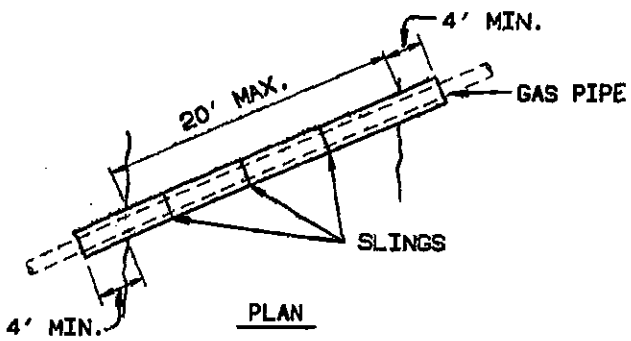
OLD NO. I-A-7.3 SH.7

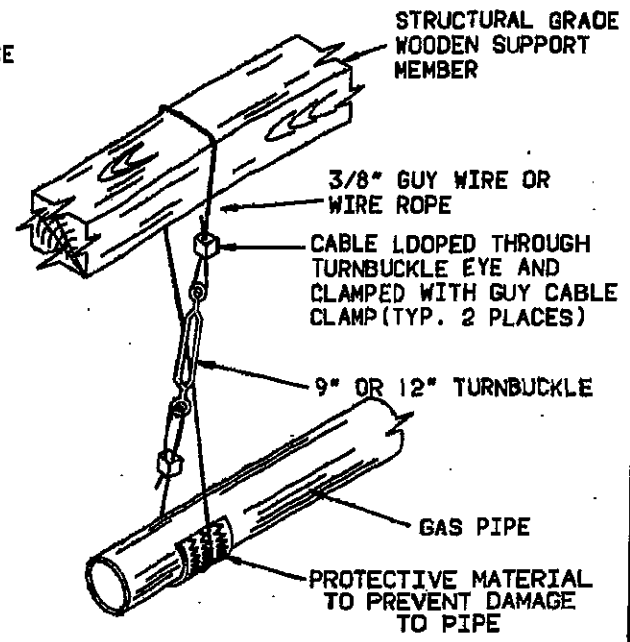
EXCAVATION PARALLEL TO PIPE



EXCAVATION CROSSING PIPE AT VARIOUS ANGLES







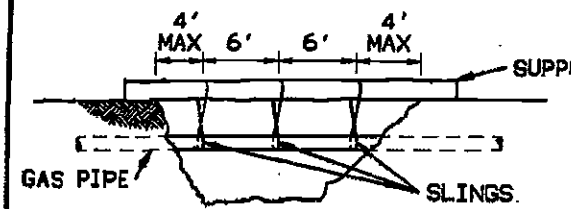


TABLE
PIPE SIZE Vs.
SIZE OF WOODEN SUPPORTS

PIPE SIZE	SUPPORT SIZE
UP TO 6"	6" x 6"
8" TO 10"	8" x 8"
12" TO 16"	10" x 10"

NOTE
FOR C.I. OR W.I. LARGER THAN 8", CENTER SUPPORT NOT REQUIRED

GAS STANDARDS	CENTRAL HUDSON GAS & ELECTRIC CORP.	DATE 5/96
DRAWN. TCJ CLEAR ENGR. APP.	GAS CONSTRUCTION TEMPORARY SUPPORT AND PROPER RE-EMBEDMENT OF EXPOSED OR DISTURBED UNDERGROUND GAS FACILITIES CAST IRON OR WROUGHT IRON PIPE	ISSUE 3 APP. APP.

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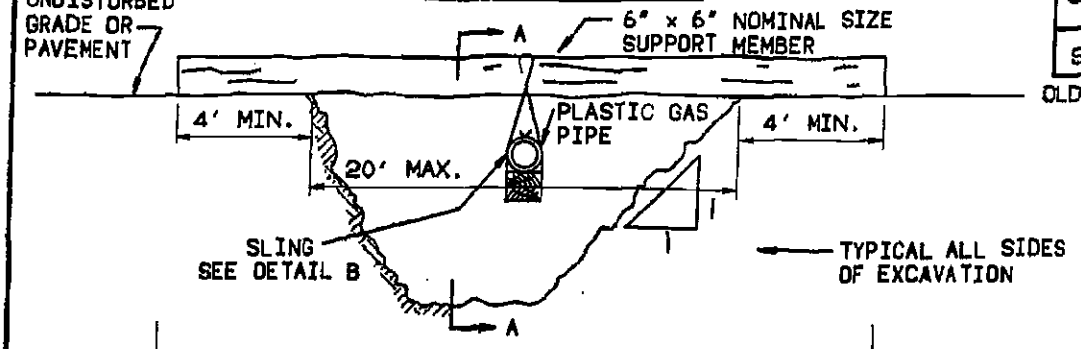
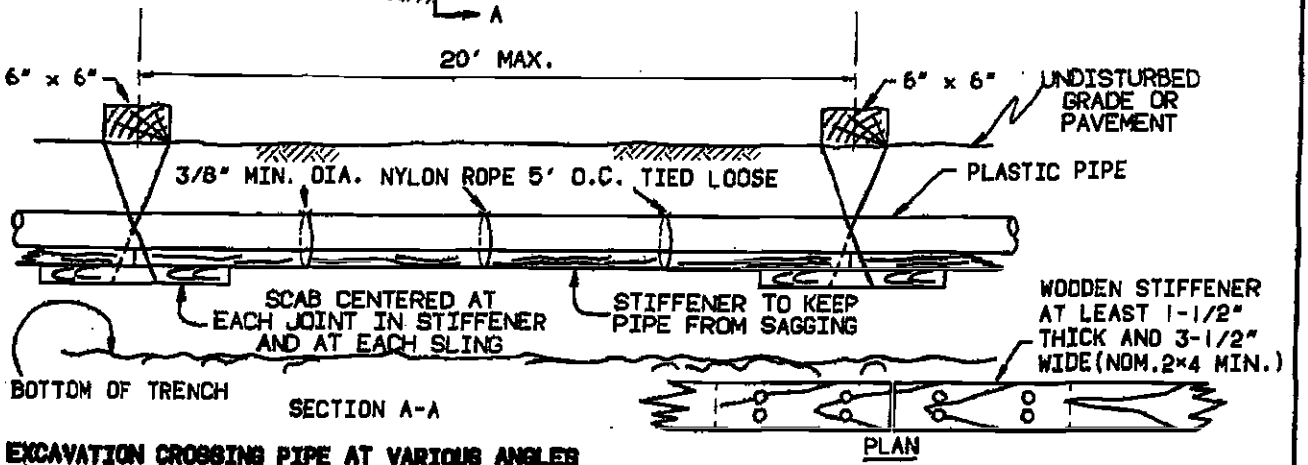
G 01 07 003.0

SHEET 9 OF 9

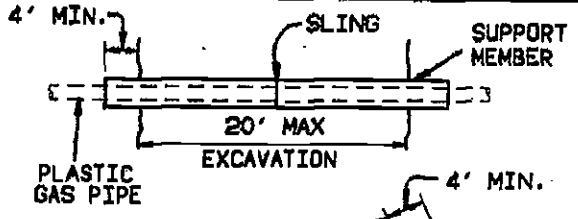
OLD NO. I-A-7.3 SH.8

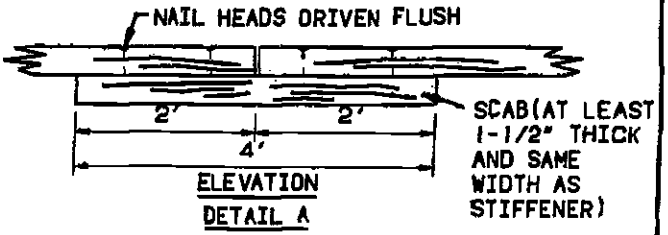
EXCAVATION PARALLEL TO PIPE

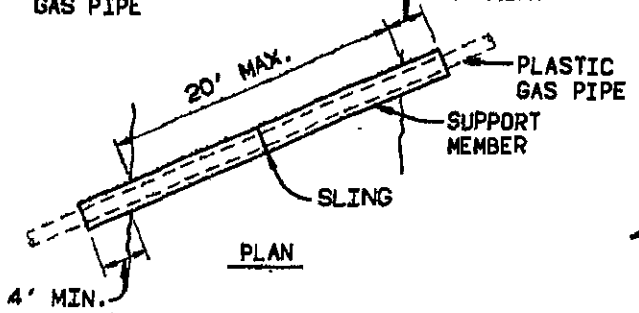


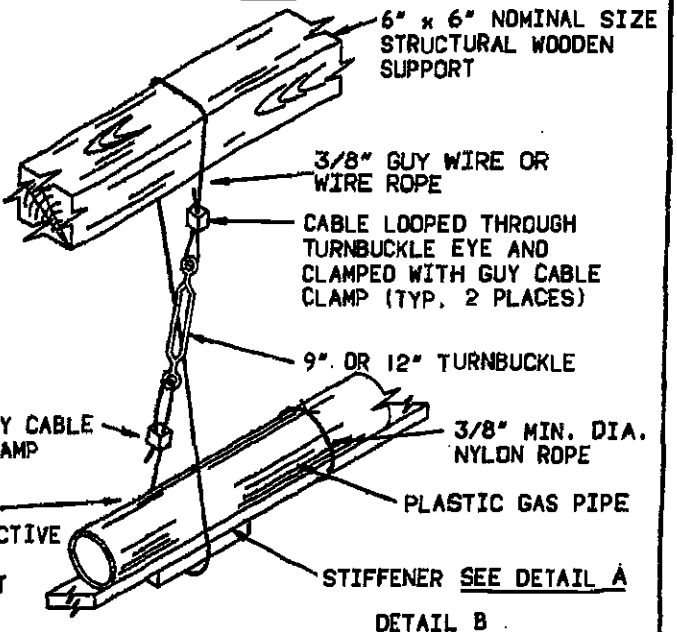


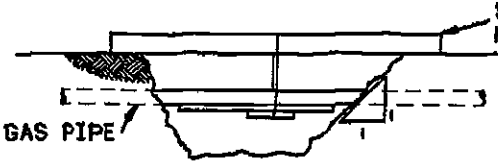
EXCAVATION CROSSING PIPE AT VARIOUS ANGLES











GAS STANDARDS	CENTRAL HUDSON GAS & ELECTRIC CORP.	DATE 5/96
DRAWN. TCJ CLEAR BJS ENGR. CAZ APP.	GAS CONSTRUCTION TEMPORARY SUPPORT AND PROPER RE-EMBEDMENT OF EXPOSED OR DISTURBED UNDERGROUND GAS FACILITIES PLASTIC PIPE	ISSUE 3 APP. APP.

REDRAWN ON CAD BY TCON../ CDT 2/94

LIMITED PROPERTY ACCESS AGREEMENT

This Limited Property Access Agreement (the "Agreement") is made by and between The City of Kingston ("Licensor"), located at 420 Broadway, Kingston, NY 12401 and Millens Metal Recycling of Kingston, LLC ("Licensee"), located at 4 Kieffer Lane, Kingston, NY 12401 and The Trolley Museum of New York (Lessee of Licensor, hereafter "Lessee").

WITNESSETH:

WHEREAS, the New York State Department of Environmental Conservation ("NYSDEC") approved the Interim Remedial Measure (IRM) Work Plan for NYSDEC Site No. 356030 (former Millens Scrapyard) which, among other things, requires Licensee to conduct various interim remedial activities ("the IRM"); and

WHEREAS, Licensee is required to conduct the IRM at properties adjacent to the former Millens Scrapyard site that are owned or controlled by Licensor located on tax parcel 56.036-1-35, portions currently leased to the Trolley Museum of New York, Lessee (adjacent to tax parcel 56.036-1-22), and along North Street (portions unpaved) in Kingston, NY (collectively referred to as the "Properties"); and

WHEREAS, the IRM will be governed by the IRM Work Plan approved by NYSDEC (the "NYSDEC-approved Remedial Plans"); and

WHEREAS, Licensee, its employees, agents, contractors, consultants and representatives (collectively referred to as "Licensee and its Representatives") will need to temporarily access and use portions of Licensor's and Lessee's Properties limited to shallow soil excavation and restoration; and

WHEREAS, Licensee wishes to begin the IRM in order to implement the NYSDEC-approved IRM Work Plan, Licensor and/~~Lessor~~ Lessee agree to provide access and temporary use to Licensee and its Representatives to certain portions of the Properties to allow Licensee to perform the IRM.

Now, THEREFORE, in consideration of the mutual promises and covenants contained herein, Licensee and Licensor agree as follows:

1. Licensee will provide Licensor and Lessee with a copy of the NYSDEC-approved IRM Work Plan.

2. Licensee anticipates that it will conduct the IRM over a one (1) month period commencing on or about December 1, 2015. Licensee will provide Licensor and Lessee with its anticipated schedule of IRM activities and the locations of such activities at least 30 (thirty) calendar days prior to commencement of the IRM or as soon as practicable prior to implementation of any modified construction schedule.

3. Licensor and Lessee represent that they own and control the Properties and hereby grant Licensee and its Representatives access to the Properties only for the limited purposes specified herein. Access to the Properties is granted to Licensee and its Representatives for the purpose of performing the IRM in accordance with the NYSDEC-approved Remedial Plans annexed hereto and made a part hereof. The IRM work activities at the Properties will involve, among other things, the use of personnel and equipment to excavate shallow contaminated soil, backfill with clean material, and restore areas disturbed on the Properties (collectively referred to as "Licensee's Work").

4. Access to the Properties granted to Licensee and its Representatives shall be 24 hours a day for the duration of Licensee's Work. However, active remedial activities will be generally limited to the hours of 7:00 a.m. to 7:00 p.m., from Monday through Friday and are not anticipated to limit the use of the rail tracks leased by The Trolley Museum of New York, Lessee, during their typical scheduled use on weekends and holidays between May 1st to November 1st of any given year. Licensee will notify Licensor if extended hours and days of active remedial activities are necessary. Licensee will provide to Licensor and Lessee two day's notice of commencement of Licensee's Work. Licensor agrees to allow access to the Premises at 7:00 a.m. of the day of commencement of Licensee's Work.

5. Licensee agrees that Licensee's Work will not unreasonably interfere with Licensor's and Lessee's use and enjoyment of the Properties and shall not harm persons or property and/or otherwise damage the Properties (except unavoidable damage of

minimal extent that can and will be repaired by Licensee in accordance with the terms herein).

6. Licensee and its Representatives shall be responsible for identifying the location of all utility lines in the areas where Licensee's Work will be performed. Licensee shall assume full responsibility to assure that Licensee's Work does not disrupt any utilities on, over or under the Properties, and the liability for any such disruption shall be the sole responsibility and expense of Licensee.

7. Licensee and its Representatives shall obtain any necessary permits and approvals, including any approvals from governmental agencies, prior to performing Licensee's Work.

8. All contaminated soil, groundwater and possible waste material generated during Licensee's Work is the responsibility of Licensee and its Representatives and shall be properly handled, stored and disposed of by Licensee or its Representatives at Licensee's cost. Any manifest required to transport or dispose of generated material shall be signed by Licensee or its Representatives as the generator.

9. Licensee agrees to defend, indemnify and hold harmless Licensor and Lessee and their respective employees, agents, representatives, successors, and assigns, if any (collectively referred to as "Licensor and Lessee and their Representatives"), from and against any and all damages, claims, losses, costs, liabilities, actions and expenses,

including, but not limited to, reasonable attorneys' fees and expenses which any or all of them may incur or which may be imposed upon them as a result of Licensee's and its Representative's performance of Licensee's Work, and/or use of the Properties. Licensee's indemnification shall not extend to any willful, intentional or negligent actions of Licensor and Lessee, and its Representatives. To the extent that action by Licensor or its Representatives contributes to an Indemnified Loss, Licensor's indemnification shall be reduced by the extent that actions by Licensor or its Representatives contributed to the Indemnified Loss.

10. Notwithstanding the indemnification granted in paragraph 9 of this Agreement, nothing in this Agreement shall serve as a waiver or release of any claims that Licensor, Lessee, and Licensee and its Representatives may have against each other, or any third party.

11. Licensee or its Representatives agree to provide Licensor and Lessee with a valid Certificate of Insurance listing Licensor and Lessee as additional insured parties.

12. Licensor, and ~~Lessor and~~ Lessee represent that they are sole owners and/or occupants of the Properties. Licensor and Lessee are unaware of any reason why Licensee and its Representatives may not perform Licensee's Work at the Premises as specified herein.

13. Nothing contained in this Agreement shall obligate Licensor or Lessee to pay any costs or expenses for Licensee's Work to be performed under this Agreement by Licensee and its Representatives.

14. Licensor and Lessee agree that Licensee and its Representatives may keep equipment on the Properties overnight while Licensee's Work continues, at Licensee's own risk. Licensor and Lessee also agree that Licensee and its Representatives may store soil, and waste material generated during Licensee's Work on the Property, in compliance with all applicable environmental and legal requirements. Storage of such materials will not unreasonably interfere with the typical scheduled use (weekends and holidays between May 1st to November 1st of any given year) of the leased rail line by The Trolley Museum of New York, Lessee. Licensee shall consult with Licensor ~~Licensee~~ and Lessee regarding where on the Properties to store such equipment and materials. All equipment and materials will be removed from the Properties within a reasonable time after Licensee's Work is completed in accordance with all applicable environmental and legal requirements.

15. Weather and site conditions permitting, Licensee or its Representatives will fully repair and restore areas of the Properties that were disturbed during or as a result of Licensee's Work for a period of up to 30 days following completion of Licensee's Work. If weather or site conditions prevent or impede Licensee's obligations in this paragraph of the Agreement, Licensee or its Representatives will complete repair and restoration work as soon as reasonably possible.

16. The effective date of this Agreement shall be the date it is executed by Licensor and Licensee.

17. This Agreement shall terminate when Licensee provides Licensor and Lessee with notice that Licensee's Work is complete.

18. All notices to Licensee required by the Agreement shall be sent to:

Richard Sher
Millens Metal Recycling of Kingston, LLC
4 Kieffer Lane
Kingston, NY 12401

19. All notices to Licensor required by the Agreement shall be sent to:

Shayne R. Gallo, Mayor
The City of Kingston
420 Broadway
Kingston, NY 12401

19. (a) All notices to Lessee required by the Agreement shall be sent to:

Erik Garces, President
The Trolley Museum of New York
PO Box 2291
Kingston, New York 12402

20. This Agreement may be executed in counterparts, each of which shall constitute one instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year noted below.

The City of Kingston

By: _____ DATE: December 8, 2015
Name: Shayne R. Gallo
Title: Mayor

Sworn and subscribed to
this 8th day of December, 2015

_____
NOTARY PUBLIC

JANET K. HIGGINS
Notary Public, State of New York
No. 01HI4283985
Qualified in Ulster County
Commission Expires Sept. 30, 2017

Millens Metal Recycling of Kingston, LLC

By: _____ DATE: December 9, 2015
Name:
Title: VP

Sworn and subscribed to
this 9th day of December, 2015

_____
NOTARY PUBLIC

JANET K. HIGGINS
Notary Public, State of New York
No. 01HI4283985
Qualified in Ulster County
Commission Expires Sept. 30, 2017

The Trolley Museum of New York

By: _____, Pres
Erik Garces
President

Sworn and subscribed to this
5th day of December, 2015

_____
Notary Public – State of New York
Reg no 02R18584350
Qualified in Ulster County NY
My Commission expires 7/31/2018

STERLING

Sterling Environmental Engineering, P.C.

