OBG

WORK PLAN

Interim Remedial Measure

Former K&K Stripping Site
Site # 826021
Lima, New York

November 2015

8653.61247

Interim Remedial Measure Work Plan
Former K&K Stripping Site
Site #826021

I, Douglas M. Crawford, certify that I am currently a NYS registered professional engineer and that this Interim Remedial Measure Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

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1. INTRODUCTION

1.1 GENERAL

This document serves as the Interim Remedial Measure (IRM) Work Plan for the Former K&K Stripping Site (Site) located at 1920 Buell Avenue in the Village of Lima, Livingston County, New York. The IRM is being conducted by the New York State Department of Environmental Conservation (NYSDEC). The Site is a Class 2 Site (ID number 826021) on NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites.

The IRM scope of work included herein was developed based on data collected during a site investigation conducted by Shaw Environmental & Infrastructure Engineering of NY, P.C. (Shaw) on behalf of NYSDEC and documented in the Site Characterization Report (SCR) (Shaw, 2012), data collected during the ongoing Remedial Investigation (RI) being conducted by O'Brien & Gere Engineers, Inc. (OBG), and discussions with the NYSDEC.

1.2 INTERIM REMEDIAL MEASURE OBJECTIVE

The objective of the IRM is to remove soil located outside the building that exhibits lead concentrations exceeding the Soil Cleanup Objectives (SCOs) for Commercial Use (Area 2) at the Site (**Figure 2**). Additionally, a concrete elevated oil/water separator located within the former furniture stripping facility (Area 3) has been identified by NYSDEC for removal (**Figure 2**).

2. BACKGROUND

2.1 SITE LOCATION

The Site is located at 1920 Buell Ave in the Village of Lima, New York in northeastern Livingston County, approximately 0.2 miles south of New York State Route 20. The surrounding parcels are currently zoned for a combination of commercial and residential use. A Site location map is presented as **Figure 1**.

2.2 SITE FEATURES

The Site consists of an approximate 3,300 square feet one story commercial building (Tax Parcel ID 37.14-1-21.2) on an approximate 0.4 acre, relatively flat, parcel in the Village of Lima, NY. The commercial building is situated along the northern boundary and includes office space in the front portion with open working space in the rear portion of the building. Grassy areas are present over most of the property with overgrown brush in the rear of the property and a small paved area located behind the building.

Based on the presence of a fire hydrant on the parcel, it is assumed that the Site is served by public water. The site is also served by sewer and utilities (gas and electric) as reported in the 1997 spill report (NYSDEC 1997) and presented in the Site Characterization Report (SCR) (Shaw 2012) base map.

The buildings and properties surrounding the Site are of mixed commercial and industrial use, consisting of:

- A residence and commercial properties to the north
- Buell Avenue and residential buildings to the east
- An unnamed stream, commercial and residential property to the south
- A wooded property and commercial buildings to the west

2.3 HISTORIC SITE USE

The commercial building reportedly operated as a furniture stripping business until October 2000 when the former owner was convicted for treatment of hazardous waste without authorization. Solvents reportedly used during operations included acetone, toluene, methy-ethyl ketone (MEK), methanol, and methylene chloride (NYSDEC, 2015).

2.4 GEOLOGIC CONDITIONS

The western and northern Site boundaries exhibit increased elevation (approximately 5-feet) towards the western and north adjacent parcels. The main portion of the Site exhibits little topographic relief. Overburden geology in the region is identified as till by the Surficial Geologic Map of New York (Mueller and Cadwell, 1986). Available boring logs from the site (Shaw, 2012) identify sandy silt with some fine to coarse subround to subangular gravel and traces of clay, possibly representing reworked till. Bedrock is reportedly Skaneateles Shale of the Hamilton Group (Rickard and Fisher, 1970). Available boring logs indicate that bedrock was encountered approximately 6 to 12-feet below ground surface. Groundwater is present in the overburden at approximately 5-feet below ground surface (bgs) in the northwest portion of the Site and 10-feet bgs in the southeast portion of the Site (Shaw, 2012). Regional groundwater flow in the overburden is assumed to be toward Spring Brook to the east of the Site. Site-specific groundwater flow in the overburden is to the southeast of the Site (Shaw, 2012).

2.5 ENVIRONMENTAL CONDITIONS

Based on investigations conducted to date at the Site, the primary contaminants of concern (COCs) are VOCs (including acetone, toluene, MEK, methanol, and methylene chloride) and the following metals as defined in the SCR (Shaw, 2012) lead, arsenic, barium, cadmium, chromium, copper, mercury, zinc.

The investigation conducted by Shaw (Shaw, 2012) did not identify VOCs in soil or groundwater, but did identify metals in shallow soils only, across much of the site including in soil under the building. In addition, soil gas investigations were conducted by Shaw at the Site and identified VOCs, including the primary COCs, in soil gas (Shaw, 2012).

Based on the SCR, the affected environmental media include soil, overburden groundwater, and soil vapor within the Site boundary.

3. INTERIM REMEDIAL MEASURE

3.1 GENERAL

The IRM activities covered under this Work Plan include excavation, removal, and disposal of soil along the western edge of the paved area (Area 2) and demolition of a concrete elevated oil/water separator (Area 3) located inside the on-Site building. The approximate locations of the IRM components are depicted on **Figure 2**.

Based on discussions with NYSDEC, IRM activities will be subcontracted by OBG (the Engineer) under NYSDEC's State Standby Superfund Contract #D007623. As such, engineering oversight, documentation sampling of Area 2 excavation, and coordination of associated analytical work will be provided by the Engineer under the generic Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP).

The following is a summary of the IRM elements:

- Removal and disposal of lead contaminated soil (Area 2) located to the west of the facility (**Figure 2**) to a depth of 2 feet below grade.
- Removal and disposal of stairwell bump out, and walls between rooms B, C, D, and E. Refer to Drawing 1 of 3 in the Limited Hazardous Materials Survey conducted by Atlantic Testing Laboratories, Limited (ATL) in **Attachment 1** for room designations.
- Removal and disposal of Area 3 concrete, elevated oil water separator structure located inside the facility (**Figure 2**) with dimensions of approximately 15 ft wide by 40 ft long and 5 ft tall, and any fill material, plumbing structures, water/liquid, and any sediment and/or sludge contained within the structure. Removal will proceeded to the depth of slab, slab grade, or bottom of the tank, whichever is deepest.

3.2 IMPLEMENTATION OF AREA 2 INTERIM REMEDIAL MEASURE

All activities will be completed in accordance with the health and safety requirements outlined in **Section 3.6**.

3.2.1 Existing Environmentally-Regulated Materials Information and Scope of Work

The estimated horizontal extent of the area suspected to contain lead-contaminated soil is shown on **Figure 2**. Contractor shall accurately locate and stake the contaminated soil removal boundary (Area 2) in accordance with points provided in **Figure 2**. The estimated excavation depths are also noted on **Figure 2**.

Lead-contaminated soil shall be excavated, loaded and transported from its existing location. It is intended that excavated materials will be 'live-loaded' for off-site disposal as the project progresses; however, if temporary stockpiling is required, the location shall be mutually agreed upon with the Contractor's Representative and the Engineer prior to placement, and the excavated contaminated spoils shall be stockpiled on and covered by 8-mil plastic sheets. All plastic sheets shall be secured by sandbags.

The Contractor shall not exceed the designated limits of excavation without prior approval of the Engineer. Corrective grading including placement of backfill required due to over excavation by the Contractor will be performed at no additional cost to the Owner, NYSDEC or Engineer. Prior to restoration (backfilling), the entire bottom of the excavation will be lined with a demarcation layer of orange snow fence.

Pre-Excavation survey; the Pre-excavation survey shall be conducted by an independent NYS-licensed surveyor prior to excavation to located the limits of excavation as defined in **Figure 2** and one additional stake to be placed by Engineer prior to survey.

Post-excavation survey; the Post-excavation survey shall be conducted after excavation activity has been completed, as directed and confirmed by the Engineer. Contractor shall provide an independent, licensed land surveyor to document the vertical and horizontal limits of excavation.

3.2.2 Drainage/Dewatering

The Contractor shall provide all labor, equipment, and materials needed to properly manage surface water and groundwater that enters open excavations. Methods and equipment for sediment control shall be utilized to minimize surface water migration into excavations and to control groundwater that enters the excavation. Methods and equipment used to control drainage, dewatering, and sedimentation shall be in accordance with the Contractor's submitted Site Health and Safety Plan.

Contractor's Health and Safety Plan, at a minimum, shall address the following elements as applicable to the scope of work:

- General project information including project team organization and responsibilities
- Safety and health risk or hazard analysis
- Employee training assignments
- Personal protective equipment (PPE)
- Site control measures
- Emergency Response Plan

Requirements identified for dewatering and erosion and sediment control shall be implemented as required and identified below. Additionally, the area to be remediated is less than 1 acre in size and, therefore, a stormwater pollution prevention plan (SWPPP) is not required.

Erosion and sediment control (ESC) for the project will be completed in accordance with the latest editions of New York Standards and Specifications for Erosion and Sediment Control prepared by NYS Department of Environmental Conservation (NYSDEC, 2005), and New York State Stormwater Management Design Manual

prepared by the Center for Watershed Protection for the NYSDEC (NYSDEC, 2010b). In addition, ESC measures will comply with any other applicable NYSDEC requirements.

Recovered groundwater or standing water removed shall be containerized and analyzed for requisite waste characterization parameters as required by the selected disposal facility prior to discharge. Construction water that meets applicable New York State surface water criteria may be discharged to the sanitary sewer with approval from the authority operating the sewer (Contractor responsibility to obtain), otherwise the containerized water shall be discharged off-site at an appropriate wastewater treatment facility at no additional cost to the Owner, NYSDEC or Engineer.

3.2.3 Environmental Sampling and Testing

Prior to disposal, the Contractor will employ the services of an independent testing laboratory to perform testing of the removed solid materials for toxicity in accordance with USEPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP).

Test results indicating a value greater than 6 NYCRR Part 371 *Table 1 - The Maximum Concentration of Contaminants for the Toxicity Characteristic*, classifies the removed material as Hazardous Waste.

The Engineer will collect documentation soil samples to document the final vertical and horizontal extents of excavation. Samples will be analyzed for Lead by USEPA Method 6010B.

No backfill may be placed until directed by the Engineer, after verification that limits of excavation have been met as defined in this scope of work. Any and all Contractor standby time will occur at no additional cost to the Owner, NYSDEC or Engineer if limits are determined to not have been met.