December 30, 2015

Mr. Michael E. Schupp
Superintendent
City of Kingston
Department of Public Works
25 East O'Reilly Street
Kingston, New York 12401

Subject: B. Millens & Sons, Inc.
290 East Strand Street, Kingston, New York
NYSDEC BCP Site No. 356030
STERLING File #27023

Dear Mr. Schupp,

Enclosed please find an updated Excavation Permit by Ulster Excavating for the soil excavation required for remediation of the B. Millens & Sons, Inc. NYSDEC Site No. 356030. The updated permit extends the duration of the permit into the spring of 2016 in anticipation of possible final grading after the winter, and increases the potential excavation depth from one (1) foot to two (2) feet. In addition, enclosed please find the following:

- Updated Dig Safely Ticket #12285-134-051-00;
- Surety Bond already on file at B.O.P.W 25 E. O'Reilly Street, Kingston; and
- Ulster Excavating Certificates of Insurance.

The description/plan of work involves the excavation of a small area of surficial soil east of North Street and north of the railroad tracks on Parcel 56.036-1-35 (see enclosed Figure). Please contact me should you have any questions or comments.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

Mark P. Millspaugh, P.E.
President
mark@sterlingenvironmental.com

MPM/bc
Email/First Class Mail
Enclosures

cc: Joan Millens
Richard Sher
David Lenefsky
Vincent Organtini, Ulster Excavating & Trucking, Inc.

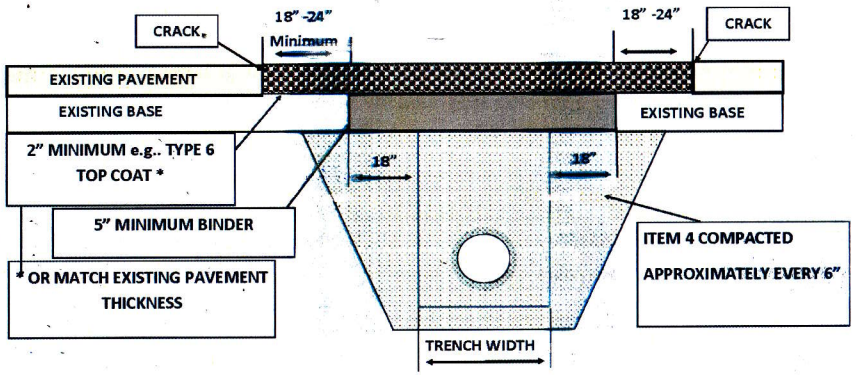
S:\Sterling\Projects\2007 Projects\Millens Scrap Metal Recycling - 27023\Applications\Excavation Permit Application - Ulster Excavating\City_Excavation Permit_ltr 2015-12-30.docx

"Serving our clients and the environment since 1993"

KINGSTON DPW

EXCAVATION PERMIT

TYPICAL DETAIL OF 4' DEEP EXCAVATION



CONTACT INFORMATION

- **Dept. Public Works 25 East O'Reilly St**
  Michael Schupp, Superintendent (845) 331-0682
- **Dept. Public Works - Emergency On Call**
  (845) 338-2114
- **Dig Safely NY:** ***811 or 1 (800) 962-7962***
  5063 Britton Field Parkway East Syracuse, NY 13057
- **Police Department - 1 Garraghan Drive Kingston**
  Chief of Police Egidio Tinti (845) 331-1671
- **Ulster County Emergency Services -**
  eoc@co.ulster.ny.us *Art Snyder, Director*
  (911 notification of closed streets/traffic pattern changes)
- **Manual on Uniform Traffic Control Devices (MUTCD)**
  http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/mutcd2009r1r2edition.pdf
- **Fire Department - 19 East O'Reilly St**
  Fire Chief Mark Brown—331-1216
- **Office of Planning & Tree Commission -**
  420 Broadway Kingston
  Suzanne Cahill, Planner (845) 331-0080 x 3955

CITY OF KINGSTON

DEPARTMENT OF PUBLIC WORKS

STREET/SIDEWALK/EXCAVATION PERMIT

PERMIT #

DATE: 12/29/15

PROJECT START DATE: 01/04/16

PROPERTY OWNER: Millens Metal Recycling of Kingston LLC

PROJECT END DATE: 04/29/16

PROPERTY OWNER ADDRESS:
4 Kieffer Lane, Kingston, NY 12401

CONTRACTOR
NAME: Ulster Excavating
ADDRESS: 909 Orlando Street
24 HR PHONE: 845-494-6219
EMAIL: lorgantini@hvc.rr.com

PURPOSE OF PERMIT:
- Storm Sewer Connection
- Sanitary Sewer Connection or Repair
- Sidewalk Repair/Replacement
- Blocking Sidewalk
- ✓ Other— provide description below

LOCATION OF EXCAVATION/WORK:
STREET: North Street
CROSS STREET: East Strand St.

DESCRIPTION OF WORK:
Plan of property showing length and location of opening and other pertinent information must be attached:
See Figure 2 attached. Excavation of impacted soil will be conducted to a depth of approximately 24". Fill material will meet New York State Dept. of Environmental Conservation requirements. Final Grading may occur in Spring 2016.

SIZE OF CUT: width 50' depth 2' length 120'

CURRENT SURFACE MATERIAL:
Vegetated surface

NEW SURFACE MATERIAL:
Fill will meet NYSDEC requirements

EXCAVATION WILL DISTURB: Check All that Apply
- Sidewalk
- Driveway Apron
- Street
- ✓ Grass Area

Contractor Signature Vincent Organtini

***Sidewalk Repair/Replace/Block $ 50.00** ***Street Excavation $250.00** ***Emergency Fee $100.00**

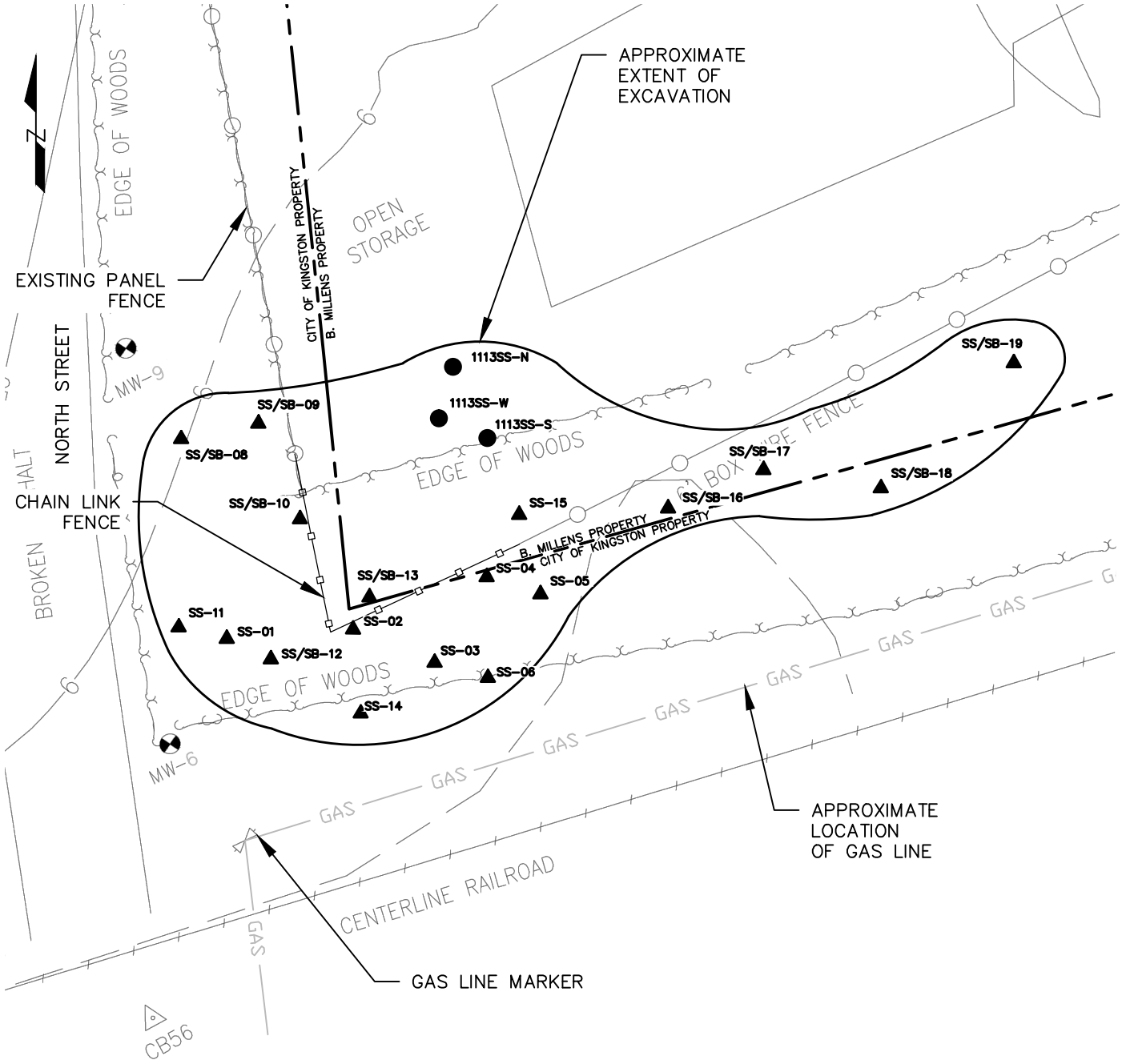
***Non Compliance $250.00** ***Sewer Tap $350.00**

FOR OFFICE USE ONLY:

[ ] Completed Application
[ ] Description of Work/Plan Submitted
[ ] Bond Received
[ ] Liability Insurance Received
[ ] Workman's Compensation Received
[ ] Disability Insurance Received
[ ] Dig Safely
[ ] Fee Paid

Type of Permit Issued _____
Date Permit Issued _____
Amount Paid _____ Check # _____
Receipt # _____
Permit Issued By _____

Superintendent/Designee Approval
_____



MAP REFERENCE: SITE PLAN; MILLENS STAGING AREA BY MJ ENGINEERING AND LAND SURVEYING DATED MAY 18, 2010.

LEGEND:

PROPERTY LINE

SS-10 — RI SAMPLES (2012,2013) ANALYTICAL RESULTS EXCEED RESIDENTIAL USE SCO (MILLENS PROPERTY) OR EXCEEDS UNRESTRICTED USE SCO (CITY OF KINGSTON PROPERTY)

1113SS-W — SAMPLES BY STERLING (NOVEMBER 2015)

0 5' 10' 20' 40'

1" = 20'

FIGURE 2

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road ♦ Latham, New York 12110

OFF-SITE EXCAVATION AREA
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NY

PROJ. No.:	27023	DATE:	12/23/2015	SCALE:	1" = 20'	DWG. NO.	27023050	FIGURE	2

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023050 - Off Site Sampling SWEETT 12/23/2015 2:33 PM

ProTek Locating, Inc.
5-28 51st Ave 1st Floor
Long Island City, NY 11101
Tel: (718) 472-2304
Fax: (718) 361-8529
Email: info@proteklocating.com

DIG TIX

Response Report

Ticket ID : 12285-134-051-00
Transmit Date: 2015-12-28

ULSTER EXCAVATING & TRUCKING
909 ORLANDO ST KINGSTON NY 12401
Tel: 845-339-4350
Fax: 845-339-9585
Caller: VINCENT ORGANTINI
Email:

We are responding to your dig request to locate facilities in the area specified on:
Ticket ID : 12285-134-051-00
Street : 1900 NORTH ST
City : KINGSTON /C
State : NY
Work Start Date : 12/31/2015 07:00:00

The described work area is:
CHG / WEST / ELECTRIC : Pending
Remarks : 10 : CLEAR *** 78.01 12/30/15 KD MD Marked gas main transmission line AH in stated work area, Spoke with Vince and met on-site previously for locate. on 12/30/15 he stated working in same work locations.

CHG / WEST / GAS : Pending
Remarks : 31 : MARKED WITH EXCEPTIONS *** 78.01 12/30/15 KD MD Marked gas main transmission line AH in stated work area, Spoke with Vince and met on-site previously for locate. on 12/30/15 he stated working in same work locations.

Available Responses
10 : CLEAR, NO FACILITIES WITHIN 15 FT OF THE EXCAVATOR DEFINED WORK AREA
30 : MARKED, THE APPROXIMATE HORIZONTAL LOCATION OF UNDERGROUND FACILITIES WITHIN 15 FT OF THE EXCAVATOR DEFINED WORK AREA HAVE BEEN MARKED
31 : MARKED WITH EXCEPTIONS, DO NOT DIG, HIGH PROFILE UTILITY IN CONFLICT; UTILITY OWNER WILL ATTEMPT TO CONTACT YOU TO SCHEDULE SITE SURVEILLANCE PRIOR TO YOUR STATED COMMENCEMENT DATE
51 : UNMARKED, DO NOT DIG, LOCATE TECHNICIAN COULD NOT GAIN ACCESS TO PROPERTY. PLEASE CALL IN A REVISION WITH DETAILS ABOUT ACCESS
52 : UNMARKED, DO NOT DIG, THE DIGSITE DESCRIPTION WAS INCOMPLETE OR UNCLEAR. CALL DIG SAFELY NEW YORK TO VERIFY THE INFORMATION ON THE TICKET
53 : UNMARKED, DO NOT DIG, INCORRECT ADDRESS INFORMATION. CALL DIG SAFELY NEW YORK AND PROVIDE CORRECT INFORMATION
54 : UNMARKED, DO NOT DIG, HIGH PROFILE UTILITY IN CONFLICT; UTILITY OWNER WILL ATTEMPT TO CONTACT YOU TO SCHEDULE SITE SURVEILLANCE PRIOR TO YOUR STATED COMMENCEMENT DATE
55 : UNMARKED, MARKING AND DIG DELAY REQUESTED. LOCATE TECHNICIAN HAS OR IS ATTEMPTING TO CONTACT THE EXCAVATOR. EXCAVATION SITE REMAINS UNMARKED OR INCOMPLETE. A NEW DEADLINE FOR MARKING IS TO BE OR HAS BEEN SCHEDULED.
56 : UNMARKED, THE EXCAVATOR HAS PERFORMED THE EXCAVATION PRIOR TO THE LOCATOR'S ARRIVAL. THE EXCAVATION WORK HAD ALREADY BEEN COMPLETED.
61 : DESIGN CONFLICT, PLEASE SHARE DESIGN DRAWINGS WITH OUR ENGINEERING DEPT. UTILITY OWNER WILL ATTEMPT TO CONTACT YOU.
71 : MEETING CONFLICT, YOUR PROPOSED MEETING IS IN CONFLICT AND WE ARE UNABLE TO MEET ON SITE UTILITY OWNER WILL ATTEMPT TO CONTACT YOU.
72 : MEETING ACCEPTED, REQUEST ACCEPTED AT STATED DATE AND TIME
81 : NO LOCATE REQUIRED - EXCAVATION WORK IS BEING PERFORMED FOR THE FACILITY OWNER. LOCATE WILL BE PERFORMED BY THE EXCAVATOR PER CONTRACTUAL AGREEMENT

******* PROTEK LOCATING WANTS YOU TO KNOW *******

PRIVATELY OWNED FACILITIES MAY EXIST (SOMETIMES PROPERTY OWNERS ARE RESPONSIBLE FOR MARKING THEIR LINES). IF YOU WANT THOSE MARKED, FOR A FEE, PLEASE CALL 845-206-6046. If you have any questions please contact Protek Locating

Western Surety Company

CONTINUATION CERTIFICATE

Western Surety Company hereby continues in force Bond No. 43289710 briefly described as EXCAVATION CONTRACTOR CITY OF KINGSTON

for ULSTER EXCAVATING & TRUCKING, INC.

, as Principal, in the sum of $ TEN THOUSAND AND NO/100 Dollars, for the term beginning April 07, 2015, and ending April 07, 2016, subject to all the covenants and conditions of the original bond referred to above.

This continuation is issued upon the express condition that the liability of Western Surety Company under said Bond and this and all continuations thereof shall not be cumulative and shall in no event exceed the total sum above written.

Dated this 18 day of February, 2015.

WESTERN SURETY COMPANY

By _____
Paul T. Bruflat, Vice President

THIS "Continuation Certificate" MUST BE FILED WITH THE ABOVE BOND.

Form 90-A-8-2012

Western Surety Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That WESTERN SURETY COMPANY, a corporation organized and existing under the laws of the State of South Dakota, and authorized and licensed to do business in the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the United States of America, does hereby make, constitute and appoint

Paul T. Bruflat of Sioux Falls,

State of South Dakota, its regularly elected Vice President,

as Attorney-in-Fact, with full power and authority hereby conferred upon him to sign, execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, the following bond:

One EXCAVATION CONTRACTOR CITY OF KINGSTON

bond with bond number 43289710

for ULSTER EXCAVATING & TRUCKING, INC.

as Principal in the penalty amount not to exceed: $10,000.00.

Western Surety Company further certifies that the following is a true and exact copy of Section 7 of the by-laws of Western Surety Company duly adopted and now in force, to-wit:

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys-in-Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

In Witness Whereof, the said WESTERN SURETY COMPANY has caused these presents to be executed by its Vice President with the corporate seal affixed this 18 day of February, 2015.

ATTEST

L. Nelson

L. Nelson, Assistant Secretary

WESTERN SURETY COMPANY

By Paul T. Bruflat

Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA }
COUNTY OF MINNEHAHA } ss

On this 18 day of February, 2015, before me, a Notary Public, personally appeared Paul T. Bruflat and L. Nelson who, being by me duly sworn, acknowledged that they signed the above Power of Attorney as Vice President and Assistant Secretary, respectively, of the said WESTERN SURETY COMPANY, and acknowledged said instrument to be the voluntary act and deed of said Corporation.

S. PETRIK
SEAL NOTARY PUBLIC SEAL
SOUTH DAKOTA

My Commission Expires August 11, 2016

S. Petrik

Notary Public

Form F1975-1-2012

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/18/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Miller & Miller Insurance Agency Inc
720 Commerce Street
Thornwood NY 10594

CONTACT NAME: Gina M. Roma
PHONE (A/C, No, Ext): 914-239-4415 FAX (A/C, No): 914-741-6407
E-MAIL ADDRESS: ginar@miller-ins.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Harleysville Ins Co of NY	10674
INSURER B : Harleysville Worcester Ins	26182
INSURER C : Shelter Point Life Ins Co	
INSURER D : Wesco Insurance Company	
INSURER E :	
INSURER F :	

INSURED
Ulster Excavating & Trucking Inc
909 Orlando Street
Kingston NY 12401

COVERAGES **CERTIFICATE NUMBER:** 205865728 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			MPA00000018502J	3/19/2015	3/19/2016	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$1,000,000 $100,000 $5,000 $1,000,000 $2,000,000 $2,000,000 $
B	**AUTOMOBILE LIABILITY** ANY AUTO ALL OWNED AUTOS X SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			BA00000018425J	3/19/2015	3/19/2016	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$1,000,000 $ $ $ $
B	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $ 10,000			CMB00000021587J	3/19/2015	3/19/2016	EACH OCCURRENCE AGGREGATE $	$5,000,000 $5,000,000 $
D	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WWC3134559	4/1/2015	4/1/2016	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
C	Disability			DBL424147	1/1/2014	12/31/2015		Statutory

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Policies shown are subject to terms, conditions, exclusions, sublimits and deductibles not listed on this certificate. We recommend that requests for policy copies be directed to the Named Insured shown above.

CERTIFICATE HOLDER

City of Kingston
420 Broadway
Kingston NY 12401

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

STATE OF NEW YORK
WORKER'S COMPENSATION BOARD

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name and address of Insured (Use street address only) Ulster Excavating & Trucking Inc. 909 Orlando Street Kingston, NY 12401 Work Location of Insured *(Only required if coverage is specifically limited to certain location in New York State, i.e. a Wrap-Up Policy)*	**1b. Business Telephone Number of Insured** 845-339-4350 **1c. NYS Unemployment Insurance Employer Registration Number of Insured** **1d. Federal Employer Indentification Number of Insured or Social Security Number** 141809667
2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) City of Kingston 420 Broadway Kingston, NY 12401	**3a.Name of Insurance Carrier** Wesco Insurance Company **3b. Policy Number of entity listed in box "1a":** WWC3134559 **3c. Policy effective period:** 4/1/2015 to 4/1/2016 **3d. The Proprietor, Partners or Executive Officers are:** ☑ **included** (Only check box if all partners/officers included) ☐ **all excluded or certain partners/officers excluded**

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certification of Insurance to the entity listed above as the certificate holder in box "2".