3.2.4 Backfill and Restoration

All excavations shall be backfilled to the original surface of the ground or to such other grades as may be shown, specified or directed.

The Contractor shall backfill all excavations with run-of-crusher stone material in accordance with the requirements of Chapter 5.4(e)5 of Program Policy DER-10 Technical Guidance for Site Investigation and Remediation dated May 3, 2010 (NYSDEC 2010a).

Run-of-crusher is defined as a hard durable limestone or approved equal having the following gradation by weight:

% Passing	Sieve
100	1½- inch
95 – 100	1
65 – 80	½
40 – 60	¼
0 – 10	#200 Sieve

The excavations shall not be backfilled by the Contractor until written approval to do so is provided by the Engineer based on the results of visual inspection of the excavation floor conducted by the Engineer.

Documentation for fill material proposed by the Contractor will be submitted to the Engineer at least 5 days prior to import to the site to verify that the material meets the backfill requirements.

3.2.5 Compaction

Maximum of 12 inch lifts and compaction using a vibratory compactor to satisfaction of Engineer.

3.2.6 Disposal of Excavated Materials

All excavated materials (waste materials) shall be collected in containers or similar means as proposed by the Contractor and approved by the Engineer, for subsequent transportation and disposal. The Contractor shall label the containers in accordance with federal and state regulations.

All excavated waste materials shall be disposed in accordance with the requirements of the United States Environmental Protection Agency (USEPA) and NYSDEC regulations.

Unless otherwise specified, all excavated waste materials shall become the responsibility of the Contractor. The Contractor shall be responsible for the safe and proper removal of all waste materials and the disposal of such waste materials at a licensed waste disposal facility approved by the Engineer.

All fees and transportation and disposal costs are the responsibility of the Contractor. The Contractor shall bear full responsibility for any and all fines or assessments levied against the project resulting from improper handling and disposal of the waste material.

For the purposes of developing costs, Contractor shall assume that soil is non-hazardous.

3.3 IMPLEMENTATION OF AREA 3 INTERIM REMEDIAL MEASURE

All activities will be completed in accordance with the health and safety requirements outlined in **Section 3.6**.

Area 3 is a concrete, elevated oil water separator structure inside the building with dimensions of approximately 15 ft wide by 40 ft long and 5 ft tall. Under the elevated structure is a tank (assumed to be 6 inch thick concrete) measuring approximately 12.5 ft by 15 ft and 40 inches deep. The tank shall be pumped of all liquids by Contractor prior to removal of sediment. Solid tank bottoms/sediment shall be removed by Contractor using manual methods (*e.g.* use of hand tools, or as otherwise approved by Engineer) to the extent possible. Remaining material shall be removed during pressure washing of the tank by Contractor, prior to disposal. The elevated structure shall be demolished by Contractor leaving the northern exterior wall, southern exterior wall, and eastern interior wall intact. A small stairwell bump out on east wall shall also be demolished for access. Any fill material piping or other plumbing structures (*e.g*. sump) beneath the tank or occupying the space within the elevated oil water separator structure shall be removed by Contractor to slab, slab grade or the bottom of the tank, whichever is deepest. Shared interior divider walls between Rooms B, C, D, and E shall be removed by Contractor during demolition to access the elevated structure. Contractor shall evaluate structural integrity of the building prior to performing activities associated with Area 3. Refer to Drawing 1 of 3 in the Limited Hazardous Materials Survey conducted by Atlantic Testing Laboratories, Limited (ATL) in **Attachment 1** for room designations. The demolished materials, tank, and removed fill material shall be disposed off-Site by Contractor. If no concrete slab is present below the tank, restoration will require 6 inches of run-of-crusher stone fill placed over a snow fence demarcation layer by Contractor that covers the elevated structure footprint. If a concrete slab is present, no fill or demarcation layer will be required and the slab will remain in place.

3.3.1 Lead Containing/Coated Building Materials Handling

A lead survey of the building was conducted by ATL and documented in a report dated August 18, 2015 (**Attachment 1**). The survey was performed using x-ray fluorescence (XRF) testing and two painted surfaces were found to have detectable levels of lead. The two paints were identified as blue paint on concrete block in Room D and light blue paint on concrete block in Room E. Refer to Drawing 2 of 3 in the ATL report for sample locations and room designations. XRF results for both paints were 0.08 milligrams per square centimeter (mg/cm2). The regulatory level defining "lead-based paint" is 1.0 mg/cm2.

Although the paints do not meet the definition of a lead-based paint, the Occupational Safety and Health Administration (OSHA) standard for Lead in Construction (29 CFR 1926.62) applies to any paint that contains measurable levels of lead.

Additionally, in January 2011, five concrete chip samples were collected from the building floor and laboratory analysis confirmed that all samples contained lead. These results are documented in a Site Characterization report dated February 2012 (Shaw, 2012) (**Attachment 2**). In September 2015, a sample of water in the tank was submitted for laboratory analysis confirming presence of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals (**Appendix A**). At a minimum sediments that will be removed from the tank are also assumed to contain lead in addition to other constituents.

The Contractor shall comply with OSHA's Lead in Construction standard for any work that will impact lead containing materials, including the two identified paints, and the lead-containing concrete. Use procedures and equipment required to limit cross contamination of building spaces during demolition.

3.3.2 Pre-Disposal Testing

The Contractor shall be responsible for all waste characterization sampling required for appropriate disposal. Prior to disposal, the Contractor will employ the services of an independent testing lab to perform testing of the removed solid materials for toxicity in accordance with USEPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP) and as required by selected permitted receiving facility.

Prior to disposal the Contractor will provide the Engineer with a list of receiving facilities for all wastes.

3.3.3 Cover and Restoration

If no concrete slab is present below the tank, restoration will require 6 inches of run-of-crusher stone material (see below) in accordance with the requirements of Chapter 5.4(e)5 of Program Policy DER-10 Technical Guidance for Site Investigation and Remediation dated May 3, 2010 (NYSDEC 2010a). Cover material shall be placed over a snow fence demarcation layer by Contractor that covers the elevated structure footprint.

Run-of-crusher is defined as a hard durable limestone or approved equal having the following gradation by weight:

% Passing	Sieve
100	1½- inch
95 – 100	1
65 – 80	½
40 – 60	¼
0 – 10	#200 Sieve

The run-of-crusher material shall be 6 inches thick and will not require compaction. Documentation for cover material proposed by the Contractor will be submitted to the Engineer at least 5 days prior to import to the site to verify that the material meets the backfill requirements.

3.3.4 Disposal of Lead-Containing/Coated Material and Related Debris

Contractor is responsible for:

- Transport and disposal of lead-containing material classified as Hazardous Waste in accordance with the standards referenced.
- Transport and disposal of lead-containing material classified as Non-Hazardous Waste in accordance with the standards referenced.
- For purposes of developing costs, the contractor shall assume that materials are non-hazardous with the exception of the sediment in the oil/water separator and sediment in the sump on top of the separator, which are assumed hazardous for lead.

3.3.5 Material Management and Disposal

Contractor shall supply and direct all loading and coordination of trucks or roll-offs for transport of materials to a NYSDEC permitted landfill in accordance with all state, local and federal laws. All transporters hauling excavated materials shall submit a copy of their current Waste Transportation Permit (obtained in accordance with 6 NYCRR Part 364) and safety records (including any incidents reported since January 1, 2009 [*i.e.*, the previous 5 years]. All loads shall be lined, shall be securely covered with a solid lining/cover (i.e., non-mesh), and all tailgates shall be equipped with tailgate locks.

3.4 ADDITIONAL INTERIM REMEDIAL MEASURE REQUIREMENTS

The following apply to Area 2 and Area 3 IRM activities.

3.4.1 Truck Wash and Decontamination

Contractor shall construct a temporary decontamination pad with accommodations (*i.e*. sump) for collection of water generated. The tires of all vehicles leaving the construction area shall be cleaned by Contractor with a pressure washer within a decontamination pad prior to exiting the construction area.

Water and electrical hook-ups are not available at the site. Accommodations for water and electricity are the responsibility of the Contractor. Contractor shall provide a means for transporting and containing water for the pressure washer.

Decontamination of excavator or other loading equipment shall consist of washing the bucket with a pressure washer over decontamination pad between excavations. Tires and tracks of all trucks shall be inspected and washed off with pressure washer prior to leaving the construction area.

Should soil or dust accumulate on facility or public roadways as a result of truck traffic associated with this construction activity, Contractor shall clean roadways to the satisfaction of the Engineer. Contractor shall provide sufficient drums to contain decontamination water and a means to transfer the water from the sump to the drums. Disposal of the drummed water will be the responsibility of the Contractor.

3.4.2 Manifest Signature and Generator ID

In accordance with Article 10 I.v.j. of Contract D007623, the Engineer is duly authorized and appointed by NYSDEC, as agent-in-fact for the NYSDEC, to act in all circumstances in the name, place and stead of the NYSDEC with respect to the completion and execution of manifests required by law for the storage, transportation and/or disposal of non-hazardous and regulated hazardous, or toxic materials and wastes from the Former K&K Stripping Site, Lima, New York, as each of those terms is defined by applicable statue and regulation. In accepting this appointment, the agent agrees to abide by all applicable law, statutes and regulations governing the storage, transportation and/or disposal of non-hazardous and hazardous waste. Manifests will be signed accordingly with the following: “as an agent of NYSDEC”.

For waste profiling and manifesting purposes, the generator will be identified as follows:

Generator: NYSDEC – K&K Stripping Site #826021
1920 Buell Avenue
Lima, NY 14485

If additional information generated during the IRM indicates that material to be disposed would be a regulated Hazardous Waste, a Generator ID Number will be required. Should this need arise, the Engineer will notify NYSDEC and Generator ID Number NYD0982270761 will be used.

3.4.3 Miscellaneous

Area 3

Contractor shall remove all materials (*e.g*. furniture, cabinets, etc.) from the elevated structure and place in the other portions of the building to facilitate access for demolition; this shall be included under Mobilization payment item.

A visual condition survey of the building was performed in September 2015 to evaluate the structural integrity of the building (Carmon, 2015) (**Appendix B**).

Contractor shall protect all sumps in building floor that are not part of demolition.

If doors used to access the facility are not in operating order at conclusion of site activities, Contractor is responsible to seal doorway with a plywood structure.

General

Subject property will be restored to pre-work conditions.

Any additional fill or materials brought on the site will be subject to approval by the Engineer and must meet the requirements of Chapter 5.4(e)5 of Program Policy DER-10 Technical Guidance for Site Investigation and Remediation dated May 3, 2010 (NYSDEC 2010a).