The Insurance Carrier will also notify the above certificate holder within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.

Please Note: Upon the cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved By: Henry C. Sibley
(Print name of authorized representative or licensed agent of insurance carrier)

Approved By: Henry C. Sibley 11/18/2015
(Signature) (Date)

Title: Underwriting Manager

Telephone Number of authorized representative or licensed agent of insurance carrier: CarrierPhone

Please Note: Only insurance carriers and their licensed agents are authorized to issue the C-105.2 form. Insurance brokers are NOT authorized to issue it.

C-105.2 (9-07)

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.

2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

C-105.2 (9-07) Reverse

STATE OF NEW YORK
WORKER'S COMPENSATION BOARD

CERTIFICATE OF INSURANCE COVERAGE UNDER THE NYS DISABILITY BENEFITS LAW

PART 1. To be completed by Disability Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name and Address of Insured (Use street address only)
ULSTER EXCAVATING AND TRUCKING, INC.

909 ORLANDO STREET
KINGSTON, NY 12401

1b. Business Telephone Number of Insured
845-339-4350

1c. NYS Unemployment Insurance Employer Registration Number of Insured

1d. Federal Employer Identification Number of Insured or Social Security Number
141809667

2. Name and Address of the Entity requesting Proof of Coverage (Entity being listed as the Certificate Holder)

City of Kingston
420 Broadway
Kingston NY 12401

3a. Name of Insurance Carrier
ShelterPoint Life Insurance Company

3b. Policy Number of Entity listed in box "1a":
DBL424147

3c. Policy effective period:
01/01/2015 to 12/31/2016

4. Policy covers:

a. [X] All of the employer's employees eligible under the New York Disability Benefits Law

b. [ ] Only the following class or classes of the employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability Benefits insurance coverage as described above.

Date Signed 11/18/2015 By _____
(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number 516-829-8100 Title Chief Executive Officer

IMPORTANT: If box "4a" is checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.
If box "4b" is checked, this certificate is NOT COMPLETE for the purposes of Section 220, Subd. 8 of the Disability Benefits Law. It must be mailed for completion to the Worker's Compensation Board, DB Plans Acceptance Unit, 328 State Street, Schenectady, NY 12305.

PART 2. To be completed by NYS Worker's Compensation Board (Only if box "4b" of Part 1 has been checked)

State of New York
Worker's Compensation Board

According to information maintained by the NYS Worker's Compensation Board, the above-named employer has complied with the NYS Disability Benefits Law with respect to all of his/her employees.

Date Signed _____ By _____
(Signature of NYS Worker's Compensation Board Employee)

Telephone Number _____ Title _____

Please Note: Only insurance carriers licensed to write NYS Disability Benefits insurance policies and NYS Licensed Insurance Agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box "3" on this form is certifying that it is insuring the business referenced in Box "1a" for disability benefits under the New York State Disability Benefits Law. The insurance carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in Box "2". **This certificate is valid for the earlier of one year after this form is approved by the insurance carrier or its licensed agent, or the policy expiration date listed in Box "3c".**

Please Note: Upon the cancellation of the disability benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability Benefits Law.

DISABILITY BENEFITS LAW

§220. Subd. 8

(a) The head of state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of state or municipal department, board, commission, or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article.

APPENDIX C

PHOTOGRAPH LOG

Photographs 1& 2: Underground utilities were marked with spray paint and flags during site preparation activities and prior to ground intrusive activities.

Photograph 3: Oxygen Release Compound Advanced® (ORC) injection points were marked with wood stakes during site preparation activities.

Photograph 4: Silt fencing was installed and maintained at the hydraulically downgradient perimeter of the site and offsite excavation area for erosion control. Construction fencing was also installed to secure site access. Photograph facing east along south property line.

Photograph 5: Site soil was excavated by Ulster Excavating & Trucking, Inc. (Ulster Excavating) to achieve intended site grades and for the construction of a stormwater control ditch along southern property boundary, shown above. Photograph facing west.

Photograph 6: Ulster Excavating excavated impacted soil from the offsite area east of North Street and confirmatory sampling was conducted to verify the removal of impacted soil.

Photograph 7: Onsite and offsite soils excavated by Ulster Excavating were placed in the designated soil placement area. Soil stockpiles were temporary and were graded before the end of each work day.

Photograph 8: Aquifer Drilling & Testing, Inc. (ADT) performed mixing and injection of ORC.

Photograph 9: Public roadways abutting the site were swept by Ulster Excavating, as necessary, to mitigate potential nuisance dust conditions.

Photograph 10: Perimeter community air monitoring was conducted during ground-intrusive activities and during moving and placement of impacted soil.

Photograph 11: Monitoring wells MW-1, MW-2, and MW-7R were decommissioned by ADT in accordance with the Interim Remedial Measures (IRM) Work Plan dated November 18, 2015 and Commissioner's Policy-43 (CP-43). Monitoring well MW-2 shown above.

Photograph 12: Monitoring Well MW-4R, adjacent to MW-11, was observed during IRM field activities to be irreparably damaged and was subsequently decommissioned by ADT in accordance with CP-43.

Photograph 13: The area surrounding MW-13 (photocenter) was excavated by Ulster Excavating to locate well MW-3. No evidence of MW-3 was observed and is presumed to have been previously removed.

Photograph 14: Approximately two (2) feet of soil located north of the Millens property line and south of the site's fence line was excavated by Ulster Excavating and placed in the soil placement area and covered.

Photograph 15: Visibly stained soil was excavated spanning approximately 80 feet east-west and 20 feet north-south near MW-14 (shown far right). Photograph facing northeast.

Photograph 16: Stained soil shown in Photograph 15 was excavated and placed in the soil placement area and covered. Photograph facing west.

Photograph 17: Ulster Excavating excavated additional soil from the offsite area east of North Street and removed all impacted soil. Excavated soil was placed within the soil placement area and covered.

Photographs 18, 19, & 20: A demarcation layer consisting of construction fencing and/or filter fabric was placed above existing site soils and covered with imported backfill. Photographs facing northwest.

Photographs 21 and 22: A protective site cover consisting of imported soil (left) or imported stone product (right) was installed over the footprint of the site.

Photographs 23 and 24: Monitoring Well MW-10 was damaged during the installation of the protective site cover.

Photograph 25: Ulster Excavating located the remainder of the below grade portion of MW-10, repaired the associated well casing and installed a new protective casing on April 29, 2016.

Photograph 26: The well casing associated with MW-14 was replaced by ADT to accommodate new site grades. The top of the PVC well casing was cut and resurveyed.

Photograph 27: Imported stone product was placed within the offsite excavation area located east of North Street. No demarcation layer was installed in the offsite excavation area because end-point sampling indicated that impacted soil was removed.

Photograph 28: Photograph facing northeast following the installation of the protective site cover.

Photograph 29: Photograph facing northwest following the installation of the protective site cover.

Photograph 30: Stormwater control ditch following completion, facing east.

APPENDIX D

CAMP AIR MONITORING DATA
(PROVIDED ON CD)

APPENDIX E

AS-BUILT DRAWINGS

LEGEND:

	PROPERTY LINE
	EXISTING CONTOUR
	EXISTING FENCE
	EXISTING GAS MAIN
	INACTIVE GAS MAIN
	STONE/ CRUSHED CONCRETE COVER
	RELOCATED SOIL PLACEMENT AREA
	ASPHALT
	EXCAVATION AREAS
	VISUALLY IMPACTED SOIL EXCAVATION AREA

MAP REFERENCE: BASEMAP SURVEY BY RICHARD PAUL HANBACK P.L.S. DATED APRIL 15, 2016
GAS MAIN LOCATIONS FROM CENTRAL HUDSON KINGSTON DISTRICT MAPS SHEETS 5 AND 6, LAST REVISED MAY 7, 2013

SHEET 1

LICENSED PROFESSIONAL ENGINEER — MARK P. MILLSPAUGH — 059182 — STATE OF NEW YORK

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR
1	6/6/16	REVISIONS PER DEC COMMENTS DATED JUNE 2, 2016.	TAS	TMJ	

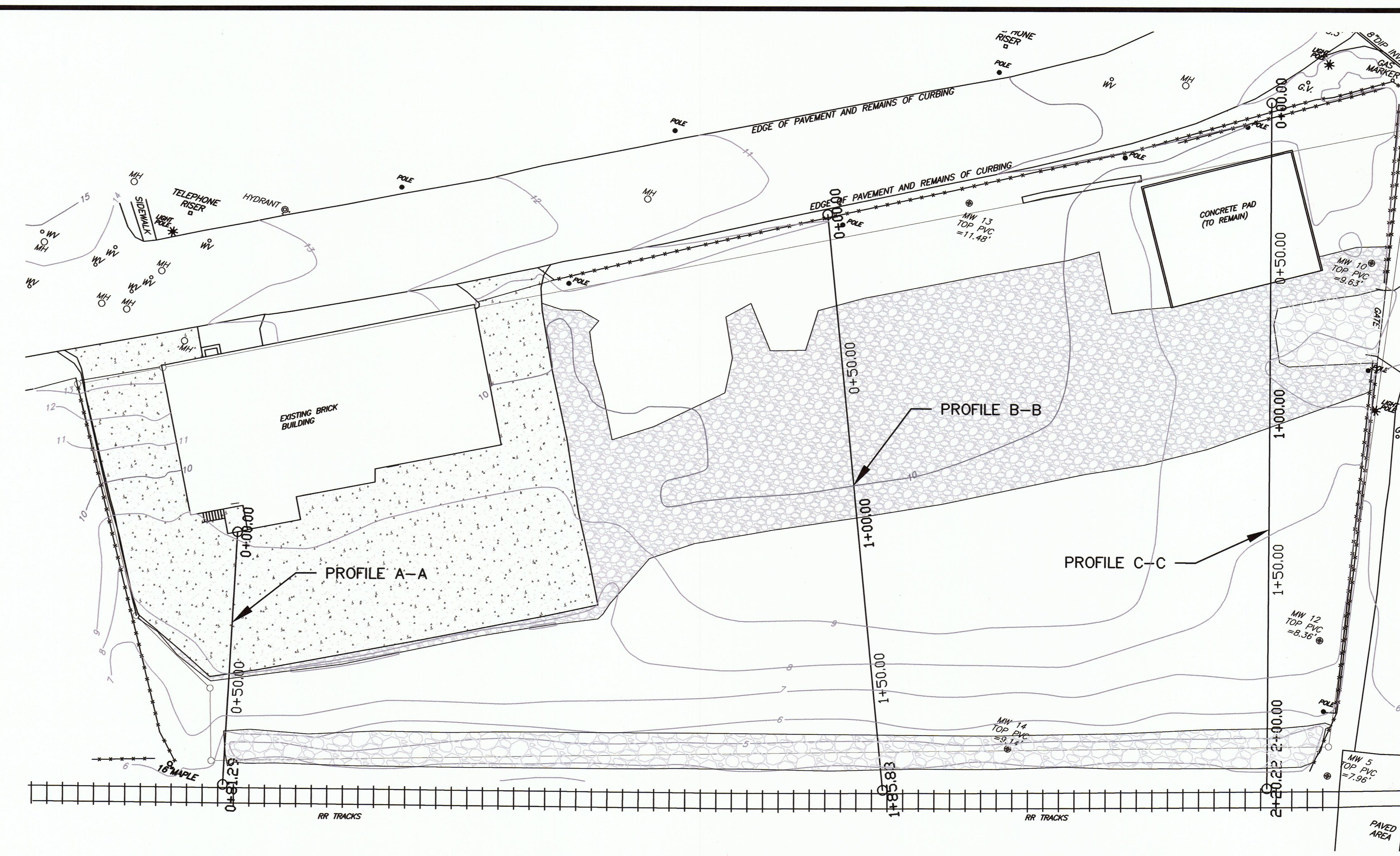
PROJECT	
PROJ. ENGR.:	MPM
PROJ. NO.:	27023
PREPARED BY:	TAS
DRAFTED BY:	TAS
CHECKED BY:	
APPROVED BY:	
DATUM:	MSL
CONTOUR INTERVAL =	1 – FEET

0 4' 8' 16' 32'
1" = 16'

EXCAVATION AND COVER SYSTEM
RECORD PLAN
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER COUNTY

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

DATE: 05/11/2016 | SCALE: 1" = 16' | DWG. NO. 27023060 | SHEET 1 OF 2



PROFILE PLAN

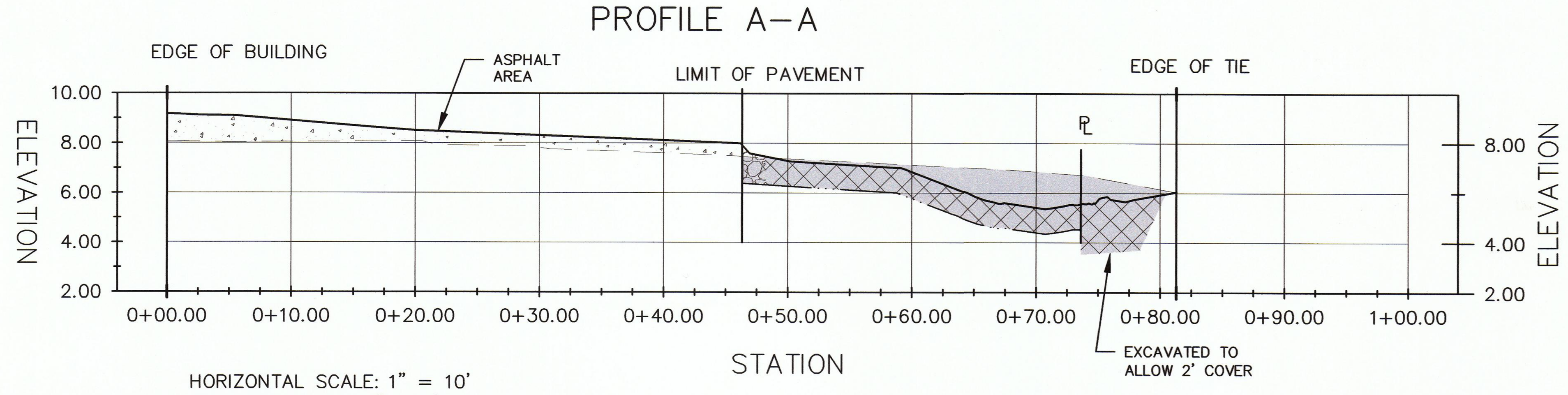
1" = 30'

LEGEND:

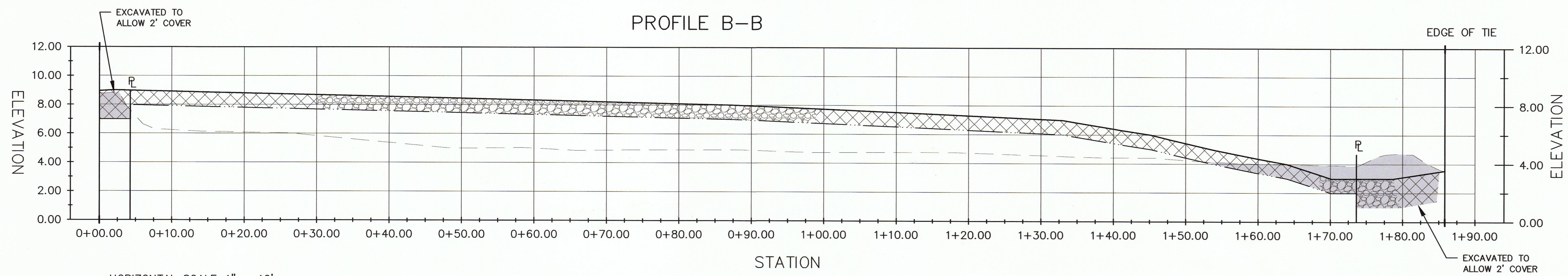
CONTOUR

STONE/ CRUSHED CONCRETE COVER

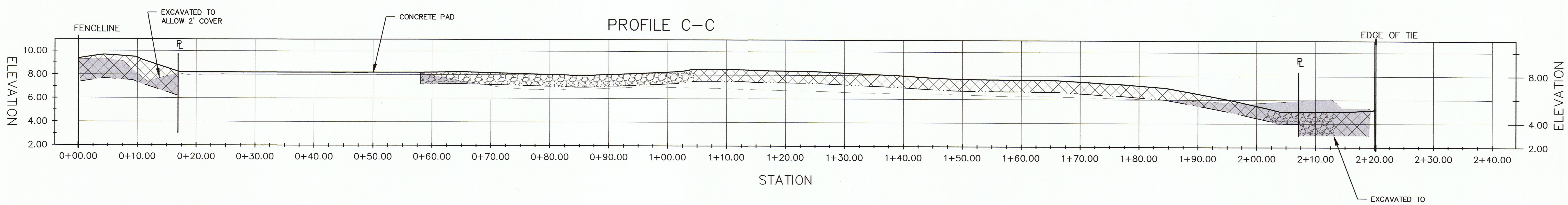
ASPHALT



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'

LEGEND:

PRE–REMEDIATION GRADE

FINAL GRADE

DEMARCATION LAYER

MATERIAL EXCAVATED

STONE/ CONCRETE FILL COVER SYSTEM

SOIL COVER

ASPHALT

MAP REFERENCE: BASEMAP SURVEY BY RICHARD PAUL HANBACK P.L.S. DATED NOVEMBER 19, 2015
AS–BUILT SURVEY BY RICHARD PAUL HANBACK P.L.S. DATED APRIL 15, 2016
GAS MAIN LOCATIONS FROM CENTRAL HUDSON KINGSTON DISTRICT MAPS SHEETS 5 AND 6, LAST REVISED MAY 7, 2013

SHEET 2

LICENSED PROFESSIONAL ENGINEER 059182 STATE OF NEW YORK

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR
1	6/6/16	REVISIONS PER DEC COMMENTS DATED JUNE 2, 2016.	TAS	TMJ	

PROJECT

PROJ. ENGR.: MPM
PROJ. NO.: 27023
PREPARED BY: TAS
DRAFTED BY: TAS
CHECKED BY:
APPROVED BY:
DATUM: MSL
CONTOUR INTERVAL = FEET

SITE GRADING PROFILES
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER COUNTY

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

DATE: 05/11/2016 | SCALE: AS NOTED | DWG. NO. 27023061 | SHEET 2 OF 2

APPENDIX F

DATA USABILITY SUMMARY REPORTS (DUSRs)

ALPHA
GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

April 6, 2016

Mr. Vedran Cirkovic, EIT
Assistant Engineer
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
Millen's Scrap Yard
March 2016 Ground Water Sampling Event

Dear Mr. Cirkovic:

The data usability summary report (DUSR) and QA/QC review are attached to this letter for the above referenced project sampling event. The data for Alpha Analytical, SDG number L1608469 are mostly acceptable with some issues that are identified and discussed in the validation summaries. There are volatile data that were flagged as rejected, unusable (R) in the data pack. This is due to an unacceptable level of acetone in the trip blank. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Sterling Environmental Engineering, P.C.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
Alpha Analytical, SDG Number: L1608469

7 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected March 23, 2016

Prepared by: Donald Anné
April 6, 2016

The data packages contain the documentation required by NYSDEC ASP except for dioxins/furans. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 7 ground water samples, 1 field duplicate, and 1 trip blank analyzed for volatiles.

The overall performances of the analyses are acceptable. Alpha Analytical did fulfill the requirements of the analytical methods except for volatiles.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for chloromethane were flagged as estimated (J) in all 7 ground water samples, field duplicate, and trip blank because 1 of 2 percent recoveries for chloromethane was below QC limits in the associated aqueous LCS/LCSD sample and the RRF for the SPCC was below the method minimum in the associated continuing calibration.