Contractor shall provide a portable toilet for use by its personnel and OBG site personnel for the duration of the construction activity.

Prior to initiation of intrusive activities, contractor shall contact an underground facilities protective organization (UFPO) and verify excavation activities will not encounter utilities. Additionally, Contractor is responsible for disconnection of appropriate utilities in the building prior to demolition activities.

Photographic log and notes are provided as **Appendix C**.

3.5 DUST CONTROL

Control of fugitive dust created as a result of this project shall be the obligation of the Contractor. The Contractor shall also comply with the requirements of OSHA 29 CFR 1910.1000.

The Contractor shall make every effort to minimize the generation of dust. Appropriate methods to minimize the generation of dust include, but are not limited to:

- Use of tarpaulin or suitable means to cover exposed areas and materials.
- Limiting the amount of exposed areas.
- Water spray or mist curtain. If water spray is used, run-off must be collected and managed if it comes into contact with contaminated soil.
- Dust suppression activities shall not result in the generation of runoff or water ponding on surfaces
- The use of chloride or petroleum containing compounds for dust control is prohibited.

Actions to control the generation or release of dust are required if the difference between the downwind and upwind/background dust exceed, as determined by the Engineer, the following action levels:

- 100 µg/m^3 for PM-10 for a 15-minute average
- If the downwind PM10 level exceeds 150 micrograms above background of PM10 per cubic meter of air (150 mg/m^3) for more than 15 minutes, dust control activities at the active site shall be initiated to reduce the level at the perimeter to below 100 mg/m^3 within 15 minutes.

The Contractor shall initiate dust control activities at any time as directed by the Engineer, who will be performing perimeter air monitoring.

3.6 HEALTH AND SAFETY

Excavations will occur in an area that contains constituents at concentrations above commercial cleanup objectives and that contain lead. Analytical results from the Site are presented in the attached Site Characterization Report (SCR) (Shaw, 2012) (**Attachment 2**) for use developing a Site-Specific Health and Safety Plan (HASP).

Contractor

The Contractor shall provide to the Engineer a Site-Specific HASP, to include provisions for Contractor personnel to perform the Site work described in this IRM Work Plan. The HASP shall be submitted to the Engineer a minimum of 5 working days in advance of the start of work. It is assumed that work associated with this IRM will be conducted in Level D. The contractor must have a qualified excavation competent person on-site for the

duration of the work and provide documentation of such competent-person training. Excavations must be installed, inspected and monitored as per OSHA regulations 1926.651.

The Contractor will provide for work area and personnel breathing zone monitoring of dust using an aerosol particulate meter (dust monitor) and photoionization detector (VOC monitor) throughout the duration of field activities to protect the safety of on-Site workers. The Contractor must have a dust control and mitigation plan in place in the event that CAMP (see below) action levels are exceeded. Upon completion of the removal and backfilling actions, the data collected during the CAMP will be provided to the Engineer.

Contractor personnel must be trained as per OSHA and DOL requirements, have medical clearance and must have recently received pulmonary function test (PFT) and respirator fit tested by a trained professional. The use of respirators must also follow a complete respiratory protection program as specified by OSHA. Work activities will be considered to fall under the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations in OSHA regulation 1910.120 and must include procedures for employee qualifications, training, site control, and personnel decontamination.

OBG is a subcontractor to Parsons Engineering of NY, Inc. (Parsons), for this project. All on-site contractors (excluding transport companies) must complete the Parsons Online Contractor Safety Evaluation per the attached questionnaire letter (**Attachment 3**). On line safety prequalification must be completed by Contractor 2 weeks prior to commencing work in order for Parsons to complete its review of your safety questionnaire. No work can begin prior these items being completed, reviewed and approved.

The Contractor must have a dust control and mitigation plan in place in the event that CAMP action levels are exceeded.

Engineer

The Engineer shall prepare a Job Safety Analysis (JSA), detailing required provisions for the Engineer's personnel at the Site during remedial construction activities. The JSA will serve to supplement the Generic HASP developed by Parsons and OBG for use during NYS Superfund Standby Work Assignments. The Engineer shall also observe the progression of excavation and the demolition activities described in the IRM Work Plan.

Consistent with the Generic Community Air Monitoring Plan (CAMP) provided in Appendix 1A of DER-10 with special requirements (**Attachment 4**), the Engineer will conduct air monitoring during ground-intrusive work and work that has the potential to generate dust. Accordingly, one upwind and one downwind station, equipped with particulate monitoring equipment equipped with visual and auditory alarms will be housed in enclosures and mounted on tripods. The instruments shall be capable of recording data and the Engineer shall download the data from the instruments daily. The specific locations of the equipment will be based on wind direction and the location of the potential exposure populations at the time the field activities are completed. Monitoring guidance and action levels will be consistent with Appendix 1A of DER-10.

4. PROJECT COORDINATION

4.1 SUBMITTALS

The following items shall be submitted by the Contractor to the Engineer for review and approval, prior to initiating Site work.

- Draft copies of manifests required to transport waste materials. Such manifests shall be submitted prior to the transportation of waste materials within 24 hours following their preparation.
- Letters of acceptance from permitted facility and haulers acknowledging agreement to accept the waste material.
- Documentation of backfill source.

The following items shall be submitted by the Contractor to the Engineer after completion of Site work.

- Contractor shall provide copies of all bills of lading for materials imported to the site. At a minimum, the document shall indicate the vendor, type of material, volume or weight and date of pickup/delivery.
- Contractor shall provide copies of all bills of lading and weigh tickets for materials shipped to the permitted disposal facility. At a minimum, the document shall indicate the vendor, type of material, volume or weight and date of pickup/delivery. Materials from each of the two areas shall be tracked separately by the contractor so that the quantity of soil from each area can be documented.
- The Contractor shall provide Record Drawings prepared by a NYS-licensed surveyor retained by the contractor shall survey the limits, thickness and final grades following placement of the covers. The Record Drawings shall be provided in an electronic format compatible with the latest edition of AutoCAD.

4.2 STATUTES, REGULATIONS AND POLICIES

All work included in the Contract shall be conducted in strict compliance with all applicable federal, state, and local statutes, regulations, codes and policies. Compliance assurance shall be the responsibility of the Contractor. Communication between Contractor and governing authorities, regulatory agencies, and similar entities, shall be coordinated through the Engineer's Representative.

4.3 PERMIT AND LICENSE REQUIREMENTS

All permits, bonds, easements, or licenses required to perform the work shall be conducted in strict compliance with all federal, state, and local statutes, regulations, codes and policies.

- The Contractor shall to provide a copy of all required permits to the Contractor prior to starting work.
- Determination of license and permit requirements shall be the responsibility of the Contractor.

5. REPORTING

The Engineer shall summarize remediation activities and analytical results in the Remedial Investigation Report.

6. PROJECT SCHEDULE

The Contractor shall develop a detailed project schedule incorporating the work elements described in this Work Plan.

7. REFERENCES

Carmon, B., O'Brien & Gere Engineers, Inc., Syracuse, NY. 2015. Letter. RE: *Existing Tank Removal Assessment of K&K Building.* Hausaman, E. NYSDEC, Albany, NY. September 24, 2015.

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NYSDEC. 1997. K&K Stripping, 1920 Buell Ave, Lima (Field Report). December 29, 1997.

NYSDEC, 2005. New York State Standards and Specifications for Erosion and Sediment Control, NYS Soil and Water Conservation Committee for NYSDEC, August 2005.

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NYSDEC, 2010a. DER-10 Technical Guidance for Site Investigation and Remediation. NYSDEC Division of Environmental Remediation; May 3, 2010.

NYSDEC, 2010b. Stormwater Management Design Manual, Center for Watershed Protection for NYSDEC, August 2010

NYSDEC: Title 6 of the New York Codes, Rule and Regulations (NYCRR):

a. Part 360 Solid Waste Management Facilities.

b. Part 364 Waste Transporter Permits.

c. Part 370 Hazardous Waste Management System-General.

d. Part 371 Identification and Listing of Hazardous Wastes.

e. Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities.

f. Part 373 Hazardous Waste Management Facilities.

g. Part 375 Environmental Remediation Programs

OSHA: Lead in Construction 29 CFR 1926.62.

Parsons and O'Brien & Gere, 2011a. *Field Activities Plan*. May 2011.

Parsons and O'Brien & Gere, 2011b. *Generic Quality Assurance Project Plan*. May 2011.

Parsons and O'Brien & Gere, 2011c. *Generic/Site-specific Health and Safety Plan*. May 2011.

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Shaw. 2012. Final Site Characterization Report, Former K and K Stripping Facility, Lima, Livingston County, New York, Site Number 826021. February 2012.

United States Department of Housing and Urban Development (HUD): Guidelines for evaluation and control of Lead based paint hazards: Title Ten of Housing and Community Act of 1992.

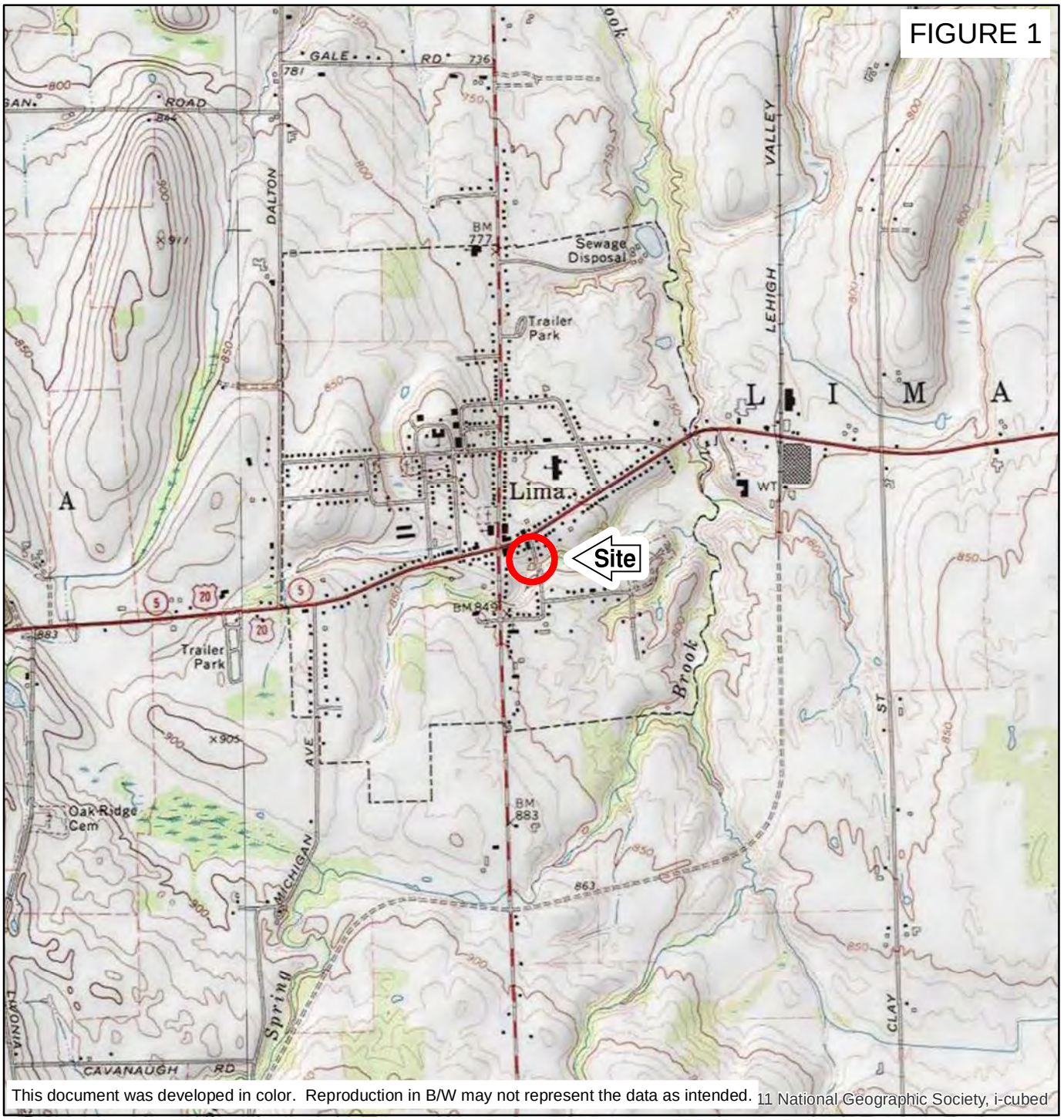
USEPA: Resource Conservation and Recovery Act (RCRA) Section 3004 Hazardous and Solid Waste Amendments.

USEPA: Toxicity Characteristics Leaching Procedure EPA Method 1311.

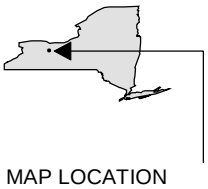
United States Department of Transportation (USDOT): Follow all regulations of Title 49, Code of Federal Regulations (CFR) Parts 100 through 199.

Village of Lima. 2009. Zoning Map of Village of Lima, Adopted: October 2009. URL=" http://www.lima-ny.org/boards/Zoning_Map_-_Village_of_Lima_rotated.pdf"

FIGURE 1



ADAPTED FROM: HONEOYE FALLS AND RUSH, NY USGS QUADRANGLE



MAP LOCATION

NYSDEC
K&K STRIPPING
1920 BUELL AVENUE
LIMA, NEW YORK
SITE NO. 826021

SITE LOCATION

N

0 1,000 2,000 4,000 6,000 8,000

Feet

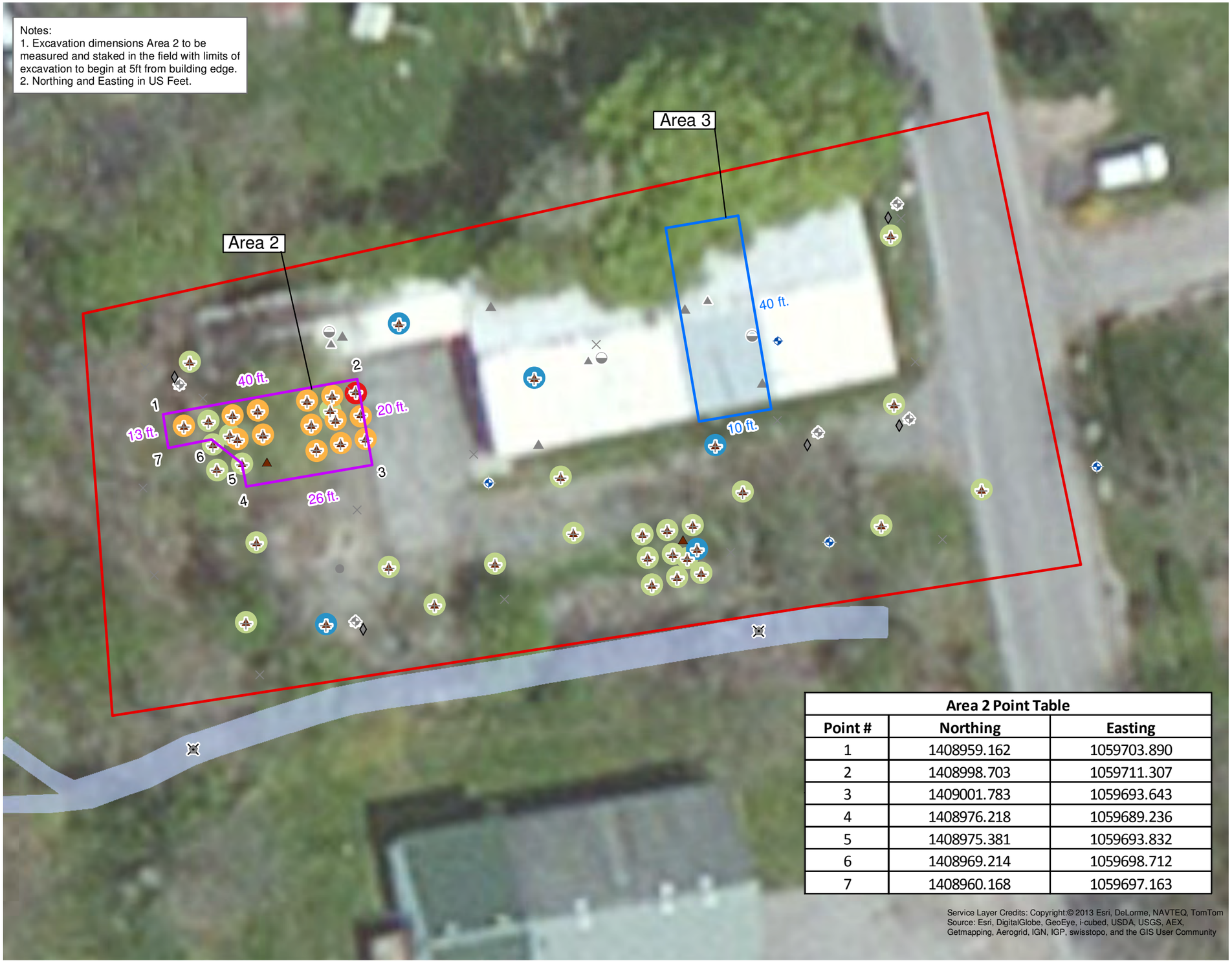
JULY 2015
8653.61247

1:24,000

O'BRIEN & GERE

I:\Parsons-Eng.865361247.K-And-K-Stripp\Docs\DWG\MXD\IRM WP\IRM_Details.mxd

Notes:
1. Excavation dimensions Area 2 to be measured and staked in the field with limits of excavation to begin at 5ft from building edge.
2. Northing and Easting in US Feet.



Area 2 Point Table		
Point #	Northing	Easting
1	1408959.162	1059703.890
2	1408998.703	1059711.307
3	1409001.783	1059693.643
4	1408976.218	1059689.236
5	1408975.381	1059693.832
6	1408969.214	1059698.712
7	1408960.168	1059697.163

This document was developed in color. Reproduction in B/W may not represent the data as intended.

PLOTDATE: 10/28/15 12:53:59 PM newtonjm

FIGURE 2

N

LEGEND

- TEMPORARY MONITORING WELL
- PROPOSED SOIL BORING

LOCATION TYPE

- AMBIENT AIR
- CONCRETE CHIP
- GORE POINTS
- SOIL BORING
- SOIL GAS
- SUMP
- SURFACE SOIL
- SURFACE WATER
- TEMPORARY MONITORING WELL

XRF LAB LEAD SURFACE SOIL DATA (MAY/JUNE 2011)

- 24 - 63
- 64 - 1,000
- 1,000 - 3,900
- >3,900

- LIMITS OF EXCAVATION
- OIL/WATER SEPARATOR DEMO
- STREAM
- PROPERTY LINE

Note:
- Area 1 removed from original proposal due to revised zoning and targeted clean-up objective. Clean up objective revised from Restricted-Residential to Commercial.
- Coordinates in NAD 83 State Plane

NYSDEC
K&K STRIPPING
1920 BUELL AVENUE
LIMA, NEW YORK
SITE NO. 826021

IRM DETAILS

0 10 20 40
Feet

OCTOBER 2015
8653.61247

O'BRIEN & GERE

Figure 2 Notes

Erosion Control Notes:

- Erosion and sediment control (ESC) for the project will be completed in accordance with the latest editions of New York Standards and Specifications for Erosion and Sediment Control prepared by NYS Department of Environmental Conservation (NYSDEC, 2005), and New York State Stormwater Management Design Manual prepared by the Center for Watershed Protection for the NYSDEC (NYSDEC, 2010b) . In addition, ESC measures will comply with any other applicable NYSDEC requirements.

Additional Notes:

- Existing site information presented should be considered approximate only
- Exact dimensions and locations of all structures and utilities are considered approximate only and shall be verified as required in the field by the Contractor
- Other underground utilities may exist, the locations, depths and extent of each are unknown. The Contractor shall determine the location and elevation of all utilities in the field as it may pertain to the Contractors work prior to construction.
- During construction the Contractor is responsible for the protection and support of all under and above ground utilities, and structures affected by the Contractor's work.
- The Contractor shall contact "Dig Safely NY" within 72 hours prior to the commencement of the work. The Contractor shall verify the location of all utilities and if necessary notify the affected utility departments one week prior to digging in any portion of the site. Dig Safely New York phone number: 1-800-962-7962. website: **www.digsafelynewyork.com**
- The Contractor shall be aware that portions of the installation may be performed proximate to overhead power lines. It is the Contractor's responsibility to maintain appropriate minimum required clearance from overhead electrical lines and utility poles. It is the Contractor's responsibility to coordinate with appropriate utility company to have overhead electrical lines shielded/protected and flagged (as appropriate) prior to the initiation of the work efforts. The Contractor is also required to ground equipment (as necessary) and perform all work efforts.
- The Contractor shall restore to preconstruction conditions or better all support areas that are impacted by remedial activities, including but not limited to, equipment and material storage areas, material loading and staging areas, parking areas, and locations of office trailers.
- All surfaces damaged or destroyed as a result of work performed by the Contractor shall be restored to preconstruction conditions or better in a timely manner and prior to Contractor demobilization.
- Equipment used for excavation of potentially impacted soil/fill shall be decontaminated prior to transport off-site and/or transporting/handling clean backfill materials. The Contractor shall provide 6 mil polyethylene sheeting to cover the ground in all areas being used to load excavated material into trucks whether in or out of the limits of work.
- The Contractor shall excavate existing soil from Area 2 to 2 ft below grade, as required, to remove impacted soil. Backfill shall match surrounding grades. All excavated material shall be direct loaded and shipped off-site by the Contractor.
- Existing monitoring wells shown here shall be protected. The Contractor shall be responsible for all monitoring well cost associated with monitoring well restoration should the monitoring wells be disturbed by the Contractor during construction.