- The positive volatile result for acetone was flagged as "unusable, rejected" (R) for sample MW-12 because the level reported in the sample was not significantly greater than (more than 10 times) the highest associated blank level.

- The positive volatile results for methyl tert butyl ether were flagged as estimated (J) in samples MW-11 and DUPLICATE because relative percent difference for methyl tert butyl ether was above the allowable maximum in aqueous field duplicate pair MW-11/DUPLICATE.

All data that are not flagged rejected, unusable (R) are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260 Volatiles Data
for Alpha Analytical, SDG Number: L608469

7 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected March 23, 2016

Prepared by: Donald Anné
April 6, 2016

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260 criteria.

The average RRFs for target compounds were above the allowable minimum (0.0005 for 1,4-dioxane, 0.010 for all other compounds) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The CCCs were within method 8260 criteria. The RRF for the SPCC chloromethane was below the method minimum (0.100), but not below 0.010 on 03-27-16 (0327A02). Samples associated with this calibration should have been re-analyzed with a method compliant analysis. Positive and "not detected" results for chloromethane should be considered estimated (J) in associated samples.

The RRFs for target compounds were above the allowable minimum (0.0005 for 1,4-dioxane, 0.010 for all other compounds), as required.

The %Ds for chloromethane, chloroethane, trichlorodifluoromethane, methyl acetate, 1,1,2,2-tetrachloroethane, and 1,2-dibromo-3-chloropropane were above the allowable maximum (25%) on 03-27-16 (0327A01). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method blanks reported target compounds as not detected. Trip blank TB111920 contained an unacceptable level of acetone (22 ug/L). Positive results for acetone that are less than 10 times the highest blank level should be reported as unusable, rejected (R) in associated samples.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966
www.alphageoscience.com

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blanks.

Matrix Spike/Matrix Spike Duplicate: One of eighty-three relative percent differences for spiked compounds was above the allowable maximum and 17 of 168 percent recoveries were above QC limits for aqueous MS/MSD sample MW-13. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The relative percent difference for chloromethane was above the allowable maximum and 1 of 2 percent recoveries (%Rs) for chloroethane was above QC limits for aqueous samples WG877887-1LCS/2LCSD. Positive results for chloroethane should be considered estimated (J) associated aqueous samples.

One of two %Rs for chloromethane was below QC limits for aqueous samples WG877887-1LCS/2LCSD. Positive and "not detected" results for chloromethane should be considered estimated (J) associated aqueous samples.

Field Duplicates: The relative percent difference for methyl tert butyl ether was above the allowable maximum (20%) for aqueous field duplicate pair MW-11/DUPICATE (attached table). Results for methyl tert butyl ether should be considered estimated (J) in samples MW-11 and DUPLICATE.

Compound ID: Checked surrogates and compounds were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L1608469

S1= MW-11 **S2=** DUPLICATE

Analyte	S1	S2	RPD (%)	
methyl tert butyl ether	2.4	28	168%	*
cyclohexane	ND	0.72	NC	

* RPD is above the allowable maximum (20%)

All results are in ug/L

Bold numbers were values that below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

3A
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1608469 Matrix: Water
Lab Control Sample: WG877887-1LCS Injected: 03/27/16 11:22 Lab File ID: 0327A02.D

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC	QC. LIMITS REC.
Methylene chloride	10	NA	11.	106	70-130
1,1-Dichloroethane	10	NA	11.	112	70-130
Chloroform	10	NA	11.	109	70-130
2-Chloroethylvinyl ether	10	NA	10.	105	70-130
Carbontetrachloride	10	NA	9.1	91	63-132
1,2-Dichloropropane	10	NA	11.	111	70-130
Chlorodibromomethane	10	NA	8.6	86	63-130
1,1,2-Trichloroethane	10	NA	12.	116	70-130
Tetrachloroethene	10	NA	9.1	91	70-130
Chlorobenzene	10	NA	10.	105	75-130
Trichlorofluoromethane	10	NA	12.	124	62-150
1,2-Dichloroethane	10	NA	12.	117	70-130
1,1,1-Trichloroethane	10	NA	10.	101	67-130
Bromodichloromethane	10	NA	10.	103	67-130
trans-1,3-Dichloropropen	10	NA	10.	102	70-130
cis-1,3-Dichloropropene	10	NA	9.7	97	70-130
1,1-Dichloropropene	10	NA	10.	106	70-130
Bromoform	10	NA	8.1	81	54-136
1,1,2,2,-Tetrachloroetha	10	NA	12.	124	67-130
Benzene	10	NA	10.	105	70-130
Toluene	10	NA	9.5	95	70-130
Ethyl benzene	10	NA	11.	109	70-130
Chloromethane	10	NA	6.3	63*	64-130
Bromomethane	10	NA	11.	107	39-139
Vinyl chloride	10	NA	11.	114	55-140
Chloroethane	10	NA	15.	148*	55-138
1,1,-Dichloroethene	10	NA	10.	100	61-145
trans-1,2-Dichloroethene	10	NA	10.	101	70-130
Trichloroethene	10	NA	10.	103	70-130
1,2-Dichlorobenzene	10	NA	10.	104	70-130
1,3-Dichlorobenzene	10	NA	10.	103	70-130
1,4-Dichlorobenzene	10	NA	10.	105	70-130
Methyl tert butyl ether	10	NA	9.8	98	63-130
p/m xylene	20	NA	21.	107	70-130
o Xylene	20	NA	21.	106	70-130
cis-1,2-Dichloroethene	10	NA	10.	102	70-130
Dibromomethane	10	NA	10.	105	70-130
1,2,3-Trichloropropane	10	NA	13.	128	64-130
Acrylonitrile	10	NA	11.	114	70-130
Diisopropyl Ether	10	NA	12.	120	70-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III NYTCL-8260

3A
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1608469 Matrix: Water
Lab Control Sample: WG877887-1LCS Injected: 03/27/16 11:22 Lab File ID: 0327A02.D

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC	QC. LIMITS REC.
tert-Butyl Alcohol	50	NA	46.	93	70-130
Styrene	20	NA	22.	108	70-130
Dichlorodifluoromethane	10	NA	10.	100	36-147
Acetone	10	NA	9.6	96	58-148
Carbon disulfide	10	NA	10.	100	51-130
2-Butanone	10	NA	12.	116	63-138
Vinyl acetate	10	NA	13.	134*	70-130
4-Methyl-2-pentanone	10	NA	9.9	99	59-130
2-Hexanone	10	NA	10.	100	57-130
Acrolein	10	NA	10.	103	40-160
Bromochloromethane	10	NA	9.4	94	70-130
2,2-Dichloropropane	10	NA	9.2	92	63-133
1,2-Dibromoethane	10	NA	10.	105	70-130
1,3-Dichloropropane	10	NA	12.	117	70-130
1,1,1,2-Tetrachloroethan	10	NA	9.7	97	64-130
Bromobenzene	10	NA	10.	101	70-130
n-Butylbenzene	10	NA	12.	116	53-136
sec-Butylbenzene	10	NA	11.	111	70-130
tert-Butylbenzene	10	NA	11.	106	70-130
2-Chlorotoluene	10	NA	12.	117	70-130
4-Chorotoluene	10	NA	12.	116	70-130
1,2-Dibromo-3-chloroprop	10	NA	12.	121	41-144
Hexachlorobutadiene	10	NA	9.0	90	63-130
Isopropylbenzene	10	NA	11.	111	70-130
p-Isopropyltoluene	10	NA	10.	105	70-130
Naphthalene	10	NA	10.	105	70-130
n-Propylbenzene	10	NA	12.	118	69-130
1,2,3-Trichlorobenzene	10	NA	10.	103	70-130
1,2,4-Trichlorobenzene	10	NA	9.4	94	70-130
1,3,5-Trimethybenzene	10	NA	11.	111	64-130
1,2,4-Trimethylbenzene	10	NA	11.	110	70-130
Methyl Acetate	10	NA	12.	122	70-130
Ethyl Acetate	10	NA	12.	115	70-130
Cyclohexane	10	NA	11.	108	70-130
Ethyl-Tert-Butyl-Ether	10	NA	10.	101	70-130
Tertiary-Amyl Methyl Eth	10	NA	8.9	89	66-130
1,4-Dioxane	500	NA	550	110	56-162
Freon-113	10	NA	10.	100	70-130
p-Diethylbenzene	10	NA	10.	103	70-130
4-Ethyltoluene	10	NA	11.	112	70-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III NYTCL-8260

3A
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1608469 Matrix: Water
Lab Control Sample: WG877887-1LCS Injected: 03/27/16 11:22 Lab File ID: 0327A02.D

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC	QC. LIMITS REC.
1,2,4,5-Tetramethylbenze	10	NA	10.	101	70-130
Ethyl ether	10	NA	11.	114	59-134
trans-1,4-Dichloro-2-but	10	NA	11.	109	70-130
Iodomethane	10	NA	5.3	53*	70-130
Methyl cyclohexane	10	NA	9.8	98	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Lab Control Sample: WG877887-1LCS Injected: 03/27/16 11:22 Lab File ID: 0327A02.D

Lab Control Dup : WG877887-2LCSD Injected: 03/27/16 11:45 Lab File ID: 0327A03.D

COMPOUND	SPIKE ADDED (ug/l)	LCSD CONCENTRATION (ug/l)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Methylene chloride	10	11.	106	0	20	70-130
1,1-Dichloroethane	10	11.	110	2	20	70-130
Chloroform	10	11.	107	2	20	70-130
2-Chloroethylvinyl ether	10	10.	106	1	20	70-130
Carbontetrachloride	10	8.9	89	2	20	63-132
1,2-Dichloropropane	10	11.	108	3	20	70-130
Chlorodibromomethane	10	8.6	87	1	20	63-130
1,1,2-Trichloroethane	10	12.	116	0	20	70-130
Tetrachloroethene	10	8.9	89	2	20	70-130
Chlorobenzene	10	10.	103	2	20	75-130
Trichlorofluoromethane	10	12.	122	2	20	62-150
1,2-Dichloroethane	10	12.	117	0	20	70-130
1,1,1-Trichloroethane	10	10.	100	1	20	67-130
Bromodichloromethane	10	10.	102	1	20	67-130
trans-1,3-Dichloropropen	10	10.	102	0	20	70-130
cis-1,3-Dichloropropene	10	9.6	96	1	20	70-130
1,1-Dichloropropene	10	10.	103	3	20	70-130
Bromoform	10	8.1	81	0	20	54-136
1,1,2,2,-Tetrachloroetha	10	12.	126	2	20	67-130
Benzene	10	10.	103	2	20	70-130
Toluene	10	9.3	93	2	20	70-130
Ethyl benzene	10	11.	107	2	20	70-130
Chloromethane	10	8.8	88	33 *	20	64-130
Bromomethane	10	10.	101	6	20	39-139
Vinyl chloride	10	11.	115	1	20	55-140
Chloroethane	10	15.	155 *	5	20	55-138
1,1,-Dichloroethene	10	9.8	98	2	20	61-145
trans-1,2-Dichloroethene	10	9.9	99	2	20	70-130
Trichloroethene	10	10.	101	2	20	70-130
1,2-Dichlorobenzene	10	10.	103	1	20	70-130
1,3-Dichlorobenzene	10	10.	101	2	20	70-130
1,4-Dichlorobenzene	10	10.	104	1	20	70-130
Methyl tert butyl ether	10	9.7	97	1	20	63-130
p/m xylene	20	21.	104	3	20	70-130
o Xylene	20	21.	104	2	20	70-130
cis-1,2-Dichloroethene	10	9.9	100	2	20	70-130
Dibromomethane	10	10.	105	0	20	70-130
1,2,3-Trichloropropane	10	13.	129	1	20	64-130
Acrylonitrile	10	11.	115	1	20	70-130
Diisopropyl Ether	10	12.	117	3	20	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Lab Control Sample: WG877887-1LCS Injected: 03/27/16 11:22 Lab File ID: 0327A02.D

Lab Control Dup : WG877887-2LCSD Injected: 03/27/16 11:45 Lab File ID: 0327A03.D

COMPOUND	SPIKE ADDED (ug/l)	LCSD CONCENTRATION (ug/l)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
tert-Butyl Alcohol	50	47.	95	2	20	70-130
Styrene	20	21.	106	2	20	70-130
Dichlorodifluoromethane	10	9.8	98	2	20	36-147
Acetone	10	9.5	95	1	20	58-148
Carbon disulfide	10	9.7	98	2	20	51-130
2-Butanone	10	12.	117	1	20	63-138
Vinyl acetate	10	13.	132 *	1	20	70-130
4-Methyl-2-pentanone	10	10.	102	3	20	59-130
2-Hexanone	10	10.	105	5	20	57-130
Acrolein	10	10.	102	1	20	40-160
Bromochloromethane	10	9.3	93	1	20	70-130
2,2-Dichloropropane	10	8.7	87	6	20	63-133
1,2-Dibromoethane	10	11.	106	1	20	70-130
1,3-Dichloropropane	10	12.	117	0	20	70-130
1,1,1,2-Tetrachloroethan	10	9.4	95	2	20	64-130
Bromobenzene	10	10.	101	0	20	70-130
n-Butylbenzene	10	11.	113	3	20	53-136
sec-Butylbenzene	10	11.	108	3	20	70-130
tert-Butylbenzene	10	10.	103	3	20	70-130
2-Chlorotoluene	10	12.	115	2	20	70-130
4-Chorotoluene	10	11.	114	2	20	70-130
1,2-Dibromo-3-chloroprop	10	12.	121	0	20	41-144
Hexachlorobutadiene	10	8.7	87	3	20	63-130
Isopropylbenzene	10	11.	108	3	20	70-130
p-Isopropyltoluene	10	10.	103	2	20	70-130
Naphthalene	10	11.	107	2	20	70-130
n-Propylbenzene	10	11.	115	3	20	69-130
1,2,3-Trichlorobenzene	10	10.	102	1	20	70-130
1,2,4-Trichlorobenzene	10	9.5	95	1	20	70-130
1,3,5-Trimethybenzene	10	11.	108	3	20	64-130
1,2,4-Trimethylbenzene	10	11.	108	2	20	70-130
Methyl Acetate	10	12.	125	2	20	70-130
Ethyl Acetate	10	12.	116	1	20	70-130
Cyclohexane	10	10.	105	3	20	70-130
Ethyl-Tert-Butyl-Ether	10	10.	100	1	20	70-130
Tertiary-Amyl Methyl Eth	10	8.9	89	0	20	66-130
1,4-Dioxane	500	540	107	3	20	56-162
Freon-113	10	9.8	98	2	20	70-130
p-Diethylbenzene	10	10.	100	3	20	70-130
4-Ethyltoluene	10	11.	109	3	20	70-130

NA

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A
LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY
WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1608469 Matrix: Water
Lab Control Sample: WG877887-1LCS Injected: 03/27/16 11:22 Lab File ID: 0327A02.D
Lab Control Dup : WG877887-2LCSD Injected: 03/27/16 11:45 Lab File ID: 0327A03.D

COMPOUND	SPIKE ADDED (ug/l)	LCSD CONCENTRATION (ug/l)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
1,2,4,5-Tetramethylbenze	10	10.	100	1	20	70-130
Ethyl ether	10	11.	111	3	20	59-134
trans-1,4-Dichloro-2-but	10	10.	106	3	20	70-130
Iodomethane	10	5.0	50 *	6	20	70-130
Methyl cyclohexane	10	9.4	94	4	20	70-130

NA

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Client Sample ID : MW-13 Injected: 03/27/16 17:58 Lab File ID: 0327A19.D

Matrix Spike : WG877887-4 Injected: 03/27/16 19:32 Lab File ID: 0327A23.D

Matrix Spike Dup : WG877887-5 Injected: 03/27/16 19:55 Lab File ID: 0327A24.D

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC	QC. LIMITS REC.
Methylene chloride	10	ND	12.	122	70-130
1,1-Dichloroethane	10	ND	13.	128	70-130
Chloroform	10	ND	12.	123	70-130
Carbontetrachloride	10	ND	9.8	98	63-132
1,2-Dichloropropane	10	ND	12.	125	70-130
Chlorodibromomethane	10	ND	9.2	92	63-130
1,1,2-Trichloroethane	10	ND	13.	130	70-130
Tetrachloroethene	10	ND	9.8	98	70-130
Chlorobenzene	10	ND	11.	114	75-130
Trichlorofluoromethane	10	ND	14.	142	62-150
1,2-Dichloroethane	10	ND	13.	132*	70-130
1,1,1-Trichloroethane	10	ND	11.	114	67-130
Bromodichloromethane	10	ND	11.	114	67-130
trans-1,3-Dichloropropen	10	ND	11.	108	70-130
cis-1,3-Dichloropropene	10	ND	10.	103	70-130
1,1-Dichloropropene	10	ND	12.	118	70-130
Bromoform	10	ND	8.5	85	54-136
1,1,2,2,-Tetrachloroetha	10	ND	14.	138*	67-130
Benzene	10	ND	12.	119	70-130
Toluene	10	ND	10.	104	70-130
Ethyl benzene	10	ND	12.	118	70-130
Chloromethane	10	ND	9.9	99	64-130
Bromomethane	10	0.75J	6.2	62	39-139
Vinyl chloride	10	ND	13.	135	55-140
Chloroethane	10	ND	19.	191*	55-138
1,1,-Dichloroethene	10	ND	11.	113	61-145
trans-1,2-Dichloroethene	10	ND	11.	113	70-130
Trichloroethene	10	ND	12.	115	70-130
1,2-Dichlorobenzene	10	ND	11.	110	70-130
1,3-Dichlorobenzene	10	ND	11.	109	70-130
1,4-Dichlorobenzene	10	ND	11.	111	70-130
Methyl tert butyl ether	10	ND	11.	107	63-130
p/m xylene	20	ND	23.	115	70-130
o Xylene	20	ND	23.	116	70-130
cis-1,2-Dichloroethene	10	ND	11.	114	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Client Sample ID : MW-13 Injected: 03/27/16 17:58 Lab File ID: 0327A19.D

Matrix Spike : WG877887-4 Injected: 03/27/16 19:32 Lab File ID: 0327A23.D

Matrix Spike Dup : WG877887-5 Injected: 03/27/16 19:55 Lab File ID: 0327A24.D

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC	QC. LIMITS REC.
Dibromomethane	10	ND	12.	118	70-130
1,2,3-Trichloropropane	10	ND	14.	141*	64-130
Acrylonitrile	10	ND	13.	127	70-130
Diisopropyl Ether	10	ND	13.	133*	70-130
tert-Butyl Alcohol	50	ND	46.	93	70-130
Styrene	20	ND	23.	115	70-130
Dichlorodifluoromethane	10	ND	11.	108	36-147
Acetone	10	ND	11.	115	58-148
Carbon disulfide	10	ND	11.	115	51-130
2-Butanone	10	ND	13.	127	63-138
Vinyl acetate	10	ND	15.	152*	70-130
4-Methyl-2-pentanone	10	ND	11.	113	59-130
2-Hexanone	10	ND	12.	116	57-130
Acrolein	10	ND	11.	109	40-160
Bromochloromethane	10	ND	11.	107	70-130
2,2-Dichloropropane	10	ND	9.1	91	63-133
1,2-Dibromoethane	10	ND	12.	117	70-130
1,3-Dichloropropane	10	ND	13.	129	70-130
1,1,1,2-Tetrachloroethan	10	ND	10.	104	64-130
Bromobenzene	10	ND	11.	109	70-130
n-Butylbenzene	10	ND	12.	121	53-136
sec-Butylbenzene	10	ND	12.	115	70-130
tert-Butylbenzene	10	ND	11.	112	70-130
2-Chlorotoluene	10	ND	12.	126	70-130
4-Chorotoluene	10	ND	12.	124	70-130
1,2-Dibromo-3-chloroprop	10	ND	13.	127	41-144
Hexachlorobutadiene	10	ND	8.8	88	63-130
Isopropylbenzene	10	ND	12.	119	70-130
p-Isopropyltoluene	10	ND	11.	111	70-130
Naphthalene	10	ND	10.	101	70-130
n-Propylbenzene	10	ND	12.	125	69-130
1,2,3-Trichlorobenzene	10	ND	9.3	93	70-130
1,2,4-Trichlorobenzene	10	ND	9.4	94	70-130
1,3,5-Trimethybenzene	10	ND	12.	119	64-130
1,2,4-Trimethylbenzene	10	ND	12.	117	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Client Sample ID : MW-13 Injected: 03/27/16 17:58 Lab File ID: 0327A19.D