Appendix A

Elevated Oil/Water Separator Water Sample Lab Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-86587-1
Client Project/Site: K&K Stripping Site, Lima, NY

For:
O'Brien & Gere Engineers, Inc.
PO BOX 4873
Syracuse, New York 13221-4873

Attn: Scott Tucker

Authorized for release by:
9/16/2015 10:25:27 AM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Table of Contents

Definitions/Glossary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Job ID: 480-86587-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-86587-1

Receipt
The sample was received on 9/3/2015 2:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3º C.

GC/MS VOA
Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: TL-1-090215 (480-86587-1).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TL-1-090215 (480-86587-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TL-1-090215 (480-86587-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-263582 recovered above the upper control limit for Trichlorofluoromethane. The sample associated with this CCV was non-detect for the affected analyte; therefore, the data have been reported. The following sample is impacted: TL-1-090215 (480-86587-1).

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

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-262587 was outside the method criteria for the following analyte: 4-Nitrophenol and Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes are considered estimated.

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: TL-1-090215 (480-86587-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: TL-1-090215 (480-86587-1). Because of these dilutions, the surrogate spike concentration in the samples were reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The initial calibration curve analyzed in analytical batch 261847 was outside method criteria for the analyte 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

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

Metals
Method(s) 6010C: The low level continuing calibration verification (CCVL 480-262554/16) for analytical batch 480-262554 contained Total Potassium above the upper quality control limit. All reported samples associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples (LCS 480-261889/2-A) and (MB 480-261889/1-A) was not performed.

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-262554/28) for analytical batch 480-262554 contained Total Potassium above the upper quality control limit. All reported samples associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples (LCS 480-261889/2-A) and (MB 480-261889/1-A) was not performed.

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-262554/40) for analytical batch 480-262554 contained Total

Job ID: 480-86587-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Potassium above the upper quality control limit. All reported samples associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of sample TL-1-090215 (480-86587-1) was not performed.

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-262554/51) for analytical batch 480-262554 contained Total Potassium above the upper quality control limit. All reported samples associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of sample TL-1-090215 (480-86587-1) was not performed.

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

General Chemistry
Method(s) 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: TL-1-090215 (480-86587-1).

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

Organic Prep
Method(s) 3510C: The following sample formed emulsions during the extraction procedure: TL-1-090215 (480-86587-1). The emulsions were broken up using the centrifuge.

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

Detection Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Client Sample ID: TL-1-090215

Lab Sample ID: 480-86587-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	110	J	400	53	ug/L	40		8260C	Total/NA
Acetone	510		400	120	ug/L	40		8260C	Total/NA
Toluene	5500	E	40	20	ug/L	40		8260C	Total/NA
Xylenes, Total	27	J	80	26	ug/L	40		8260C	Total/NA
Acetone - DL	450	J	1000	300	ug/L	100		8260C	Total/NA
Methylene Chloride - DL	64	J	100	44	ug/L	100		8260C	Total/NA
Toluene - DL	5500		100	51	ug/L	100		8260C	Total/NA
2,4,6-Trichlorophenol	26	J	100	12	ug/L	20		8270D	Total/NA
2-Methylphenol	61	J	100	8.0	ug/L	20		8270D	Total/NA
4-Methylphenol	29	J	200	7.2	ug/L	20		8270D	Total/NA
Benzaldehyde	12	J B	100	5.3	ug/L	20		8270D	Total/NA
Pentachlorophenol	170	J	200	44	ug/L	20		8270D	Total/NA
Phenol	77	J	100	7.8	ug/L	20		8270D	Total/NA
Aluminum	0.54		0.20	0.060	mg/L	1		6010C	Total/NA
Antimony	0.29		0.020	0.0068	mg/L	1		6010C	Total/NA
Arsenic	0.70		0.015	0.0056	mg/L	1		6010C	Total/NA
Barium	1.8		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.019		0.0020	0.00050	mg/L	1		6010C	Total/NA
Calcium	8.4		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.54		0.0040	0.0010	mg/L	1		6010C	Total/NA
Cobalt	0.062		0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.45		0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	7.3		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	27.9		0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	9.4		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.11	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.070		0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	122	B ^	0.50	0.10	mg/L	1		6010C	Total/NA
Silver	0.0028	J	0.0060	0.0017	mg/L	1		6010C	Total/NA
Sodium	3730		1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.091		0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	9.5		0.010	0.0015	mg/L	1		6010C	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>176.0		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	9.37	HF	0.100	0.100	SU	1		9040C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Client Sample ID: TL-1-090215
Date Collected: 09/02/15 12:00
Date Received: 09/03/15 02:30

Lab Sample ID: 480-86587-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			09/15/15 03:21	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			09/15/15 03:21	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			09/15/15 03:21	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			09/15/15 03:21	40
1,1-Dichloroethane	ND		40	15	ug/L			09/15/15 03:21	40
1,1-Dichloroethene	ND		40	12	ug/L			09/15/15 03:21	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			09/15/15 03:21	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			09/15/15 03:21	40
1,2-Dibromoethane	ND		40	29	ug/L			09/15/15 03:21	40
1,2-Dichlorobenzene	ND		40	32	ug/L			09/15/15 03:21	40
1,2-Dichloroethane	ND		40	8.4	ug/L			09/15/15 03:21	40
1,2-Dichloropropane	ND		40	29	ug/L			09/15/15 03:21	40
1,3-Dichlorobenzene	ND		40	31	ug/L			09/15/15 03:21	40
1,4-Dichlorobenzene	ND		40	34	ug/L			09/15/15 03:21	40
2-Hexanone	ND		200	50	ug/L			09/15/15 03:21	40
2-Butanone (MEK)	**110**	**J**	400	53	ug/L			09/15/15 03:21	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			09/15/15 03:21	40
Acetone	**510**		400	120	ug/L			09/15/15 03:21	40
Benzene	ND		40	16	ug/L			09/15/15 03:21	40
Bromodichloromethane	ND		40	16	ug/L			09/15/15 03:21	40
Bromoform	ND		40	10	ug/L			09/15/15 03:21	40
Bromomethane	ND		40	28	ug/L			09/15/15 03:21	40
Carbon disulfide	ND		40	7.6	ug/L			09/15/15 03:21	40
Carbon tetrachloride	ND		40	11	ug/L			09/15/15 03:21	40
Chlorobenzene	ND		40	30	ug/L			09/15/15 03:21	40
Dibromochloromethane	ND		40	13	ug/L			09/15/15 03:21	40
Chloroethane	ND		40	13	ug/L			09/15/15 03:21	40
Chloroform	ND		40	14	ug/L			09/15/15 03:21	40
Chloromethane	ND		40	14	ug/L			09/15/15 03:21	40
cis-1,2-Dichloroethene	ND		40	32	ug/L			09/15/15 03:21	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			09/15/15 03:21	40
Cyclohexane	ND		40	7.2	ug/L			09/15/15 03:21	40
Dichlorodifluoromethane	ND		40	27	ug/L			09/15/15 03:21	40
Ethylbenzene	ND		40	30	ug/L			09/15/15 03:21	40
Isopropylbenzene	ND		40	32	ug/L			09/15/15 03:21	40
Methyl acetate	ND		100	52	ug/L			09/15/15 03:21	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			09/15/15 03:21	40
Methylcyclohexane	ND		40	6.4	ug/L			09/15/15 03:21	40
Methylene Chloride	ND		40	18	ug/L			09/15/15 03:21	40
Styrene	ND		40	29	ug/L			09/15/15 03:21	40
Tetrachloroethene	ND		40	14	ug/L			09/15/15 03:21	40
Toluene	**5500**	**E**	40	20	ug/L			09/15/15 03:21	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			09/15/15 03:21	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			09/15/15 03:21	40
Trichloroethene	ND		40	18	ug/L			09/15/15 03:21	40
Trichlorofluoromethane	ND		40	35	ug/L			09/15/15 03:21	40
Vinyl chloride	ND		40	36	ug/L			09/15/15 03:21	40
Xylenes, Total	**27**	**J**	80	26	ug/L			09/15/15 03:21	40

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Client Sample ID: TL-1-090215
Date Collected: 09/02/15 12:00
Date Received: 09/03/15 02:30