Matrix Spike : WG877887-4 Injected: 03/27/16 19:32 Lab File ID: 0327A23.D

Matrix Spike Dup : WG877887-5 Injected: 03/27/16 19:55 Lab File ID: 0327A24.D

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC	QC. LIMITS REC.
Methyl Acetate	10	ND	13.	126	70-130
Ethyl Acetate	10	ND	13.	128	70-130
Cyclohexane	10	ND	11.	113	70-130
Ethyl-Tert-Butyl-Ether	10	ND	11.	111	70-130
Tertiary-Amyl Methyl Eth	10	ND	9.7	97	66-130
1,4-Dioxane	500	ND	520	104	56-162
Freon-113	10	ND	11.	106	70-130
p-Diethylbenzene	10	ND	11.	107	70-130
4-Ethyltoluene	10	ND	12.	118	70-130
1,2,4,5-Tetramethylbenze	10	ND	10.	105	70-130
Ethyl ether	10	ND	12.	125	59-134
trans-1,4-Dichloro-2-but	10	ND	9.7	97	70-130
Methyl cyclohexane	10	ND	9.8J	98	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Client Sample ID : MW-13 Injected: 03/27/16 17:58 Lab File ID: 0327A19.D

Matrix Spike : WG877887-4 Injected: 03/27/16 19:32 Lab File ID: 0327A23.D

Matrix Spike Dup : WG877887-5MSD Injected: 03/27/16 19:55 Lab File ID: 0327A24.D

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Methylene chloride	10	13.	126	8	20	70-130
1,1-Dichloroethane	10	13.	132 *	0	20	70-130
Chloroform	10	13.	127	8	20	70-130
Carbontetrachloride	10	10.	102	2	20	63-132
1,2-Dichloropropane	10	13.	128	8	20	70-130
Chlorodibromomethane	10	9.6	96	4	20	63-130
1,1,2-Trichloroethane	10	13.	132 *	0	20	70-130
Tetrachloroethene	10	10.	101	2	20	70-130
Chlorobenzene	10	12.	118	9	20	75-130
Trichlorofluoromethane	10	14.	145	0	20	62-150
1,2-Dichloroethane	10	13.	134 *	0	20	70-130
1,1,1-Trichloroethane	10	12.	117	9	20	67-130
Bromodichloromethane	10	12.	118	9	20	67-130
trans-1,3-Dichloropropen	10	11.	113	0	20	70-130
cis-1,3-Dichloropropene	10	11.	106	10	20	70-130
1,1-Dichloropropene	10	12.	120	0	20	70-130
Bromoform	10	8.7	87	2	20	54-136
1,1,2,2,-Tetrachloroetha	10	14.	138 *	0	20	67-130
Benzene	10	12.	121	0	20	70-130
Toluene	10	11.	107	10	20	70-130
Ethyl benzene	10	12.	122	0	20	70-130
Chloromethane	10	13.	129	27 *	20	64-130
Bromomethane	10	7.6	76	20	20	39-139
Vinyl chloride	10	14.	141 *	7	20	55-140
Chloroethane	10	21.	210 *	10	20	55-138
1,1,-Dichloroethene	10	12.	116	9	20	61-145
trans-1,2-Dichloroethene	10	12.	115	9	20	70-130
Trichloroethene	10	12.	118	0	20	70-130
1,2-Dichlorobenzene	10	11.	115	0	20	70-130
1,3-Dichlorobenzene	10	11.	112	0	20	70-130
1,4-Dichlorobenzene	10	12.	116	9	20	70-130
Methyl tert butyl ether	10	11.	110	0	20	63-130
p/m xylene	20	24.	119	4	20	70-130
o Xylene	20	24.	119	4	20	70-130
cis-1,2-Dichloroethene	10	12.	118	9	20	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1608469 Matrix: Water

Client Sample ID : MW-13 Injected: 03/27/16 17:58 Lab File ID: 0327A19.D

Matrix Spike : WG877887-4 Injected: 03/27/16 19:32 Lab File ID: 0327A23.D

Matrix Spike Dup : WG877887-5MSD Injected: 03/27/16 19:55 Lab File ID: 0327A24.D

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Dibromomethane	10	12.	120	0	20	70-130
1,2,3-Trichloropropane	10	14.	143 *	0	20	64-130
Acrylonitrile	10	13.	131 *	0	20	70-130
Diisopropyl Ether	10	14.	137 *	7	20	70-130
tert-Butyl Alcohol	50	48.	97	4	20	70-130
Styrene	20	24.	120	4	20	70-130
Dichlorodifluoromethane	10	11.	110	0	20	36-147
Acetone	10	11.	115	0	20	58-148
Carbon disulfide	10	12.	117	9	20	51-130
2-Butanone	10	13.	128	0	20	63-138
Vinyl acetate	10	16.	156 *	6	20	70-130
4-Methyl-2-pentanone	10	11.	114	0	20	59-130
2-Hexanone	10	12.	116	0	20	57-130
Acrolein	10	12.	115	9	20	40-160
Bromochloromethane	10	11.	108	0	20	70-130
2,2-Dichloropropane	10	9.5	95	4	20	63-133
1,2-Dibromoethane	10	12.	120	0	20	70-130
1,3-Dichloropropane	10	13.	132 *	0	20	70-130
1,1,1,2-Tetrachloroethan	10	11.	107	10	20	64-130
Bromobenzene	10	11.	112	0	20	70-130
n-Butylbenzene	10	13.	126	8	20	53-136
sec-Butylbenzene	10	12.	120	0	20	70-130
tert-Butylbenzene	10	11.	115	0	20	70-130
2-Chlorotoluene	10	13.	129	8	20	70-130
4-Chorotoluene	10	13.	128	8	20	70-130
1,2-Dibromo-3-chloroprop	10	13.	131	0	20	41-144
Hexachlorobutadiene	10	9.3	93	6	20	63-130
Isopropylbenzene	10	12.	122	0	20	70-130
p-Isopropyltoluene	10	11.	115	0	20	70-130
Naphthalene	10	11.	110	10	20	70-130
n-Propylbenzene	10	13.	129	8	20	69-130
1,2,3-Trichlorobenzene	10	10.	103	7	20	70-130
1,2,4-Trichlorobenzene	10	10.	100	6	20	70-130
1,3,5-Trimethybenzene	10	12.	122	0	20	64-130
1,2,4-Trimethylbenzene	10	12.	121	0	20	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

3A
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
WATER VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1608469 Matrix: Water
Client Sample ID : MW-13 Injected: 03/27/16 17:58 Lab File ID: 0327A19.D
Matrix Spike : WG877887-4 Injected: 03/27/16 19:32 Lab File ID: 0327A23.D
Matrix Spike Dup : WG877887-5MSD Injected: 03/27/16 19:55 Lab File ID: 0327A24.D

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Methyl Acetate	10	13.	129	0	20	70-130
Ethyl Acetate	10	13.	129	0	20	70-130
Cyclohexane	10	11.	115	0	20	70-130
Ethyl-Tert-Butyl-Ether	10	11.	115	0	20	70-130
Tertiary-Amyl Methyl Eth	10	10.	100	3	20	66-130
1,4-Dioxane	500	590	119	13	20	56-162
Freon-113	10	11.	107	0	20	70-130
p-Diethylbenzene	10	11.	113	0	20	70-130
4-Ethyltoluene	10	12.	122	0	20	70-130
1,2,4,5-Tetramethylbenze	10	11.	110	10	20	70-130
Ethyl ether	10	12.	126	0	20	59-134
trans-1,4-Dichloro-2-but	10	9.8	99	1	20	70-130
Methyl cyclohexane	10	10.	101	2	20	70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8260

Alpha Analytical Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Voa105.i
Lab File ID: 0327A02.D
Analysis Type: WATER
Lab Sample ID:
Method: \\Orgserv2\ff\chem\GCMSVOA\Voa105.i\160327.b\liq8260B.m

Injection Date: 27-MAR-2016 11:22
Init. Cal. Date(s): 15-MAR-2016 16-MAR-2016
Init. Cal. Times: 21:46 00:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF100	CCAL RRF100	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 dichlorodifluoromethane	0.16439	0.16366	0.16366	0.050	-0.44636	20.00000	Averaged	
2 chloromethane	0.14598	0.09156	0.09156	0.050	-37.27962	20.00000	Averaged	<-
3 vinyl chloride	0.16695	0.19103	0.19103	0.050	14.42214	20.00000	Averaged	
4 bromomethane	100	107	0.08122	0.050	6.73087	20.00000	Wt Linear	
5 chloroethane	0.07164	0.10603	0.10603	0.050	48.00567	20.00000	Averaged	<-
6 trichlorofluoromethane	0.22086	0.27330	0.27330	0.050	23.74532	20.00000	Averaged	<-
7 ethyl ether	0.07380	0.08379	0.08379	0.050	13.54360	20.00000	Averaged	
8 1,1,-dichloroethene	0.14346	0.14290	0.14290	0.050	-0.38825	20.00000	Averaged	
9 carbon disulfide	0.43837	0.44029	0.44029	0.050	0.43691	20.00000	Averaged	
10 freon-113	0.15541	0.15588	0.15588	0.050	0.30043	20.00000	Averaged	
186 iodomethane	100	53.25155	0.11374	0.050	-46.74845	20.00000	Wt Linear	<-
12 acrolein	0.01482	0.01533	0.01533	0.050	3.44798	20.00000	Averaged	<-
11 methylene chloride	0.14328	0.15246	0.15246	0.050	6.40989	20.00000	Averaged	
13 acetone	100	95.88050	0.02891	0.050	-4.11950	20.00000	Wt Linear	<-
14 trans-1,2-dichloroethene	0.15909	0.16100	0.16100	0.050	1.20061	20.00000	Averaged	
15 Methyl Acetate	0.06348	0.07739	0.07739	0.050	21.90230	20.00000	Averaged	<-
16 methyl tert butyl ether	0.32372	0.31609	0.31609	0.050	-2.35643	20.00000	Averaged	
17 Tert-Butyl Alcohol	0.00612	0.00568	0.00568	0.050	-7.18865	20.00000	Averaged	<-
18 Diisopropyl Ether	0.54371	0.64984	0.64984	0.050	19.51918	20.00000	Averaged	
19 1,1-dichloroethane	0.30675	0.34406	0.34406	0.050	12.16293	20.00000	Averaged	
20 halothane	0.12664	0.11646	0.11646	0.050	-8.04346	20.00000	Averaged	
21 acrylonitrile	0.03387	0.03857	0.03857	0.050	13.86310	20.00000	Averaged	<-
22 Ethyl-Tert-Butyl-Ether	0.44523	0.44826	0.44826	0.050	0.67990	20.00000	Averaged	
23 vinyl acetate	0.24824	0.32919	0.32919	0.050	32.61020	20.00000	Averaged	<-
24 cis-1,2-dichloroethene	0.17340	0.17637	0.17637	0.050	1.71801	20.00000	Averaged	
25 2,2-dichloropropane	0.25920	0.23910	0.23910	0.050	-7.75369	20.00000	Averaged	
26 Cyclohexane	0.31771	0.34220	0.34220	0.050	7.71136	20.00000	Averaged	
27 bromochloromethane	0.07589	0.07123	0.07123	0.050	-6.13433	20.00000	Averaged	
28 chloroform	0.28481	0.30969	0.30969	0.050	8.73535	20.00000	Averaged	
29 Ethyl Acetate	0.09266	0.10668	0.10668	0.050	15.13425	20.00000	Averaged	
30 carbontetrachloride	0.24107	0.21943	0.21943	0.050	-8.97752	20.00000	Averaged	
$ 32 dibromofluoromethane	0.26061	0.25564	0.25564	0.050	-1.90713	20.00000	Averaged	
31 tetrahydrofuran	0.03197	0.03652	0.03652	0.050	14.21676	20.00000	Averaged	<-
33 1,1,1-trichloroethane	0.26661	0.26825	0.26825	0.050	0.61561	20.00000	Averaged	
34 2-butanone	0.04408	0.05093	0.05093	0.050	15.53881	20.00000	Averaged	<-
35 1,1-dichloropropene	0.22816	0.24088	0.24088	0.050	5.57579	20.00000	Averaged	
36 benzene	0.65796	0.69060	0.69060	0.050	4.96064	20.00000	Averaged	
37 Tertiary-Amyl Methyl Ether	0.35318	0.31452	0.31452	0.050	-10.94506	20.00000	Averaged	
$ 38 1,2-dichloroethane-d4	0.27558	0.31460	0.31460	0.050	14.16067	20.00000	Averaged	
39 1,2-dichloroethane	0.19699	0.23034	0.23034	0.050	16.92966	20.00000	Averaged	
42 methyl cyclohexane	0.28289	0.27790	0.27790	0.050	-1.76531	20.00000	Averaged	
43 trichloroethene	0.17629	0.18178	0.18178	0.050	3.11724	20.00000	Averaged	

Alpha Analytical Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Voa105.i
Lab File ID: 0327A02.D
Analysis Type: WATER
Lab Sample ID:
Method: \\Orgserv2\ff\chem\GCMSVOA\Voa105.i\160327.b\liq8260B.m

Injection Date: 27-MAR-2016 11:22
Init. Cal. Date(s): 15-MAR-2016 16-MAR-2016
Init. Cal. Times: 21:46 00:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF100	CCAL RRF100	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 dibromomethane	0.08076	0.08474	0.08474	0.050	4.92862	20.00000	Averaged
46 1,2-dichloropropane	0.16374	0.18159	0.18159	0.050	10.90325	20.00000	Averaged
47 bromodichloromethane	0.20634	0.21204	0.21204	0.050	2.76159	20.00000	Averaged
49 1,4-Dioxane	0.00076	0.00083	0.00083	0.050	9.98904	20.00000	Averaged <-
51 2-Chloroethylvinyl ether	0.07265	0.07663	0.07663	0.050	5.47381	20.00000	Averaged
52 cis-1,3-dichloropropene	0.24399	0.23766	0.23766	0.050	-2.59589	20.00000	Averaged
$ 53 toluene-d8	1.24660	1.32853	1.32853	0.050	6.57287	20.00000	Averaged
54 toluene	0.61109	0.57881	0.57881	0.050	-5.28214	20.00000	Averaged
56 4-methyl-2-pentanone	0.03184	0.03159	0.03159	0.050	-0.81347	20.00000	Averaged <-
55 tetrachloroethene	0.23296	0.21290	0.21290	0.050	-8.61329	20.00000	Averaged
57 trans-1,3-dichloropropene	0.25366	0.26009	0.26009	0.050	2.53441	20.00000	Averaged
59 ethyl-methacrylate	0.18175	0.18416	0.18416	0.050	1.32664	20.00000	Averaged
60 1,1,2-trichloroethane	0.11285	0.13129	0.13129	0.050	16.34870	20.00000	Averaged
61 chlorodibromomethane	100	86.38217	0.16725	0.050	-13.61783	20.00000	Wt Linear
62 1,3-dichloropropane	0.24365	0.28533	0.28533	0.050	17.10834	20.00000	Averaged
64 1,2-dibromoethane	0.13390	0.14115	0.14115	0.050	5.41794	20.00000	Averaged
65 2-hexanone	0.07810	0.07849	0.07849	0.050	0.49971	20.00000	Averaged
67 chlorobenzene	0.59078	0.62229	0.62229	0.050	5.33231	20.00000	Averaged
68 ethyl benzene	1.03915	1.13320	1.13320	0.050	9.05029	20.00000	Averaged
69 1,1,1,2-tetrachloroethane	0.20025	0.19436	0.19436	0.050	-2.93940	20.00000	Averaged
70 p/m xylene	0.39593	0.42310	0.42310	0.050	6.86336	20.00000	Averaged
71 o xylene	0.37389	0.39813	0.39813	0.050	6.48201	20.00000	Averaged
72 styrene	0.60225	0.64967	0.64967	0.050	7.87430	20.00000	Averaged
73 bromoform	100	81.29433	0.16553	0.050	-18.70567	20.00000	Wt Linear
74 isopropylbenzene	2.13397	2.37500	2.37500	0.050	11.29482	20.00000	Averaged
$ 75 4-bromofluorobenzene	1.03516	1.14052	1.14052	0.050	10.17728	20.00000	Averaged
76 bromobenzene	0.47041	0.47409	0.47409	0.050	0.78338	20.00000	Averaged
77 n-propylbenzene	2.37631	2.79717	2.79717	0.050	17.71068	20.00000	Averaged
78 1,4-dichloro-2-butane	0.50947	0.67032	0.67032	0.050	31.57313	20.00000	Averaged <-
79 1,1,2,2,-tetrachloroethane	0.28234	0.34962	0.34962	0.050	23.83109	20.00000	Averaged <-
80 4-ethyltoluene	2.12420	2.37512	2.37512	0.050	11.81219	20.00000	Averaged
82 2-chlorotoluene	1.46867	1.71598	1.71598	0.050	16.83942	20.00000	Averaged
83 1,3,5-trimethybenzene	1.67740	1.85848	1.85848	0.050	10.79509	20.00000	Averaged
84 1,2,3-trichloropropane	0.24466	0.31457	0.31457	0.050	28.57171	20.00000	Averaged <-
85 trans-1,4-dichloro-2-butene	0.09096	0.09938	0.09938	0.050	9.25580	20.00000	Averaged
87 4-chorotoluene	1.47678	1.71876	1.71876	0.050	16.38524	20.00000	Averaged
88 tert-butylbenzene	1.43264	1.52309	1.52309	0.050	6.31369	20.00000	Averaged
89 1,2,4-trimethylbenzene	1.65858	1.83131	1.83131	0.050	10.41399	20.00000	Averaged
90 sec-butylbenzene	1.97906	2.19443	2.19443	0.050	10.88207	20.00000	Averaged
91 p-isopropyltoluene	1.65407	1.74303	1.74303	0.050	5.37828	20.00000	Averaged
92 1,3-dichlorobenzene	0.89104	0.91604	0.91604	0.050	2.80581	20.00000	Averaged
94 1,4-dichlorobenzene	0.87917	0.92088	0.92088	0.050	4.74364	20.00000	Averaged
95 p-Diethylbenzene	0.95351	0.98627	0.98627	0.050	3.43565	20.00000	Averaged

Alpha Analytical Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Voa105.i
Lab File ID: 0327A02.D
Analysis Type: WATER
Lab Sample ID:
Method: \\Orgserv2\ff\chem\GCMSVOA\Voa105.i\160327.b\liq8260B.m

Injection Date: 27-MAR-2016 11:22
Init. Cal. Date(s): 15-MAR-2016 16-MAR-2016
Init. Cal. Times: 21:46 00:29
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF100	CCAL RRF100	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
96 n-butylbenzene	1.40443	1.62259	1.62259	0.050	15.53340	20.00000	Averaged	
97 1,2-dichlorobenzene	0.74415	0.77289	0.77289	0.050	3.86240	20.00000	Averaged	
98 1,2,4,5-tetramethylbenzene	1.39066	1.40005	1.40005	0.050	0.67529	20.00000	Averaged	
99 1,2-dibromo-3-chloropropane	0.12252	0.14803	0.14803	0.050	20.82505	20.00000	Averaged	<-
100 1,3,5-trichlorobenzene	0.49511	0.46388	0.46388	0.050	-6.30845	20.00000	Averaged	
101 hexachlorobutadiene	0.15153	0.13570	0.13570	0.050	-10.44550	20.00000	Averaged	
102 1,2,4-trichlorobenzene	0.32418	0.30528	0.30528	0.050	-5.82895	20.00000	Averaged	
103 naphthalene	0.46650	0.49072	0.49072	0.050	5.19301	20.00000	Averaged	
104 1,2,3-trichlorobenzene	0.17294	0.17890	0.17890	0.050	3.44284	20.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 10.09151
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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QA/QC Review of Lead Data
for Alpha Analytical Labs
SDG Number: L1603375

2 Soil Samples
Collected February 9, 2016

Prepared by: Donald Anné
April 26, 2016

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for lead were within control limits (90-110%).