Lab Sample ID: 480-86587-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*88*		*66 - 137*		*09/15/15 03:21*	*40*
Toluene-d8 (Surr)	*97*		*71 - 126*		*09/15/15 03:21*	*40*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/15/15 03:21*	*40*
Dibromofluoromethane (Surr)	*87*		*60 - 140*		*09/15/15 03:21*	*40*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			09/15/15 13:21	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			09/15/15 13:21	100
1,1,2-Trichloroethane	ND		100	23	ug/L			09/15/15 13:21	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			09/15/15 13:21	100
1,1-Dichloroethane	ND		100	38	ug/L			09/15/15 13:21	100
1,1-Dichloroethene	ND		100	29	ug/L			09/15/15 13:21	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			09/15/15 13:21	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			09/15/15 13:21	100
1,2-Dibromoethane	ND		100	73	ug/L			09/15/15 13:21	100
1,2-Dichlorobenzene	ND		100	79	ug/L			09/15/15 13:21	100
1,2-Dichloroethane	ND		100	21	ug/L			09/15/15 13:21	100
1,2-Dichloropropane	ND		100	72	ug/L			09/15/15 13:21	100
1,3-Dichlorobenzene	ND		100	78	ug/L			09/15/15 13:21	100
1,4-Dichlorobenzene	ND		100	84	ug/L			09/15/15 13:21	100
2-Hexanone	ND		500	120	ug/L			09/15/15 13:21	100
2-Butanone (MEK)	ND		1000	130	ug/L			09/15/15 13:21	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			09/15/15 13:21	100
Acetone	**450**	**J**	1000	300	ug/L			09/15/15 13:21	100
Benzene	ND		100	41	ug/L			09/15/15 13:21	100
Bromodichloromethane	ND		100	39	ug/L			09/15/15 13:21	100
Bromoform	ND		100	26	ug/L			09/15/15 13:21	100
Bromomethane	ND		100	69	ug/L			09/15/15 13:21	100
Carbon disulfide	ND		100	19	ug/L			09/15/15 13:21	100
Carbon tetrachloride	ND		100	27	ug/L			09/15/15 13:21	100
Chlorobenzene	ND		100	75	ug/L			09/15/15 13:21	100
Dibromochloromethane	ND		100	32	ug/L			09/15/15 13:21	100
Chloroethane	ND		100	32	ug/L			09/15/15 13:21	100
Chloroform	ND		100	34	ug/L			09/15/15 13:21	100
Chloromethane	ND		100	35	ug/L			09/15/15 13:21	100
cis-1,2-Dichloroethene	ND		100	81	ug/L			09/15/15 13:21	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			09/15/15 13:21	100
Cyclohexane	ND		100	18	ug/L			09/15/15 13:21	100
Dichlorodifluoromethane	ND		100	68	ug/L			09/15/15 13:21	100
Ethylbenzene	ND		100	74	ug/L			09/15/15 13:21	100
Isopropylbenzene	ND		100	79	ug/L			09/15/15 13:21	100
Methyl acetate	ND		250	130	ug/L			09/15/15 13:21	100
Methyl tert-butyl ether	ND		100	16	ug/L			09/15/15 13:21	100
Methylcyclohexane	ND		100	16	ug/L			09/15/15 13:21	100
Methylene Chloride	**64**	**J**	100	44	ug/L			09/15/15 13:21	100
Styrene	ND		100	73	ug/L			09/15/15 13:21	100
Tetrachloroethene	ND		100	36	ug/L			09/15/15 13:21	100
Toluene	**5500**		100	51	ug/L			09/15/15 13:21	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			09/15/15 13:21	100

Client Sample ID: TL-1-090215
Date Collected: 09/02/15 12:00
Date Received: 09/03/15 02:30

Lab Sample ID: 480-86587-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		100	37	ug/L			09/15/15 13:21	100
Trichloroethene	ND		100	46	ug/L			09/15/15 13:21	100
Trichlorofluoromethane	ND		100	88	ug/L			09/15/15 13:21	100
Vinyl chloride	ND		100	90	ug/L			09/15/15 13:21	100
Xylenes, Total	ND		200	66	ug/L			09/15/15 13:21	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*66 - 137*		*09/15/15 13:21*	*100*
Toluene-d8 (Surr)	*88*		*71 - 126*		*09/15/15 13:21*	*100*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*09/15/15 13:21*	*100*
Dibromofluoromethane (Surr)	*90*		*60 - 140*		*09/15/15 13:21*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		100	13	ug/L		09/04/15 09:33	09/10/15 18:03	20
bis (2-chloroisopropyl) ether	ND		100	10	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,4,5-Trichlorophenol	ND		100	9.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,4,6-Trichlorophenol	**26**	**J**	100	12	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,4-Dichlorophenol	ND		100	10	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,4-Dimethylphenol	ND		100	10	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,4-Dinitrophenol	ND		200	44	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,4-Dinitrotoluene	ND		100	8.9	ug/L		09/04/15 09:33	09/10/15 18:03	20
2,6-Dinitrotoluene	ND		100	8.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
2-Chloronaphthalene	ND		100	9.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
2-Chlorophenol	ND		100	11	ug/L		09/04/15 09:33	09/10/15 18:03	20
2-Methylnaphthalene	ND		100	12	ug/L		09/04/15 09:33	09/10/15 18:03	20
2-Methylphenol	**61**	**J**	100	8.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
2-Nitroaniline	ND		200	8.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
2-Nitrophenol	ND		100	9.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
3,3'-Dichlorobenzidine	ND		100	8.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
3-Nitroaniline	ND		200	9.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
4,6-Dinitro-2-methylphenol	ND		200	44	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Bromophenyl phenyl ether	ND		100	9.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Chloro-3-methylphenol	ND		100	9.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Chloroaniline	ND		100	12	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Chlorophenyl phenyl ether	ND		100	7.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Methylphenol	**29**	**J**	200	7.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Nitroaniline	ND		200	5.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
4-Nitrophenol	ND		200	30	ug/L		09/04/15 09:33	09/10/15 18:03	20
Acenaphthene	ND		100	8.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
Acenaphthylene	ND		100	7.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
Acetophenone	ND		100	11	ug/L		09/04/15 09:33	09/10/15 18:03	20
Anthracene	ND		100	5.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
Atrazine	ND		100	9.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
Benzaldehyde	**12**	**J B**	100	5.3	ug/L		09/04/15 09:33	09/10/15 18:03	20
Benzo(a)anthracene	ND		100	7.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
Benzo(a)pyrene	ND		100	9.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
Benzo(b)fluoranthene	ND		100	6.8	ug/L		09/04/15 09:33	09/10/15 18:03	20
Benzo(g,h,i)perylene	ND		100	7.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
Benzo(k)fluoranthene	ND		100	15	ug/L		09/04/15 09:33	09/10/15 18:03	20

Client Sample ID: TL-1-090215
Date Collected: 09/02/15 12:00
Date Received: 09/03/15 02:30

Lab Sample ID: 480-86587-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		100	7.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
Bis(2-chloroethyl)ether	ND		100	8.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
Bis(2-ethylhexyl) phthalate	ND		100	36	ug/L		09/04/15 09:33	09/10/15 18:03	20
Butyl benzyl phthalate	ND		100	8.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
Caprolactam	ND		100	44	ug/L		09/04/15 09:33	09/10/15 18:03	20
Carbazole	ND		100	6.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
Chrysene	ND		100	6.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
Di-n-butyl phthalate	ND		100	6.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
Di-n-octyl phthalate	ND		100	9.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
Dibenz(a,h)anthracene	ND		100	8.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
Dibenzofuran	ND		200	10	ug/L		09/04/15 09:33	09/10/15 18:03	20
Diethyl phthalate	ND		100	4.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
Dimethyl phthalate	ND		100	7.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
Fluoranthene	ND		100	8.0	ug/L		09/04/15 09:33	09/10/15 18:03	20
Fluorene	ND		100	7.2	ug/L		09/04/15 09:33	09/10/15 18:03	20
Hexachlorobenzene	ND		100	10	ug/L		09/04/15 09:33	09/10/15 18:03	20
Hexachlorobutadiene	ND		100	14	ug/L		09/04/15 09:33	09/10/15 18:03	20
Hexachlorocyclopentadiene	ND		100	12	ug/L		09/04/15 09:33	09/10/15 18:03	20
Hexachloroethane	ND		100	12	ug/L		09/04/15 09:33	09/10/15 18:03	20
Indeno(1,2,3-cd)pyrene	ND		100	9.4	ug/L		09/04/15 09:33	09/10/15 18:03	20
Isophorone	ND		100	8.6	ug/L		09/04/15 09:33	09/10/15 18:03	20
N-Nitrosodi-n-propylamine	ND		100	11	ug/L		09/04/15 09:33	09/10/15 18:03	20
N-Nitrosodiphenylamine	ND		100	10	ug/L		09/04/15 09:33	09/10/15 18:03	20
Naphthalene	ND		100	15	ug/L		09/04/15 09:33	09/10/15 18:03	20
Nitrobenzene	ND		100	5.8	ug/L		09/04/15 09:33	09/10/15 18:03	20
Pentachlorophenol	**170**	**J**	200	44	ug/L		09/04/15 09:33	09/10/15 18:03	20
Phenanthrene	ND		100	8.8	ug/L		09/04/15 09:33	09/10/15 18:03	20
Phenol	**77**	**J**	100	7.8	ug/L		09/04/15 09:33	09/10/15 18:03	20
Pyrene	ND		100	6.8	ug/L		09/04/15 09:33	09/10/15 18:03	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*49*	*X*	*52 - 132*	*09/04/15 09:33*	*09/10/15 18:03*	*20*
2-Fluorobiphenyl	*52*		*48 - 120*	*09/04/15 09:33*	*09/10/15 18:03*	*20*
2-Fluorophenol	*32*		*20 - 120*	*09/04/15 09:33*	*09/10/15 18:03*	*20*
Nitrobenzene-d5	*75*		*46 - 120*	*09/04/15 09:33*	*09/10/15 18:03*	*20*
p-Terphenyl-d14	*15*	*X*	*67 - 150*	*09/04/15 09:33*	*09/10/15 18:03*	*20*
Phenol-d5	*25*		*16 - 120*	*09/04/15 09:33*	*09/10/15 18:03*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.54**		0.20	0.060	mg/L		09/04/15 11:03	09/08/15 18:23	1
Antimony	**0.29**		0.020	0.0068	mg/L		09/04/15 11:03	09/08/15 18:23	1
Arsenic	**0.70**		0.015	0.0056	mg/L		09/04/15 11:03	09/08/15 18:23	1
Barium	**1.8**		0.0020	0.00070	mg/L		09/04/15 11:03	09/08/15 18:23	1
Beryllium	ND		0.0020	0.00030	mg/L		09/04/15 11:03	09/08/15 18:23	1
Cadmium	**0.019**		0.0020	0.00050	mg/L		09/04/15 11:03	09/08/15 18:23	1
Calcium	**8.4**		0.50	0.10	mg/L		09/04/15 11:03	09/08/15 18:23	1
Chromium	**0.54**		0.0040	0.0010	mg/L		09/04/15 11:03	09/08/15 18:23	1
Cobalt	**0.062**		0.0040	0.00063	mg/L		09/04/15 11:03	09/08/15 18:23	1
Copper	**0.45**		0.010	0.0016	mg/L		09/04/15 11:03	09/08/15 18:23	1

Client Sample ID: TL-1-090215
Date Collected: 09/02/15 12:00
Date Received: 09/03/15 02:30

Lab Sample ID: 480-86587-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	7.3		0.050	0.019	mg/L		09/04/15 11:03	09/08/15 18:23	1
Lead	27.9		0.010	0.0030	mg/L		09/04/15 11:03	09/08/15 18:23	1
Magnesium	9.4		0.20	0.043	mg/L		09/04/15 11:03	09/08/15 18:23	1
Manganese	0.11	B	0.0030	0.00040	mg/L		09/04/15 11:03	09/08/15 18:23	1
Nickel	0.070		0.010	0.0013	mg/L		09/04/15 11:03	09/08/15 18:23	1
Potassium	122	B ^	0.50	0.10	mg/L		09/04/15 11:03	09/08/15 18:23	1
Selenium	ND		0.025	0.0087	mg/L		09/04/15 11:03	09/08/15 18:23	1
Silver	0.0028	J	0.0060	0.0017	mg/L		09/04/15 11:03	09/08/15 18:23	1
Sodium	3730		1.0	0.32	mg/L		09/04/15 11:03	09/08/15 18:23	1
Thallium	ND		0.020	0.010	mg/L		09/04/15 11:03	09/08/15 18:23	1
Vanadium	0.091		0.0050	0.0015	mg/L		09/04/15 11:03	09/08/15 18:23	1
Zinc	9.5		0.010	0.0015	mg/L		09/04/15 11:03	09/08/15 18:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0	10.0	mg/L		09/04/15 03:45	09/04/15 11:48	1
Sulfide, Reactive	ND		10.0	10.0	mg/L		09/04/15 03:45	09/04/15 12:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176.0		50.0	50.0	Degrees F			09/04/15 16:40	1
pH	9.37	HF	0.100	0.100	SU			09/03/15 17:40	1

Surrogate Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(66-137)	(71-126)	(73-120)	(60-140)
480-86587-1	TL-1-090215	88	97	98	87
480-86587-1 - DL	TL-1-090215	82	88	99	90
LCS 480-263525/4	Lab Control Sample	85	95	93	87
LCS 480-263582/5	Lab Control Sample	78	89	101	89
MB 480-263525/6	Method Blank	94	94	93	102
MB 480-263582/7	Method Blank	81	88	98	88

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPH	PHL
Lab Sample ID	Client Sample ID	(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)
480-86587-1	TL-1-090215	49 X	52	32	75	15 X	25
LCS 480-262060/2-A	Lab Control Sample	96	81	65	84	99	50
MB 480-262060/1-A	Method Blank	76	82	63	87	114	43

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPH = p-Terphenyl-d14
PHL = Phenol-d5

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

Lab Sample ID: MB 480-263525/6
Matrix: Water
Analysis Batch: 263525

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/15 23:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/14/15 23:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/15 23:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/14/15 23:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/15 23:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/15 23:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/15 23:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/14/15 23:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/14/15 23:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/15 23:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/15 23:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/15 23:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/15 23:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/15 23:59	1
2-Hexanone	ND		5.0	1.2	ug/L			09/14/15 23:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/14/15 23:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/14/15 23:59	1
Acetone	ND		10	3.0	ug/L			09/14/15 23:59	1
Benzene	ND		1.0	0.41	ug/L			09/14/15 23:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/14/15 23:59	1
Bromoform	ND		1.0	0.26	ug/L			09/14/15 23:59	1
Bromomethane	ND		1.0	0.69	ug/L			09/14/15 23:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/14/15 23:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/15 23:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/15 23:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/14/15 23:59	1
Chloroethane	ND		1.0	0.32	ug/L			09/14/15 23:59	1
Chloroform	ND		1.0	0.34	ug/L			09/14/15 23:59	1
Chloromethane	ND		1.0	0.35	ug/L			09/14/15 23:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/14/15 23:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/14/15 23:59	1
Cyclohexane	ND		1.0	0.18	ug/L			09/14/15 23:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/14/15 23:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/15 23:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/15 23:59	1
Methyl acetate	ND		2.5	1.3	ug/L			09/14/15 23:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/15 23:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/14/15 23:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/15 23:59	1
Styrene	ND		1.0	0.73	ug/L			09/14/15 23:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/15 23:59	1
Toluene	ND		1.0	0.51	ug/L			09/14/15 23:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/14/15 23:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/14/15 23:59	1
Trichloroethene	ND		1.0	0.46	ug/L			09/14/15 23:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/15 23:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/14/15 23:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/14/15 23:59	1

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

Lab Sample ID: MB 480-263525/6
Matrix: Water
Analysis Batch: 263525

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137		09/14/15 23:59	1
Toluene-d8 (Surr)	94		71 - 126		09/14/15 23:59	1
4-Bromofluorobenzene (Surr)	93		73 - 120		09/14/15 23:59	1
Dibromofluoromethane (Surr)	102		60 - 140		09/14/15 23:59	1

Lab Sample ID: LCS 480-263525/4
Matrix: Water
Analysis Batch: 263525

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.3		ug/L		89	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	70 - 126
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.8		ug/L		91	52 - 148
1,1-Dichloroethane	25.0	22.9		ug/L		92	71 - 129
1,1-Dichloroethene	25.0	22.8		ug/L		91	58 - 121
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		107	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.9		ug/L		104	56 - 134
1,2-Dibromoethane	25.0	25.0		ug/L		100	77 - 120
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.5		ug/L		90	75 - 127
1,2-Dichloropropane	25.0	23.6		ug/L		94	76 - 120
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		101	75 - 120
2-Hexanone	125	127		ug/L		101	65 - 127
2-Butanone (MEK)	125	122		ug/L		97	57 - 140
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	123		ug/L		98	56 - 142
Benzene	25.0	23.9		ug/L		96	71 - 124
Bromodichloromethane	25.0	24.0		ug/L		96	80 - 122
Bromoform	25.0	25.2		ug/L		101	52 - 132
Bromomethane	25.0	20.2		ug/L		81	55 - 144
Carbon disulfide	25.0	22.0		ug/L		88	59 - 134
Carbon tetrachloride	25.0	23.8		ug/L		95	72 - 134
Chlorobenzene	25.0	24.4		ug/L		98	72 - 120
Dibromochloromethane	25.0	25.4		ug/L		102	75 - 125
Chloroethane	25.0	24.0		ug/L		96	69 - 136
Chloroform	25.0	22.0		ug/L		88	73 - 127
Chloromethane	25.0	20.2		ug/L		81	68 - 124
cis-1,2-Dichloroethene	25.0	23.6		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	23.5		ug/L		94	59 - 135
Dichlorodifluoromethane	25.0	20.4		ug/L		82	59 - 135
Ethylbenzene	25.0	24.8		ug/L		99	77 - 123
Isopropylbenzene	25.0	25.6		ug/L		102	77 - 122
Methyl acetate	125	115		ug/L		92	74 - 133
Methyl tert-butyl ether	25.0	23.6		ug/L		95	64 - 127

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

Lab Sample ID: LCS 480-263525/4
Matrix: Water
Analysis Batch: 263525

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylcyclohexane	25.0	24.4		ug/L		98	61 - 138
Methylene Chloride	25.0	25.0		ug/L		100	57 - 132
Styrene	25.0	26.0		ug/L		104	70 - 130
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	73 - 127
Trichloroethene	25.0	22.8		ug/L		91	74 - 123
Trichlorofluoromethane	25.0	21.3		ug/L		85	62 - 152
Vinyl chloride	25.0	22.4		ug/L		89	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*66 - 137*
Toluene-d8 (Surr)	*95*		*71 - 126*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*87*		*60 - 140*

Lab Sample ID: MB 480-263582/7
Matrix: Water
Analysis Batch: 263582

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/15 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/15/15 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/15 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/15/15 10:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/15 10:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/15 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/15 10:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/15/15 10:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/15/15 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/15 10:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/15 10:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/15 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/15 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/15 10:59	1
2-Hexanone	ND		5.0	1.2	ug/L			09/15/15 10:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/15/15 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/15/15 10:59	1
Acetone	ND		10	3.0	ug/L			09/15/15 10:59	1
Benzene	ND		1.0	0.41	ug/L			09/15/15 10:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/15/15 10:59	1
Bromoform	ND		1.0	0.26	ug/L			09/15/15 10:59	1
Bromomethane	ND		1.0	0.69	ug/L			09/15/15 10:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/15/15 10:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/15 10:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/15 10:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/15/15 10:59	1
Chloroethane	ND		1.0	0.32	ug/L			09/15/15 10:59	1

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

Lab Sample ID: MB 480-263582/7
Matrix: Water
Analysis Batch: 263582

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.34	ug/L			09/15/15 10:59	1
Chloromethane	ND		1.0	0.35	ug/L			09/15/15 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/15/15 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/15/15 10:59	1
Cyclohexane	ND		1.0	0.18	ug/L			09/15/15 10:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/15/15 10:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/15 10:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/15 10:59	1
Methyl acetate	ND		2.5	1.3	ug/L			09/15/15 10:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/15 10:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/15/15 10:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/15 10:59	1
Styrene	ND		1.0	0.73	ug/L			09/15/15 10:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/15 10:59	1
Toluene	ND		1.0	0.51	ug/L			09/15/15 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/15 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/15/15 10:59	1
Trichloroethene	ND		1.0	0.46	ug/L			09/15/15 10:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/15 10:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/15 10:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/15/15 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*66 - 137*		*09/15/15 10:59*	*1*
Toluene-d8 (Surr)	*88*		*71 - 126*		*09/15/15 10:59*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/15/15 10:59*	*1*
Dibromofluoromethane (Surr)	*88*		*60 - 140*		*09/15/15 10:59*	*1*

Lab Sample ID: LCS 480-263582/5
Matrix: Water
Analysis Batch: 263582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.3		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	70 - 126
1,1,2-Trichloroethane	25.0	23.6		ug/L		94	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/L		109	52 - 148
1,1-Dichloroethane	25.0	25.9		ug/L		103	71 - 129
1,1-Dichloroethene	25.0	26.7		ug/L		107	58 - 121
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	19.1		ug/L		77	56 - 134
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	22.7		ug/L		91	75 - 127
1,2-Dichloropropane	25.0	25.6		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	75 - 120