CRQL Check Standard: The percent recovery for lead was within laboratory QC limits (50-150%) for CRI check sample.

Blanks: The analyses of initial and continuing calibration, and method blanks reported lead as not detected.

ICP Interference Check Sample: The percent recovery for lead was within control limits (80-120%).

Spike Sample Recovery: The percent recovery for lead was above control limits (75-125%) for soil spike sample PESW-11(6")A. The sample concentration is greater than 4 times the spiking level; therefore, no action is taken on soils spike data because a valid %R could not be calculated.

Laboratory Duplicates: The relative percent difference for lead was below the allowable maximum (35%) for soil duplicate sample PESW-11(6")A, as required.

Laboratory Control Sample: The percent recovery for lead was within control limits for soil sample WG863947-2.

ICP Serial Dilution: The %D for lead was above the allowable maximum (10%) for soil serial dilution sample PESW-13(6")A. Positive results for lead should be considered estimated (J) in associated soil samples.

Percent Solids: The percent solids for soil samples were above 50%.

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LETTER OF TRANSMITTAL

ALPHA GEOSCIENCE
679 Plank Road
Clifton Park, NY 12065
(518) 348 -6995 Phone
(518) 348-6966 FAX

TO: Mr. Vedran Cirkovic
Sterling Environmental Engineering, PC
24 Wade Road
Latham, New York 12110

FROM: Don Anne'

DATE: 4/26/2016

SUBJECT: Data Validation
Millen's Scrap Yard
Jan-Feb 2016 Soil Sampling Events

WE ARE TRANSMITTING THE FOLLOWING ITEMS:

_____ Photographs
_____ Maps/Plans
_____ Report(s)
_____ Letter(s)
_____ Disk(s)
__X__ Other: Data Packs

Originals	Copies	Description of Materials
1		Alpha Analytical dat pack, SDG: L1601093
1		Alpha Analytical dat pack, SDG: L1602796
1		Alpha Analytical dat pack, SDG: L1603375

These Materials are Transmitted:

_____ For your use
_____ For your approval
_____ For your review and comment
_____ Approved as submitted
_____ Approved as noted
__X__ Returned after loaned to us
_____ Returned for revision

Please: _____ Return original to us
_____ Submit after revision
_____ Retain for your files
_____ Other

REMARKS:

Returned upon completion of data validation.

ADDITIONAL COPIES TO:

SIGNATURE:

Donald Anne'

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April 26, 2016

Mr. Vedran Cirkovic, EIT
Assistant Engineer
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
Millen's Scrap Yard
January-February 2016 Soil Sampling Events

Dear Mr. Cirkovic:

The data usability summary reports (DUSRs) and QA/QC reviewss are attached to this letter for the above referenced project sampling event. The data for Alpha Analytical, SDG numbers L1601093, L1602796, and L1603375 are acceptable with some minor issues that are identified and discussed in the validation summaries. There are no data that were flagged as rejected, unusable (R) in the data packs.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Sterling Environmental Engineering, P.C.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

Z:\projects\2016\16600 - 16620\16606-Millen's Scrap Yard\Millen's Scrap Yard-162.ltr.wpd

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

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Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L1601093

14 Soil Samples and 1 Field Duplicate
Collected January 13, 2016

Prepared by: Donald Anné
April 26, 2016

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of semi-volatile, PCB, and metal analyses for 14 soil samples and 1 field duplicate.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive semi-volatile results for 12 compounds were flagged as estimated (J) in samples PESW-7 and DUP because the relative percent differences for these 12 compounds were above the allowable maximum in the soil field duplicate pair PESW-7/DUP.

- The positive PCB result for aroclor-1254 was flagged as "estimated" (J) in sample DUP because %D for dual column quantitation of aroclor-1254 was above the allowable maximum (25%), but not above 70% in the sample.

- The positive PCB results for aroclor 1254, aroclor 1260, and total PCBs were flagged as estimated (J) in samples PESW-7 and DUP because the relative percent differences for PCB results for aroclor 1254, aroclor 1260, and total PCBs were above the allowable maximum in the soil field duplicate pair PESW-7/DUP.

- The positive metal results for antimony were flagged as "estimated" (J) in the following samples because the percent recovery for antimony was above QC limits in the associated CRI Check Standard and the sample results were below 4x the reporting limit.

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PESW-8	PESW-7	PESW-6.	PESW-5	PESW-4
PESW-3	PEFL-6	PEFL-5	PELF-3	PELF-2

- The positive metal results for calcium were flagged as "estimated" (J) in all 14 soil samples and the field duplicate because the 2 of 2 percent recoveries for calcium were outside control limits, but not below 10% in the associated soil MS/MSD sample.

- The positive metal results for magnesium and manganese were flagged as "estimated" (J) in all 14 soil samples and the field duplicate because the 1 of 2 percent recoveries for magnesium and manganese were above control limits in the associated soil MS/MSD sample.

- The positive metal results for zinc were flagged as "estimated" (J) in all 14 soil samples and the field duplicate because the relative percent difference for zinc was above the allowable maximum in the associated soil MS/MSD sample.

- The positive metal results for the following metals were flagged as estimated (J) in samples PESW-7 and DUP because the relative percent differences for these were above the allowable maximum in the soil field duplicate pair PESW-7/DUP.

aluminum	arsenic	barium	chromium	iron	mercury

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8270 Semi-Volatiles
Data for Alpha Analytical Labs
SDG Number: L1601093

14 Soil Samples and 1 Field duplicate
Collected January 13, 2016

Prepared by: Donald Anné
April 26, 2016

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: One of eighty relative percent differences for spiked compounds was above the allowable maximum and 15 of 160 percent recoveries were outside QC limits for soil MS/MSD sample PEFL-2. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum, but 2 of 2 percent recoveries (%Rs) for benzoic acid and 1 of 2 %Rs for 2,4-dinirotoluene were above QC limits for soil samples WG857933-2LCS/3LCSD. Positive results for 2,4-dinitrotoluene and benzoic acid should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for 12 compounds were above the allowable maximum (35%) for soil field duplicate pair PESW-7/DUP (attached table). Results for these 12 compounds should be considered estimated (J) in samples PESW-7 and DUP.

Compound ID: Checked compounds and surrogates were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L1601093

S1= PESW-7 **S2=** DUP

Analyte	S1	S2	RPD (%)	
2-methylnaphthalene	**230**	**220**	NC	
acenaphthene	**280**	ND	NC	
acenaphthylene	**150**	270	NC	
acetophenone	ND	**34**	NC	
anthracene	630	240	90%	*
benzo(a)anthracene	1600	620	88%	*
benzo(a)pyrene	1500	690	74%	*
benzo(b)fluoranthene	2000	1300	42%	*
benzo(g,h,i)perylene	900	520	54%	*
benzo(k)fluoranthene	700	530	28%	
butyl benzyl phthalate	490	ND	NC	
bis(2-ethylhexyl)phthalate	**230**	ND	NC	
carbazole	**310**	**58**	NC	
chrysene	1600	780	69%	*
dibenzofuran	**210**	**35**	NC	
dibenz(a,h)anthracene	270	160	51%	*
fluoranthene	2900	1000	97%	*
fluorene	**270**	**23**	NC	
indeno(1,2,3-cd)pyrene	970	590	49%	*
naphthalene	530	180	99%	*
phenanthrene	2100	210	164%	*
pyrene	2500	1000	86%	*

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

3D

LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Lab Control Sample: WG857933-2LCS Injected: 01/17/16 17:45 Lab File ID: 857933-2.D

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS % REC	QC. LIMITS REC.
Acenaphthene	1300	NA	1100	86	31-137
Benzidine	1300	NA	590	45	10- 66
n-Nitrosodimethylamine	1300	NA	920	70	22-100
1,2,4-Trichlorobenzene	1300	NA	1100	82	38-107
Hexachlorobenzene	1300	NA	1300	98	40-140
Bis(2-chloroethyl)ether	1300	NA	1000	76	40-140
2-Chloronaphthalene	1300	NA	1200	94	40-140
1,2-Dichlorobenzene	1300	NA	1000	76	40-140
1,3-Dichlorobenzene	1300	NA	960	73	40-140
1,4-Dichlorobenzene	1300	NA	970	74	28-104
3,3'-Dichlorobenzidine	1300	NA	570	43	40-140
2,4-Dinitrotoluene	1300	NA	1300	99*	28- 89
2,6-Dinitrotoluene	1300	NA	1300	102	40-140
Fluoranthene	1300	NA	1200	90	40-140
4-Chlorophenyl phenyl et	1300	NA	1200	91	40-140
4-Bromophenyl phenyl eth	1300	NA	1200	93	40-140
Azobenzene	1300	NA	1200	89	40-140
Bis(2-chloroisopropyl)et	1300	NA	1000	78	40-140
Bis(2-chloroethoxy)metha	1300	NA	1100	87	40-117
Hexachlorobutadiene	1300	NA	1100	84	40-140
Hexachlorocyclopentadien	1300	NA	1200	92	40-140
Hexachloroethane	1300	NA	1000	78	40-140
Isophorone	1300	NA	1100	86	40-140
Naphthalene	1300	NA	1000	80	40-140
Nitrobenzene	1300	NA	1000	80	40-140
NDPA/DPA	1300	NA	1200	90	36-157
n-Nitrosodi-n-propylamin	1300	NA	1100	86	32-121
Bis(2-Ethylhexyl)phthala	1300	NA	1200	91	40-140
Butyl benzyl phthalate	1300	NA	1200	92	40-140
Di-n-butylphthalate	1300	NA	1200	91	40-140
Di-n-octylphthalate	1300	NA	1200	89	40-140
Diethyl phthalate	1300	NA	1200	92	40-140
Dimethyl phthalate	1300	NA	1200	90	40-140
Benzo(a)anthracene	1300	NA	1100	87	40-140
Benzo(a)pyrene	1300	NA	1200	95	40-140
Benzo(b)fluoranthene	1300	NA	1200	88	40-140
Benzo(k)fluoranthene	1300	NA	1200	90	40-140
Chrysene	1300	NA	1200	89	40-140
Acenaphthylene	1300	NA	1200	92	40-140
Anthracene	1300	NA	1200	88	40-140

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Lab Control Sample: WG857933-2LCS Injected: 01/17/16 17:45 Lab File ID: 857933-2.D

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	LCS CONCENTRATION (ug/kg)	LCS % REC	QC. LIMITS REC.
Benzo(ghi)perylene	1300	NA	1100	85	40-140
Fluorene	1300	NA	1200	90	40-140
Phenanthrene	1300	NA	1200	89	40-140
Dibenzo(a,h)anthracene	1300	NA	1100	85	40-140
Indeno(1,2,3-cd)Pyrene	1300	NA	1100	85	40-140
Pyrene	1300	NA	1200	88	35-142
Biphenyl	1300	NA	1200	89	54-104
Aniline	1300	NA	640	49	40-140
4-Chloroaniline	1300	NA	980	75	40-140
2-Nitroaniline	1300	NA	1300	96	47-134
3-Nitroaniline	1300	NA	880	67	26-129
4-Nitroaniline	1300	NA	1100	83	41-125
Dibenzofuran	1300	NA	1200	88	40-140
2-Methylnaphthalene	1300	NA	1100	87	40-140
1,2,4,5-Tetrachlorobenze	1300	NA	1100	87	40-117
Acetophenone	1300	NA	1100	84	14-144
2,4,6-Trichlorophenol	1300	NA	1300	97	30-130
P-Chloro-M-Cresol	1300	NA	1200	92	26-103
2-Chlorophenol	1300	NA	1000	80	25-102
2,4-Dichlorophenol	1300	NA	1200	90	30-130
2,4-Dimethylphenol	1300	NA	1200	89	30-130
2-Nitrophenol	1300	NA	1200	89	30-130
4-Nitrophenol	1300	NA	1300	97	11-114
2,4-Dinitrophenol	1300	NA	1000	80	4-130
4,6-Dinitro-o-cresol	1300	NA	1200	91	10-130
Pentachlorophenol	1300	NA	1200	93	17-109
Phenol	1300	NA	980	74	26- 90
2-Methylphenol	1300	NA	1100	85	30-130
3-Methylphenol/4-Methylp	1300	NA	1100	85	30-130
2,4,5-Trichlorophenol	1300	NA	1300	98	30-130
Benzoic Acid	1300	NA	1000	77*	10- 66
Benzyl Alcohol	1300	NA	1200	88	40-140
Carbazole	1300	NA	1200	88	54-128
Benzaldehyde	1300	NA	950	72	40-140
Caprolactam	1300	NA	1200	95	15-130
Atrazine	1300	NA	1300	100	40-140
2,3,4,6-Tetrachloropheno	1300	NA	1300	101	40-140
Pyridine	1300	NA	790	60	10- 93
1-Methylnaphthalene	1300	NA	1200	88	26-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Lab Control Sample: WG857933-2LCS Injected: 01/17/16 17:45 Lab File ID: 857933-2.D

Lab Control Dup : WG857933-3LCSD Injected: 01/17/16 18:10 Lab File ID: 857933-3.D

COMPOUND	SPIKE ADDED (ug/kg)	LCSD CONCENTRATION (ug/kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	1300	1000	77	11	50	31-137
Benzidine	1300	560	43	5	50	10- 66
n-Nitrosodimethylamine	1300	880	68	3	50	22-100
1,2,4-Trichlorobenzene	1300	990	76	8	50	38-107
Hexachlorobenzene	1300	1100	88	11	50	40-140
Bis(2-chloroethyl)ether	1300	920	71	7	50	40-140
2-Chloronaphthalene	1300	1100	84	11	50	40-140
1,2-Dichlorobenzene	1300	940	72	5	50	40-140
1,3-Dichlorobenzene	1300	920	71	3	50	40-140
1,4-Dichlorobenzene	1300	920	71	4	50	28-104
3,3'-Dichlorobenzidine	1300	530	41	5	50	40-140
2,4-Dinitrotoluene	1300	1100	87	13	50	28- 89
2,6-Dinitrotoluene	1300	1200	94	8	50	40-140
Fluoranthene	1300	1000	80	12	50	40-140
4-Chlorophenyl phenyl et	1300	1000	80	13	50	40-140
4-Bromophenyl phenyl eth	1300	1100	83	11	50	40-140
Azobenzene	1300	1000	79	12	50	40-140
Bis(2-chloroisopropyl)et	1300	960	74	5	50	40-140
Bis(2-chloroethoxy)metha	1300	1000	80	8	50	40-117
Hexachlorobutadiene	1300	1000	79	6	50	40-140
Hexachlorocyclopentadien	1300	1100	83	10	50	40-140
Hexachloroethane	1300	980	76	3	50	40-140
Isophorone	1300	1000	80	7	50	40-140
Naphthalene	1300	960	74	8	50	40-140
Nitrobenzene	1300	960	74	8	50	40-140
NDPA/DPA	1300	1000	80	12	50	36-157
n-Nitrosodi-n-propylamin	1300	1000	79	8	50	32-121
Bis(2-Ethylhexyl)phthala	1300	1000	80	13	50	40-140
Butyl benzyl phthalate	1300	1000	81	13	50	40-140
Di-n-butylphthalate	1300	1000	80	13	50	40-140
Di-n-octylphthalate	1300	1000	79	12	50	40-140
Diethyl phthalate	1300	1000	80	14	50	40-140
Dimethyl phthalate	1300	1000	80	12	50	40-140
Benzo(a)anthracene	1300	1000	78	11	50	40-140
Benzo(a)pyrene	1300	1100	84	12	50	40-140
Benzo(b)fluoranthene	1300	1000	79	11	50	40-140
Benzo(k)fluoranthene	1300	1000	78	14	50	40-140
Chrysene	1300	1000	79	12	50	40-140
Acenaphthylene	1300	1100	83	10	50	40-140
Anthracene	1300	1000	78	12	50	40-140

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

LAB CONTROL/LAB CONTROL DUPLICATE SAMPLE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Lab Control Sample: WG857933-2LCS Injected: 01/17/16 17:45 Lab File ID: 857933-2.D

Lab Control Dup : WG857933-3LCSD Injected: 01/17/16 18:10 Lab File ID: 857933-3.D

COMPOUND	SPIKE ADDED (ug/kg)	LCSD CONCENTRATION (ug/kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Benzo(ghi)perylene	1300	980	76	11	50	40-140
Fluorene	1300	1000	79	13	50	40-140
Phenanthrene	1300	1000	78	13	50	40-140
Dibenzo(a,h)anthracene	1300	970	75	13	50	40-140
Indeno(1,2,3-cd)Pyrene	1300	980	76	11	50	40-140
Pyrene	1300	1000	78	12	50	35-142
Biphenyl	1300	1000	78	13	50	54-104
Aniline	1300	600	46	6	50	40-140
4-Chloroaniline	1300	930	72	4	50	40-140
2-Nitroaniline	1300	1100	86	11	50	47-134
3-Nitroaniline	1300	790	61	9	50	26-129
4-Nitroaniline	1300	980	76	9	50	41-125
Dibenzofuran	1300	1000	78	12	50	40-140
2-Methylnaphthalene	1300	1000	80	8	50	40-140
1,2,4,5-Tetrachlorobenze	1300	1000	79	10	50	40-117
Acetophenone	1300	1000	78	7	50	14-144
2,4,6-Trichlorophenol	1300	1100	85	13	50	30-130
P-Chloro-M-Cresol	1300	1000	82	11	50	26-103
2-Chlorophenol	1300	970	75	6	50	25-102
2,4-Dichlorophenol	1300	1000	81	11	50	30-130
2,4-Dimethylphenol	1300	1000	81	9	50	30-130
2-Nitrophenol	1300	1100	84	6	50	30-130
4-Nitrophenol	1300	1100	88	10	50	11-114
2,4-Dinitrophenol	1300	930	72	11	50	4-130
4,6-Dinitro-o-cresol	1300	1000	81	12	50	10-130
Pentachlorophenol	1300	1000	82	13	50	17-109
Phenol	1300	890	69	7	50	26- 90
2-Methylphenol	1300	1000	78	9	50	30-130
3-Methylphenol/4-Methylp	1300	1000	78	9	50	30-130
2,4,5-Trichlorophenol	1300	1100	86	13	50	30-130
Benzoic Acid	1300	880	68 *	12	50	10- 66
Benzyl Alcohol	1300	1000	79	11	50	40-140
Carbazole	1300	1000	79	11	50	54-128
Benzaldehyde	1300	930	72	0	50	40-140
Caprolactam	1300	1100	85	11	50	15-130
Atrazine	1300	1100	88	13	50	40-140
2,3,4,6-Tetrachloropheno	1300	1100	87	15	50	40-140
Pyridine	1300	750	58	3	50	10- 93
1-Methylnaphthalene	1300	1000	79	11	50	26-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Client Sample ID : PEFL-2 Injected: 01/19/16 21:01 Lab File ID: 01093-14.D

Matrix Spike : WG857933-4 Injected: 01/18/16 01:00 Lab File ID: 857933-4.D

Matrix Spike Dup : WG857933-5 Injected: 01/18/16 01:25 Lab File ID: 857933-5.D

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC	QC. LIMITS REC.
Acenaphthene	2210	ND	1600	72	31-137
Benzidine	2210	ND	ND	0*	10- 66
n-Nitrosodimethylamine	2210	ND	1300	59	22-100
1,2,4-Trichlorobenzene	2210	ND	1600	72	38-107
Hexachlorobenzene	2210	ND	1700	77	40-140
Bis(2-chloroethyl)ether	2210	ND	1500	68	40-140
2-Chloronaphthalene	2210	ND	1600	72	40-140
1,2-Dichlorobenzene	2210	ND	1500	68	40-140
1,3-Dichlorobenzene	2210	ND	1400	63	40-140
1,4-Dichlorobenzene	2210	ND	1400	63	28-104
3,3'-Dichlorobenzidine	2210	ND	200J	9*	40-140
2,4-Dinitrotoluene	2210	ND	1400	63	28- 89
2,6-Dinitrotoluene	2210	ND	1600	72	40-140
Fluoranthene	2210	1300	2400	50	40-140
4-Chlorophenyl phenyl et	2210	ND	1600	72	40-140
4-Bromophenyl phenyl eth	2210	ND	1700	77	40-140
Azobenzene	2210	ND	1500	68	40-140
Bis(2-chloroisopropyl)et	2210	ND	1600	72	40-140
Bis(2-chloroethoxy)metha	2210	ND	1700	77	40-117
Hexachlorobutadiene	2210	ND	1600	72	40-140
Hexachlorocyclopentadien	2210	ND	ND	0*	40-140
Hexachloroethane	2210	ND	1200	54	40-140
Isophorone	2210	ND	1700	77	40-140
Naphthalene	2210	2600	3000	18*	40-140
Nitrobenzene	2210	ND	1600	72	40-140
NDPA/DPA	2210	ND	1600	72	36-157
n-Nitrosodi-n-propylamin	2210	ND	1700	77	32-121
Bis(2-Ethylhexyl)phthala	2210	ND	1700	77	40-140
Butyl benzyl phthalate	2210	ND	1600	72	40-140
Di-n-butylphthalate	2210	ND	1600	72	40-140
Di-n-octylphthalate	2210	ND	1700	77	40-140
Diethyl phthalate	2210	ND	1600	72	40-140
Dimethyl phthalate	2210	ND	1600	72	40-140
Benzo(a)anthracene	2210	740	2000	57	40-140
Benzo(a)pyrene	2210	840	2100	57	40-140

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Client Sample ID : PEFL-2 Injected: 01/19/16 21:01 Lab File ID: 01093-14.D

Matrix Spike : WG857933-4 Injected: 01/18/16 01:00 Lab File ID: 857933-4.D

Matrix Spike Dup : WG857933-5 Injected: 01/18/16 01:25 Lab File ID: 857933-5.D

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC	QC. LIMITS REC.
Benzo(b)fluoranthene	2210	1300	2300	45	40-140
Benzo(k)fluoranthene	2210	390	1800	64	40-140
Chrysene	2210	820	2000	53	40-140
Acenaphthylene	2210	750	2200	66	40-140
Anthracene	2210	320	1800	67	40-140
Benzo(ghi)perylene	2210	1300	2300	45	40-140
Fluorene	2210	95J	1700	77	40-140
Phenanthrene	2210	690	2100	64	40-140
Dibenzo(a,h)anthracene	2210	210	1600	63	40-140
Indeno(1,2,3-cd)Pyrene	2210	1200	2400	54	40-140
Pyrene	2210	1300	2300	45	35-142
Biphenyl	2210	93J	1600	72	54-104
Aniline	2210	ND	520	24*	40-140
4-Chloroaniline	2210	ND	890	40	40-140
2-Nitroaniline	2210	ND	2000	91	47-134
3-Nitroaniline	2210	ND	1300	59	26-129
4-Nitroaniline	2210	ND	1400	63	41-125
Dibenzofuran	2210	120J	1600	72	40-140
2-Methylnaphthalene	2210	1100	2200	50	40-140
1,2,4,5-Tetrachlorobenze	2210	ND	1600	72	40-117
Acetophenone	2210	550	2100	70	14-144
2,4,6-Trichlorophenol	2210	ND	1800	82	30-130
P-Chloro-M-Cresol	2210	ND	1600	72	26-103
2-Chlorophenol	2210	ND	1500	68	25-102
2,4-Dichlorophenol	2210	ND	1700	77	30-130
2,4-Dimethylphenol	2210	ND	1600	72	30-130
2-Nitrophenol	2210	ND	1200	54	30-130
4-Nitrophenol	2210	ND	1500	68	11-114
2,4-Dinitrophenol	2210	ND	ND	0*	4-130
4,6-Dinitro-o-cresol	2210	ND	ND	0*	10-130
Pentachlorophenol	2210	ND	1400	63	17-109
Phenol	2210	ND	1400	63	26- 90
2-Methylphenol	2210	ND	1600	72	30-130
3-Methylphenol/4-Methylp	2210	74J	1600	72	30-130
2,4,5-Trichlorophenol	2210	ND	1700	77	30-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Client Sample ID : PEFL-2 Injected: 01/19/16 21:01 Lab File ID: 01093-14.D

Matrix Spike : WG857933-4 Injected: 01/18/16 01:00 Lab File ID: 857933-4.D

Matrix Spike Dup : WG857933-5 Injected: 01/18/16 01:25 Lab File ID: 857933-5.D

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC	QC. LIMITS REC.
Benzoic Acid	2210	ND	420J	19	10- 66
Benzyl Alcohol	2210	ND	1700	77	40-140
Carbazole	2210	80J	1600	72	54-128
Benzaldehyde	2210	ND	2600	120	40-140
Caprolactam	2210	ND	1600	72	15-130
Atrazine	2210	ND	1700	77	40-140
2,3,4,6-Tetrachlorophenol	2210	ND	1700	77	40-140
Pyridine	2210	ND	1000J	45	10- 93
1-Methylnaphthalene	2210	810	2100	58	26-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III NYTCL-8270

3D

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Client Sample ID : PEFL-2 Injected: 01/19/16 21:01 Lab File ID: 01093-14.D

Matrix Spike : WG857933-4 Injected: 01/18/16 01:00 Lab File ID: 857933-4.D

Matrix Spike Dup : WG857933-5MSD Injected: 01/18/16 01:25 Lab File ID: 857933-5.D

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	2190	1800	82	12	50	31-137
Benzidine	2190	ND	0 *	NC	50	10- 66
n-Nitrosodimethylamine	2190	1600	73	21	50	22-100
1,2,4-Trichlorobenzene	2190	1800	82	12	50	38-107
Hexachlorobenzene	2190	1900	87	11	50	40-140
Bis(2-chloroethyl)ether	2190	1800	82	18	50	40-140
2-Chloronaphthalene	2190	2000	91	22	50	40-140
1,2-Dichlorobenzene	2190	1700	77	13	50	40-140
1,3-Dichlorobenzene	2190	1700	77	19	50	40-140
1,4-Dichlorobenzene	2190	1700	77	19	50	28-104
3,3'-Dichlorobenzidine	2190	100J	5 *	67 *	50	40-140
2,4-Dinitrotoluene	2190	1600	73	13	50	28- 89
2,6-Dinitrotoluene	2190	1800	82	12	50	40-140
Fluoranthene	2190	3100	82	25	50	40-140
4-Chlorophenyl phenyl et	2190	1800	82	12	50	40-140
4-Bromophenyl phenyl eth	2190	1900	87	11	50	40-140
Azobenzene	2190	1700	77	13	50	40-140
Bis(2-chloroisopropyl)et	2190	1800	82	12	50	40-140
Bis(2-chloroethoxy)metha	2190	2000	91	16	50	40-117
Hexachlorobutadiene	2190	1800	82	12	50	40-140
Hexachlorocyclopentadien	2190	ND	0 *	NC	50	40-140
Hexachloroethane	2190	1400	64	15	50	40-140
Isophorone	2190	1900	87	11	50	40-140
Naphthalene	2190	4200	73	33	50	40-140
Nitrobenzene	2190	1900	87	17	50	40-140
NDPA/DPA	2190	1800	82	12	50	36-157
n-Nitrosodi-n-propylamin	2190	1900	87	11	50	32-121
Bis(2-Ethylhexyl)phthala	2190	1900	87	11	50	40-140
Butyl benzyl phthalate	2190	1900	87	17	50	40-140
Di-n-butylphthalate	2190	1800	82	12	50	40-140
Di-n-octylphthalate	2190	2000	91	16	50	40-140
Diethyl phthalate	2190	1900	87	17	50	40-140
Dimethyl phthalate	2190	2000	91	22	50	40-140
Benzo(a)anthracene	2190	2500	80	22	50	40-140
Benzo(a)pyrene	2190	2700	85	25	50	40-140

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III NYTCL-8270

3D

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Client Sample ID : PEFL-2 Injected: 01/19/16 21:01 Lab File ID: 01093-14.D

Matrix Spike : WG857933-4 Injected: 01/18/16 01:00 Lab File ID: 857933-4.D

Matrix Spike Dup : WG857933-5MSD Injected: 01/18/16 01:25 Lab File ID: 857933-5.D

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Benzo(b)fluoranthene	2190	3000	77	26	50	40-140
Benzo(k)fluoranthene	2190	2200	82	20	50	40-140
Chrysene	2190	2600	81	26	50	40-140
Acenaphthylene	2190	3200	110	37	50	40-140
Anthracene	2190	2300	90	24	50	40-140
Benzo(ghi)perylene	2190	3300	91	36	50	40-140
Fluorene	2190	2000	91	16	50	40-140
Phenanthrene	2190	2600	87	21	50	40-140
Dibenzo(a,h)anthracene	2190	1900	77	17	50	40-140
Indeno(1,2,3-cd)Pyrene	2190	3300	96	32	50	40-140
Pyrene	2190	3200	87	33	50	35-142
Biphenyl	2190	1900	87	17	50	54-104
Aniline	2190	510	23 *	2	50	40-140
4-Chloroaniline	2190	850	39 *	5	50	40-140
2-Nitroaniline	2190	2400	110	18	50	47-134
3-Nitroaniline	2190	1400	64	7	50	26-129
4-Nitroaniline	2190	1300	59	7	50	41-125
Dibenzofuran	2190	1900	87	17	50	40-140
2-Methylnaphthalene	2190	3000	87	31	50	40-140
1,2,4,5-Tetrachlorobenze	2190	1800	82	12	50	40-117
Acetophenone	2190	2600	93	21	50	14-144
2,4,6-Trichlorophenol	2190	2100	96	15	50	30-130
P-Chloro-M-Cresol	2190	1900	87	17	50	26-103
2-Chlorophenol	2190	1800	82	18	50	25-102
2,4-Dichlorophenol	2190	1900	87	11	50	30-130
2,4-Dimethylphenol	2190	1800	82	12	50	30-130
2-Nitrophenol	2190	1400	64	15	50	30-130
4-Nitrophenol	2190	1700	77	13	50	11-114
2,4-Dinitrophenol	2190	ND	0 *	NC	50	4-130
4,6-Dinitro-o-cresol	2190	ND	0 *	NC	50	10-130
Pentachlorophenol	2190	1600	73	13	50	17-109
Phenol	2190	1600	73	13	50	26- 90
2-Methylphenol	2190	1900	87	17	50	30-130
3-Methylphenol/4-Methylp	2190	1900	87	17	50	30-130
2,4,5-Trichlorophenol	2190	2000	91	16	50	30-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III NYTCL-8270

3D

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SOIL SEMIVOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1601093 Matrix: Soil

Client Sample ID : PEFL-2 Injected: 01/19/16 21:01 Lab File ID: 01093-14.D

Matrix Spike : WG857933-4 Injected: 01/18/16 01:00 Lab File ID: 857933-4.D

Matrix Spike Dup : WG857933-5MSD Injected: 01/18/16 01:25 Lab File ID: 857933-5.D

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Benzoic Acid	2190	520J	24	21	50	10- 66
Benzyl Alcohol	2190	1900	87	11	50	40-140
Carbazole	2190	1900	87	17	50	54-128
Benzaldehyde	2190	3500	160 *	30	50	40-140
Caprolactam	2190	1900	87	17	50	15-130
Atrazine	2190	1600	73	6	50	40-140
2,3,4,6-Tetrachloropheno	2190	2000	91	16	50	40-140
Pyridine	2190	1300	59	26	50	10- 93
1-Methylnaphthalene	2190	2800	91	29	50	26-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III NYTCL-8270

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of 8082 PCB Data
for Alpha Analytical Labs
SDG Number: L1601093

14 Soil Samples and 1 Field Duplicate
Collected January 13, 2016

Prepared by: Donald Anné
April 26, 2016

Holding Times: Samples were extracted and analyzed within USEPA SW 848 holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent difference for aroclor-1016 was below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample PEFL-2.

Laboratory Control Sample: The relative percent differences for aroclor 1016 and aroclor 1260 were below the allowable maximums and percent recoveries were within QC limits for soil samples WG858010-2/3.

Field Duplicates: The relative percent differences for aroclor 1254, aroclor 1260, and total PCBs were above the allowable maximum (35%) for soil field duplicate pair PESW-7/DUP (attached table). Results for aroclor 1254, aroclor 1260, and total PCBs should be considered estimated (J) in samples PESW-7 and DUP.

Initial Calibration: The %RSDs for target PCBs were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for target aroclors were below the allowable maximum (15%)for the quantitation column, as required.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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PCB Identification Summary: Checked surrogates and detected aroclors were within quantitation limits. The %D for dual column quantitation of aroclor-1260 in sample DUP was above the allowable maximum (25%), but not above 70%. The result for aroclor-1254 should be considered estimated (J) in sample DUP.

PCBs

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L1601093

S1= PESW-7 **S2=** DUP

Analyte	S1	S2	RPD (%)	
aroclor 1254	72.7	17.6	122%	*
aroclor 1260	60.2	19.4	103%	*
PCBs, total	133	37.0	113%	*

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

GC Organics Indentification Summary
Form 10
Multicomponent Analytes

Client	: Sterling Environmental Eng		Lab Number	: L1601093	
Project Name	: MILLENS-KINGSTON		Project Number	: 27023	
Lab Sample ID	: L1601093-09				
Client ID	: DUP				
Date Analyzed (1)	: 01/19/16 18:30		Date Analyzed (2)	: 01/19/16 18:30	
Instrument ID (1)	: PEST13		Instrument ID (2)	: PEST13	
GC Column (1)	: CLP-Pesticide		GC Column (2)	: CLP-PesticideII	

			RT Window			Mean	
Analyte	Peak	RT	From	To	Concentration	Concentration	%RPD
AROCLOR 1254	1	4.48	-0.05	0.05	16.3		
	2	4.68	-0.05	0.05	10.3		
COLUMN 1	3	4.98	-0.05	0.05	26.2		
	4	0.00	-0.05	0.05	0.		
	5	0.00	-0.05	0.05	0.	17.6	
	1	5.03	-0.05	0.05	20.4		
	2	5.16	-0.05	0.05	7.22		
COLUMN 2	3	5.51	-0.05	0.05	23.7		
	4	0.00	-0.05	0.05	0.		
	5	0.00	-0.05	0.05	0.	17.1	3
AROCLOR 1260	1	0.00	5.07	5.17	0.		
	2	0.00	5.27	5.37	0.		
COLUMN 1	3	5.77	5.72	5.82	11.3		
	4	5.98	5.93	6.03	15.1		
	5	6.17	6.13	6.23	17.2	14.5	
	1	0.00	5.60	5.70	0.		
	2	0.00	5.74	5.84	0.		
COLUMN 2	3	6.29	6.24	6.34	14.7		
	4	6.45	6.40	6.50	14.4		
	5	6.68	6.64	6.74	29.1	19.4	29

ALPHA GEOSCIENCE

Geology
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Water Supply

QA/QC Review of TAL Metals Data
for Alpha Analytical Labs
SDG Number: L1601093

14 Soil Samples and 1 Field Duplicate
Collected January 13, 2016

Prepared by: Donald Anné
April 26, 2016

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recovery for antimony was above laboratory QC limits (70-130%). Positive results for antimony that are less than 4 times the spiking level should be considered estimated (J) in associated samples.

Blanks: The analyses of initial and continuing calibration, and method blanks reported target metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for calcium were outside control limits (75-125%), but not below 10% for soil MS/MSD sample PELF-2. One of two %Rs for magesium and manganese were above control limits for soil MS/MSD sample PEFL-2. Positive results for these metals should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent differences for calcium and zinc were above the allowable maximum (35%) for soil MS/MSD sample PELF-2. Positive results for these metals should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for 8 metals were above the allowable maximum (35%) for soil field duplicate pair PESW-7/DUP (attached table). Results for these 8 metals should be considered estimated (J) in samples PESW-7 and DUP.

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Laboratory Control Sample: The percent recoveries for target metals were within control limits for soil samples WG857538-2 and WG857521-2.

ICP Serial Dilution: The %Ds for manganese and zinc were above the allowable maximum (10%) for soil serial dilution sample PEFL-2. Positive results for these metals that are above the reporting limits should be considered estimated (J) in associated soil samples.

Percent Soilds: The percent solids for soil samples were above 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L1601093

S1= PESW-7 **S2=** DUP

Analyte	S1	S2	RPD (%)	
aluminum	4700	6800	37%	*
antimony	**1.0**	ND	NC	
arsenic	13	6.0	74%	*
barium	58	180	103%	*
beryllium	**0.24**	**0.36**	NC	
cadmium	**0.96**	**0.08**	NC	
calcium	62000	2300	186%	*
chromium	10	28	95%	*
cobalt	5.6	7.2	25%	
copper	57	50	13%	
iron	17000	26000	42%	*
lead	150	180	18%	
magnesium	2700	2400	12%	
manganese	320	330	3%	
mercury	0.65	0.26	86%	*
nickel	18	18	0%	
potassium	400	300	29%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	**200**	**64**	NC	
thallium	ND	ND	NC	
vanadium	9.0	11	20%	
zinc	330	180	59%	*

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Form 2B
CRI Check Standard

Client	: Sterling Environmental Eng	**Lab Number**	: L1601093
Project Name	: MILLENS-KINGSTON	**Project Number**	: 27023
Instrument ID	: TRACE4	**Units**	: mg/L

		Initial	Final
Lab ID	:	R832103-7	
Date Analyzed	:	01/19/16 08:57	

Parameter	True	Found	%R	Found	%R
Aluminum	0.40	0.48	120		
Antimony	0.10	0.18	177		
Arsenic	0.020	0.025	125		
Barium	0.050	0.042	84		
Beryllium	0.010	0.011	106		
Cadmium	0.010	0.011	106		
Calcium	0.40	0.51	129		
Chromium	0.020	0.020	100		
Cobalt	0.10	0.11	110		
Copper	0.050	0.057	114		
Iron	0.20	0.25	127		
Lead	0.050	0.046	93		
Magnesium	0.40	0.43	107		
Manganese	0.030	0.031	104		
Nickel	0.080	0.087	108		
Potassium	5.0	5.2	104		
Selenium	0.020	0.023	116		
Silver	0.020	0.021	104		
Sodium	5.0	5.3	106		
Thallium	0.020	0.022	110		
Vanadium	0.10	0.11	110		
Zinc	0.040	0.042	106		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

Form 5a
Matrix Spike

Client	: Sterling Environmental Eng	Lab Number	: L1601093
Project Name	: MILLENS-KINGSTON	Project Number	: 27023
Client Sample ID	: PEFL-2	Matrix	: SOIL
Lab Sample ID	: L1601093-14		
Matrix Spike	: WG857538-3	MS Analysis Date	: 01/19/16 16:18
Matrix Spike Dup	: WG857538-4	MSD Analysis Date	: 01/19/16 16:22

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (mg/kg)	Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R		Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R		RPD		Recovery Limits	RPD Limit
Aluminum, Total	5900	266	6200	113		265	7200	NA491	Q	15		75-125	20
Antimony, Total	5.9J	66.6	66.	99		66.2	66.	100		0		75-125	20
Arsenic, Total	11.	16	26.	94		15.9	26.	94		0		75-125	20
Barium, Total	180	266	400	83		265	410	87		2		75-125	20
Beryllium, Total	0.41J	6.66	6.4	96		6.62	6.9	104		8		75-125	20
Cadmium, Total	1.6	6.79	8.0	94		6.75	7.8	92		3		75-125	20
Calcium, Total	3000	1330	3900	68	Q	1320	5800	211	Q	39	Q	75-125	20
Chromium, Total	17.	26.6	49.	120		26.5	40.	87		20		75-125	20
Cobalt, Total	7.1	66.6	65.	87		66.2	65.	87		0		75-125	20
Copper, Total	330	33.3	280	NA0	Q	33.1	260	NA0	Q	7		75-125	20
Iron, Total	30000	133	30000	NA0	Q	132	26000	NA0	Q	14		75-125	20
Lead, Total	1300	67.9	810	NA0	Q	67.5	740	NA0	Q	9		75-125	20
Magnesium, Total	1800	1330	3000	90		1320	3900	158	Q	26	Q	75-125	20
Manganese, Total	180	66.6	250	105		66.2	320	211	Q	25	Q	75-125	20
Nickel, Total	20.	66.6	79.	89		66.2	77.	86		3		75-125	20
Potassium, Total	350	1330	1600	94		1320	1800	109		12		75-125	20
Selenium, Total	0.58J	16	15.	94		15.9	15.	94		0		75-125	20
Silver, Total	ND	39.9	38.	95		39.7	39.	98		3		75-125	20
Sodium, Total	140J	1330	1500	113		1320	1500	113		0		75-125	20
Thallium, Total	ND	16	12.	75		15.9	13.	82		8		75-125	20
Vanadium, Total	16.	66.6	94.	117		66.2	82.	100		14		75-125	20
Zinc, Total	4000	66.6	2800	NA0	Q	66.2	1800	NA0	Q	43	Q	75-125	20

NA - Not applicable, the sample concentration was greater than 4 times the spiking level therefore, valid percent recoveries could not be calculated.

Form 8
Serial Dilutions

Client	: Sterling Environmental Eng	**Lab Number**	: L1601093
Project Name	: MILLENS-KINGSTON	**Project Number**	: 27023
Client Sample ID	: PEFL-2	**Matrix**	: SOIL
Lab Sample ID	: L1601093-14	**Analysis Date**	: 01/19/16 16:14
Serial Dilution ID	: WG857538-6	**Analysis Date**	: 01/19/16 15:05

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Aluminum, Total	5900	6500	10	10
Barium, Total	180	190	6	10
Calcium, Total	3000	3200	7	10
Copper, Total	330	330	0	10
Iron, Total	30000	33000	10	10
Lead, Total	1300	1400	8	10
Magnesium, Total	1800	1900	6	10
Manganese, Total	180	200	11*	10
Zinc, Total	4000	4500	13*	10

ALPHA GEOSCIENCE

Geology
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Water Supply

Data Usability Summary Report for
Alpha Analytical, SDG Number: L1602796

7 Soil Samples and 1 Field Duplicate
Collected February 2, 2016

Prepared by: Donald Anné
April 26, 2016

The data packages contain the documentation required by NYSDEC ASP except for dioxins/furans. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 7 soil samples and 1 field duplicate analyzed lead and mercury.

The overall performances of the analyses are acceptable. Alpha Analytical did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive lead results were flagged as estimated (J) in samples PELF-2A and DUP because the relative percent difference for lead was above the allowable maximum in the soil field duplicate pair PELF-2A/DUP.

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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ALPHA GEOSCIENCE

Geology
Hydrology
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QA/QC Review of Lead and Mercury
Data for Alpha Analytical Labs
SDG Number: L1602796

7 Soil Samples and 1 Field Duplicate
Collected February 2, 2016

Prepared by: Donald Anné
April 26, 2016

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for lead and mercury were within control limits (90-110% for Pb, 80-120% for Hg).

CRQL Check Standard: The percent recovery for lead was within laboratory QC limits (50-150%) for CRI check sample.

Blanks: The analyses of initial and continuing calibration, and method blanks reported lead and mercury as not detected.

ICP Interference Check Sample: The percent recovery for lead was within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for lead were above control limits (75-125%) for soil MS/MSD sample PESW-10(18")A. The sample concentration is greater than 4 times the spiking level; therefore, no action is taken on soils MS/MSD data because valid %Rs could not be calculated.

Two of two %Rs for mercury were below control limits (75-125%) and below 10% for soil MS/MSD sample PESW-10(18")A. The sample concentration is greater than 4 times the spiking level; therefore, no action is taken on soils MS/MSD data because valid %Rs could not be calculated.

Laboratory Duplicates: The relative percent differences for lead and mercury were below the allowable maximum (35%) for soil MS/MSD sample PESW-10(18")A, as required.

Field Duplicates: The relative percent difference for lead was above the allowable maximum (35%) for soil field duplicate pair PEFL-2A/DUP (attached table). Results for lead should be considered estimated (J) in samples PEFL-2A and DUP.

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Laboratory Control Sample: The percent recoveries for lead and mercury were within control limits for soil samples WG862330-2 and WG862329-2.

ICP Serial Dilution: The %D for lead was below the allowable maximum (10%) for soil serial dilution sample PESW-10(18")A, as required.

Percent Solids: The percent solids for soil samples were above 50%.

Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L1602796

S1= PEFL-2A **S2=** DUP

Analyte	S1	S2	RPD (%)	
lead	410	280	38%	*
mercury	0.26	0.24	8%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
Alpha Analytical, SDG Number: L1603375

2 Soil Samples
Collected February 9, 2016

Prepared by: Donald Anné
April 26, 2016

The data packages contain the documentation required by NYSDEC ASP except for dioxins/furans. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 soil samples analyzed lead.

The overall performances of the analyses are acceptable. Alpha Analytical did fulfill the requirements of the analytical method.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive lead results were flagged as estimated (J) in samples PESW-11(6")A and PESW-12(18")A because %D for lead was above allowable maximum in the associated soil serial dilution sample.

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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APPENDIX G

REMEDIAL PERFORMANCE –
ANALYTICAL LABORATORY DATA
(PROVIDED ON CD)

APPENDIX H

LOW FLOW PURGING/SAMPLING DATA SHEETS

Low Flow Purging / Sampling Data Sheet

Project: #27023
Well No.: MW-5
Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Date: 3/23/16

Well Depth: 14.65'
Well Diameter: 2 inches
Screen Length: ~~N/A~~ Not available
Casing Type: ~~N/A~~ PVC

Sampling Device: Monsoon Pump
Static Water Level: 4.57'
Other Info.: —
Tubing Type: LDPE
Measuring Point: Top of PVC

Sampling Personnel: Vedran Cirkovic, Amanda Post

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
1225	0.10	4.70	0.13	7.31	9.98	0.430	-69.7	1.27	198.9	
1230	0.12	4.72	0.02	7.32	10.26	0.431	-68.2	0.68	69.7	
1235	0.14	4.79	0.07	7.31	10.16	0.433	~~-86.1~~ 86.1	0.57	86.0	
1240	0.12	4.67	-0.13	7.31	9.96	0.432	-93.3	0.58	56.7	
1245	0.13	4.69	0.02	7.31	10.07	0.431	-100.0	0.60	46.05	
1250	0.15	4.69	0.00	7.34	10.10	0.426	-106.5	0.62	37.99	
1255	0.15	4.68	-0.01	7.38	10.09	0.415	-125.9	0.61	30.02	
1300	0.15	4.70	0.02	7.45	9.74	0.401	-141.0	0.76	22.97	
1305	0.15	4.67	-0.03	7.45	9.77	0.393	-156.5	0.69	15.0	
1310	0.15	4.69	0.02	7.45	9.92	0.384	-158.9	0.65	14.97	
1315	0.15	4.68	-0.01	7.45	10.23	0.374	-159.1	0.62	14.11	
* Turbidity meter was calibrated to a 124 NTU standard before sampling each well.										

~~Types~~ Time of Samples Collected
1320

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Low Flow Purging / Sampling Data Sheet

Project: #27023
Well No.: MW-6
Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Date: 3/23/16

Well Depth: 14.05'
Well Diameter: 2 inches
Screen Length: ~~N/A~~ Not available
Casing Type: ~~N/A~~ PVC

Sampling Device: Monsoon Pump
Static Water Level: 5.05'
Other Info.: —
Tubing Type: LDPE
Measuring Point: Top of PVC

Sampling Personnel: Vedran Cirkovic, Amanda Post

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
1135 ~~40~~	0.14	5.95	0.90	7.14	9.86	0.893	-87.8	31.7	251.6	
1145	0.15	6.04	0.09	7.20	9.84	0.892	-87.6	3.14	251.6	
1150	0.15	6.05	0.01	7.20	9.94	0.891	-85.5	3.03	251.6	
1155	0.15	6.06	0.01	7.20	10.05	0.890	-83.1	2.96	251.6	
1200	0.15	6.1	0.04	7.22	10.13	0.890	-82.0	2.86	251.6	
*	Turbidity meter was calibrated to a 124 NTU standard before sampling each well.									
	Measurements greater than or equal to 251.6 indicate turbidity values that exceed the									
	calibration range of the meter for the well.									

~~Types~~ Time of Samples Collected
1205

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Low Flow Purging / Sampling Data Sheet

Project: #27023
Well No.: MW-9
Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Date: 3/23/16

Well Depth: 10.9'
Well Diameter: 2 inches
Screen Length: ~~N/A~~ Not available
Casing Type: ~~N/A~~ PVC

Sampling Device: Monsoon Pump
Static Water Level: 5.666'
Other Info.: —
Tubing Type: LDPE
Measuring Point: Top of PVC

Sampling Personnel: Vedran Cirkovic, Amanda Post

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
1345	0.10	5.68	0.02	7.00	10.5	0.635	-98.4	2.75	260.5	
1350	0.18	5.70	0.02	7.08	10.27	0.637	-96.5	2.39	260.5	
1355	0.14	5.68	-0.02	7.13	10.28	0.639	-91.7	1.94	260.5	
1400	0.14	5.68	0.00	7.14	10.56	0.642	-92.0	1.66	240.25	
1405	0.19	5.69	0.01	7.16	10.08	0.656	-97.5	1.43	181.4	
1410	0.18	5.68	-0.01	7.26	10.00	0.658	-90.2	1.12	79.75	
1415	0.19	5.70	0.02	7.30	10.16	0.661	-82.6	0.96	40.44	
1420	0.19	5.70	0.00	7.36	9.73	0.667	-77.6	0.85	22.41	
1425	0.19	5.68	-0.02	7.36	10.24	0.663	-74.2	0.81	14.26	
1430	0.19	5.70	0.02	7.39	10.54	0.664	-78.9	0.66	14.05	
1435	0.19	5.69	-0.01	7.35	10.27	0.665	-90.2	0.60	13.98	
	* Turbidity meter was calibrated to a 124 NTU standard before sampling each well.									
	Measurements greater than or equal to 260.5 indicate turbidity values that exceed									
	the calibration range of the meter for the well.									

~~Types~~ Time of Samples Collected
1445

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Low Flow Purging / Sampling Data Sheet

Project: #27023
Well No.: MW-11
Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Date: 3/23/16

Well Depth: 12.73 ft
Well Diameter: 2 inches
Screen Length: 5
Casing Type: ~~N/A~~ PVC

Sampling Device: Monsoon Pump
Static Water Level: 7.02 ft
Other Info.: —
Tubing Type: LDPE
Measuring Point: Top of PVC

Sampling Personnel: Vedran Cirkovic, Amanda Post

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
1035	0.15	7.06	0.04	7.39	10.07	0.775	-112.0	3.84	101.2	
1040	0.23	7.07	0.01	7.39	10.24	0.775	-106.9	3.50	22.45	
1045	0.13	7.05	-0.02	7.41	10.46	0.779	-109.2	2.92	41.11	
1050	0.13	7.06	0.01	7.42	10.58	0.782	-104.6	2.19	31.56	
1055	0.13	7.06	0.00	7.45	10.57	0.784	-107.2	2.12	22.11	
1100	0.15	7.07	0.01	7.47	10.68	0.783	-111.0	1.94	19.54	
1105	0.12	7.07	0.00	7.4	10.71	0.782	-112.3	1.98	20.38	
*Turbidity meter was calibrated to a 124 NTU standard before sampling each well.										

~~Types~~ Time of Samples Collected
1115

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Low Flow Purging / Sampling Data Sheet

Project: #27023
Well No.: MW-12
Well Depth: ~~6~~ 12.89'
Well Diameter: 2 inches
Sampling Device: Peristaltic GeoPump
Static Water Level: 6.53'
Other Info.: —
Sampling Personnel: Vedran Cirkovic, Amanda Post

Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Date: 3/23/16
Screen Length: 5'
Casing Type: ~~N/A~~ PVC
Tubing Type: LDPE
Measuring Point: Top of PVC

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
1705	0.15	6.58	0.05	12.00	8.68	1.050	-180.2	2.33	96.54	Obstruction
1710	0.15	6.59	0.01	12.06	8.58	1.187	-188.0	0.90	11.03	noted ~ 6ft
1715	0.15	6.60	0.01	12.36	8.50	1.257	-193.9	0.70	8.76	down well.
1720	0.15	6.60	0.00	12.32	8.26	1.336	-203.7	0.54	7.745	
1725	0.16	6.60	0.00	12.46	8.43	1.359	-198.7	0.45	7.745	
1730	0.16	6.61	0.01	12.44	8.54	1.390	-194.7	0.41	7.039	
1735	0.16	6.61	0.00	12.58	8.53	1.407	-195.2	0.39	7.542	
*	Turbidity meter was calibrated to a 124 NTU standard before sampling each well.									

~~Types~~ Time of Samples Collected
1740

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Low Flow Purging / Sampling Data Sheet

Project: #27023
Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Well No.: MW-13
Date: 3/23/16

Well Depth: AR ~~10ft~~ 12.66 ft
Screen Length: 5ft
Well Diameter: 2 inches
Casing Type: AR ~~N/A~~ PVC

Sampling Device: Monsoon Pump
Tubing Type: LDPE
Static Water Level: 5.26 ft
Measuring Point: Top of PVC
Other Info.: —

Sampling Personnel: Vedran Cirkovic, Amanda Post

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
0935	0.1 L/min	5.26	0.0	7.78	8.79	0.942	~~0.942~~ 138.1	~~39.8%~~ 4.66	*249.6	
0940	0.18	5.30 ft	~~5.30 ft~~ 0.04	7.40	8.9	0.881	155.6	5.27	249.6	Noticably clearer
0945	0.18	5.29 ft	-0.01	7.30	9.07	0.866	162.3	5.21	249.6	
0950	0.17	5.28	-0.01	7.13	9.14	0.862	161.9	5.13	249.6	
0955	0.17	5.28	0.0	7.16	9.23	0.856	160.7	5.19	249.6	
1000	0.17	5.28	0.0	7.14	9.23	0.854	155.5	5.19	249.6	

* Turbidity meter was calibrated to a 124 NTU standard before sampling each well. Measurements greater than or equal to 249.6 indicate turbidity values that exceed the calibration range of the meter for the well.

AR ~~Types~~ Time of Samples Collected
1010

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

Low Flow Purging / Sampling Data Sheet

Project: #27023
Well No.: MW-14
Site: Millens Scrapyard, 290 E. Strand St., Kingston, NY
Date: 3/23/16

Well Depth: 10.23ft
Well Diameter: 2 inches
Screen Length: 5'
Casing Type: ~~N/A~~ PVC

Sampling Device: Monsoon Device
Static Water Level: 3.12'
Other Info.: —
Tubing Type: ~~LPD~~ LDPE
Measuring Point: Top of PVC

Sampling Personnel: Vedran Cirkovic, Amanda Post

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.33 ft)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)	Notes
1525	0.11	4.19	1.07	8.13	10.09	0.562	-143.7	2.80	264.2	Loose
1530	0.10	4.20	0.01	8.23	10.19	0.560	-145.6	1.83	264.2	~~Casing~~
1535	0.15	4.24	0.04	8.25	10.30	0.560	-131.7	1.58	262.4	riser
1540	0.15	4.40	0.16	8.26	10.27	0.558	-137.3	1.39	198.3	
1545	0.15	4.53	0.13	8.29	10.21	0.557	-139.3	1.15	165.0	
1550 ~~1550~~	0.15	4.81	0.28	8.35	10.08	0.557	-112.0	1.05	114.5	
1555	0.14	4.61	-0.20	8.44	10.06	0.555	-96.0	2.13	74.18	
1600	0.14	4.60	-0.01	8.47	10.07	0.553	-89.1	1.14	51.36	
1605	0.14	4.54	-0.06	8.57	10.15	0.553	-85.6	0.88	44.55	
1610	~~0.19~~ 0.16	4.56	0.02	8.70	10.19	0.551	-80.5	0.82	36.88	
1615	0.16	4.68	0.12	8.79	10.05	0.551	-78.9	0.73	32.33	
1620	0.13	4.67	-0.01	8.87	10.14	0.548	-78.1	0.68	33.52	
1625	0.15	4.67	0.00	8.92	10.11	0.548	-77.8	0.66	32.22	
*	Turbidity meter was calibrated to a 124 NTU standard before sampling each well. Measurements greater than or equal to ~~200~~ 264.2 NTU indicate turbidity values that exceed the calibration range of the meter for the well.									

(*) ~~Time~~ ~~Types~~ of Samples Collected
1630

Information: 2 in. = 617 ml/ft., 4 in. = 2,470 ml/ft.: $Vol_{cyl} = \pi r^2 h$

APPENDIX I

CHEMICAL ANALYSIS OF IMPORTED FILL MATERIAL (PROVIDED ON CD)

APPENDIX J

DEMARCATION LAYER SPECIFICATIONS

TENCATE Mirafi®

TENCATE GEOSYNTHETICS
Americas

Mirafi® 140NL/O

Drainage

Mirafi® 140NL/O is an orange nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Mirafi® 140NL/O is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

TenCate Geosynthetics Americas Laboratories are accredited by a2La (The American Association for Laboratory Accreditation) and Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

Mechanical Properties	Test Method	Unit	Typical Value[1]	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	100 (445)	100 (445)
Grab Tensile Elongation	ASTM D4632	%	75	75
Trapezoid Tear Strength	ASTM D4533	lbs (N)	50 (223)	50 (223)
CBR Puncture Strength	ASTM D6241	lbs (N)	310 (1380)	
Permittivity	ASTM D4491	sec^{-1}	2.4	
Flow Rate	ASTM D4491	$gal/min/ft^2$ ($l/min/m^2$)	175 (7130)	
UV Resistance (at 500 hours)[1]	ASTM D4355	% strength retained	70	

Apparent Opening Size (AOS): ASTM D4751: U.S. Sieve (mm): 60 (0.25) is tested to a Maximum Opening Diameter Value
[1] Modified

Physical Properties	Unit	Typical Value[2]
Weight (ASTM D5161)	oz/yd^2 (g/m^2)	3.8 (129)
Thickness (ASTM D5199)	mils (mm)	35 (0.9)
Roll Dimensions (width x length)	ft (m)	15 x 360 (4.5 x 110)
Roll Area	yd^2 (m^2)	600 (502)
Estimated Roll Weight	lb (kg)	157 (71)

Mirafi® 140NL/O orange polypropylene nonwoven is not manufactured with any heavy metals contents. The regulated metals – lead, mercury, cadmium, and hexavalent chromium are not intentionally added to any component in this product during the manufacturing process.

[2] ASTM D4439 Standard Terminology for Geosynthetics: typical value, *n—for geosynthetics*, the mean value calculated from documented manufacturing quality control test results for a defined population obtained from one test method associated with on specific property.

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Testing Lab 1291.01 & 1291.02