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

Lab Sample ID: LCS 480-263582/5
Matrix: Water
Analysis Batch: 263582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	125	114		ug/L		91	65 - 127
2-Butanone (MEK)	125	121		ug/L		97	57 - 140
4-Methyl-2-pentanone (MIBK)	125	107		ug/L		85	71 - 125
Acetone	125	152		ug/L		121	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromodichloromethane	25.0	24.1		ug/L		96	80 - 122
Bromoform	25.0	20.6		ug/L		83	52 - 132
Bromomethane	25.0	28.5		ug/L		114	55 - 144
Carbon disulfide	25.0	25.5		ug/L		102	59 - 134
Carbon tetrachloride	25.0	23.2		ug/L		93	72 - 134
Chlorobenzene	25.0	24.7		ug/L		99	72 - 120
Dibromochloromethane	25.0	22.7		ug/L		91	75 - 125
Chloroethane	25.0	30.3		ug/L		121	69 - 136
Chloroform	25.0	24.6		ug/L		98	73 - 127
Chloromethane	25.0	29.0		ug/L		116	68 - 124
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	23.1		ug/L		92	74 - 124
Cyclohexane	25.0	26.1		ug/L		105	59 - 135
Dichlorodifluoromethane	25.0	24.2		ug/L		97	59 - 135
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
Isopropylbenzene	25.0	25.0		ug/L		100	77 - 122
Methyl acetate	125	108		ug/L		86	74 - 133
Methyl tert-butyl ether	25.0	21.5		ug/L		86	64 - 127
Methylcyclohexane	25.0	24.6		ug/L		99	61 - 138
Methylene Chloride	25.0	25.0		ug/L		100	57 - 132
Styrene	25.0	24.9		ug/L		100	70 - 130
Tetrachloroethene	25.0	24.9		ug/L		100	74 - 122
Toluene	25.0	25.1		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	73 - 127
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	31.7		ug/L		127	62 - 152
Vinyl chloride	25.0	28.9		ug/L		115	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*66 - 137*
Toluene-d8 (Surr)	*89*		*71 - 126*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*89*		*60 - 140*

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

Lab Sample ID: MB 480-262060/1-A
Matrix: Water
Analysis Batch: 262587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		09/04/15 09:33	09/09/15 16:55	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/04/15 09:33	09/09/15 16:55	1

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

Lab Sample ID: MB 480-262060/1-A
Matrix: Water
Analysis Batch: 262587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/04/15 09:33	09/09/15 16:55	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/04/15 09:33	09/09/15 16:55	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/04/15 09:33	09/09/15 16:55	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/04/15 09:33	09/09/15 16:55	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/04/15 09:33	09/09/15 16:55	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/04/15 09:33	09/09/15 16:55	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/04/15 09:33	09/09/15 16:55	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/04/15 09:33	09/09/15 16:55	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/04/15 09:33	09/09/15 16:55	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/04/15 09:33	09/09/15 16:55	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/04/15 09:33	09/09/15 16:55	1
2-Nitroaniline	ND		10	0.42	ug/L		09/04/15 09:33	09/09/15 16:55	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/04/15 09:33	09/09/15 16:55	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/04/15 09:33	09/09/15 16:55	1
3-Nitroaniline	ND		10	0.48	ug/L		09/04/15 09:33	09/09/15 16:55	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Methylphenol	ND		10	0.36	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Nitroaniline	ND		10	0.25	ug/L		09/04/15 09:33	09/09/15 16:55	1
4-Nitrophenol	ND		10	1.5	ug/L		09/04/15 09:33	09/09/15 16:55	1
Acenaphthene	ND		5.0	0.41	ug/L		09/04/15 09:33	09/09/15 16:55	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/04/15 09:33	09/09/15 16:55	1
Acetophenone	ND		5.0	0.54	ug/L		09/04/15 09:33	09/09/15 16:55	1
Anthracene	ND		5.0	0.28	ug/L		09/04/15 09:33	09/09/15 16:55	1
Atrazine	ND		5.0	0.46	ug/L		09/04/15 09:33	09/09/15 16:55	1
Benzaldehyde	0.332	J	5.0	0.27	ug/L		09/04/15 09:33	09/09/15 16:55	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		09/04/15 09:33	09/09/15 16:55	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		09/04/15 09:33	09/09/15 16:55	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		09/04/15 09:33	09/09/15 16:55	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		09/04/15 09:33	09/09/15 16:55	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		09/04/15 09:33	09/09/15 16:55	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/04/15 09:33	09/09/15 16:55	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/04/15 09:33	09/09/15 16:55	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		09/04/15 09:33	09/09/15 16:55	1
Butyl benzyl phthalate	ND		5.0	0.42	ug/L		09/04/15 09:33	09/09/15 16:55	1
Caprolactam	ND		5.0	2.2	ug/L		09/04/15 09:33	09/09/15 16:55	1
Carbazole	ND		5.0	0.30	ug/L		09/04/15 09:33	09/09/15 16:55	1
Chrysene	ND		5.0	0.33	ug/L		09/04/15 09:33	09/09/15 16:55	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/04/15 09:33	09/09/15 16:55	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/04/15 09:33	09/09/15 16:55	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/04/15 09:33	09/09/15 16:55	1
Dibenzofuran	ND		10	0.51	ug/L		09/04/15 09:33	09/09/15 16:55	1
Diethyl phthalate	ND		5.0	0.22	ug/L		09/04/15 09:33	09/09/15 16:55	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/04/15 09:33	09/09/15 16:55	1
Fluoranthene	ND		5.0	0.40	ug/L		09/04/15 09:33	09/09/15 16:55	1

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

Lab Sample ID: MB 480-262060/1-A
Matrix: Water
Analysis Batch: 262587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		5.0	0.36	ug/L		09/04/15 09:33	09/09/15 16:55	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/04/15 09:33	09/09/15 16:55	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/04/15 09:33	09/09/15 16:55	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/04/15 09:33	09/09/15 16:55	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/04/15 09:33	09/09/15 16:55	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		09/04/15 09:33	09/09/15 16:55	1
Isophorone	ND		5.0	0.43	ug/L		09/04/15 09:33	09/09/15 16:55	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/04/15 09:33	09/09/15 16:55	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/04/15 09:33	09/09/15 16:55	1
Naphthalene	ND		5.0	0.76	ug/L		09/04/15 09:33	09/09/15 16:55	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/04/15 09:33	09/09/15 16:55	1
Pentachlorophenol	ND		10	2.2	ug/L		09/04/15 09:33	09/09/15 16:55	1
Phenanthrene	0.629	J	5.0	0.44	ug/L		09/04/15 09:33	09/09/15 16:55	1
Phenol	ND		5.0	0.39	ug/L		09/04/15 09:33	09/09/15 16:55	1
Pyrene	ND		5.0	0.34	ug/L		09/04/15 09:33	09/09/15 16:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*76*		*52 - 132*	*09/04/15 09:33*	*09/09/15 16:55*	*1*
2-Fluorobiphenyl	*82*		*48 - 120*	*09/04/15 09:33*	*09/09/15 16:55*	*1*
2-Fluorophenol	*63*		*20 - 120*	*09/04/15 09:33*	*09/09/15 16:55*	*1*
Nitrobenzene-d5	*87*		*46 - 120*	*09/04/15 09:33*	*09/09/15 16:55*	*1*
p-Terphenyl-d14	*114*		*67 - 150*	*09/04/15 09:33*	*09/09/15 16:55*	*1*
Phenol-d5	*43*		*16 - 120*	*09/04/15 09:33*	*09/09/15 16:55*	*1*

Lab Sample ID: LCS 480-262060/2-A
Matrix: Water
Analysis Batch: 262587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262060

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	16.0	13.5		ug/L		84	30 - 140
bis (2-chloroisopropyl) ether	16.0	12.5		ug/L		78	28 - 136
2,4,5-Trichlorophenol	16.0	13.7		ug/L		86	65 - 126
2,4,6-Trichlorophenol	16.0	13.2		ug/L		83	64 - 120
2,4-Dichlorophenol	16.0	13.2		ug/L		82	64 - 120
2,4-Dimethylphenol	16.0	12.9		ug/L		81	57 - 120
2,4-Dinitrophenol	32.0	27.8		ug/L		87	42 - 153
2,4-Dinitrotoluene	16.0	13.7		ug/L		85	65 - 154
2,6-Dinitrotoluene	16.0	14.5		ug/L		91	74 - 134
2-Chloronaphthalene	16.0	12.7		ug/L		80	41 - 124
2-Chlorophenol	16.0	12.3		ug/L		77	48 - 120
2-Methylnaphthalene	16.0	13.1		ug/L		82	34 - 122
2-Methylphenol	16.0	12.4		ug/L		78	39 - 120
2-Nitroaniline	16.0	14.5		ug/L		90	67 - 136
2-Nitrophenol	16.0	13.4		ug/L		84	59 - 120
3,3'-Dichlorobenzidine	32.0	38.2		ug/L		119	33 - 140
3-Nitroaniline	16.0	12.4		ug/L		78	28 - 130
4,6-Dinitro-2-methylphenol	32.0	28.2		ug/L		88	64 - 159
4-Bromophenyl phenyl ether	16.0	14.4		ug/L		90	71 - 126

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

Lab Sample ID: LCS 480-262060/2-A
Matrix: Water
Analysis Batch: 262587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262060

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	16.0	14.6		ug/L		92	64 - 120
4-Chloroaniline	16.0	11.0		ug/L		69	10 - 130
4-Chlorophenyl phenyl ether	16.0	13.2		ug/L		83	71 - 122
4-Methylphenol	16.0	12.1		ug/L		76	39 - 120
4-Nitroaniline	16.0	14.7		ug/L		92	47 - 130
4-Nitrophenol	32.0	19.0		ug/L		59	16 - 120
Acenaphthene	16.0	13.7		ug/L		86	60 - 120
Acenaphthylene	16.0	14.6		ug/L		91	63 - 120
Acetophenone	16.0	12.7		ug/L		79	45 - 120
Anthracene	16.0	16.6		ug/L		104	58 - 148
Atrazine	32.0	37.0		ug/L		116	56 - 179
Benzaldehyde	32.0	27.2		ug/L		85	30 - 140
Benzo(a)anthracene	16.0	16.7		ug/L		104	55 - 151
Benzo(a)pyrene	16.0	16.7		ug/L		105	60 - 145
Benzo(b)fluoranthene	16.0	16.5		ug/L		103	54 - 140
Benzo(g,h,i)perylene	16.0	18.2		ug/L		114	66 - 152
Benzo(k)fluoranthene	16.0	16.2		ug/L		101	51 - 153
Bis(2-chloroethoxy)methane	16.0	13.2		ug/L		83	50 - 128
Bis(2-chloroethyl)ether	16.0	12.2		ug/L		76	51 - 120
Bis(2-ethylhexyl) phthalate	16.0	17.7		ug/L		111	53 - 158
Butyl benzyl phthalate	16.0	17.0		ug/L		106	58 - 163
Caprolactam	32.0	12.4		ug/L		39	14 - 130
Carbazole	16.0	16.8		ug/L		105	59 - 148
Chrysene	16.0	16.8		ug/L		105	69 - 140
Di-n-butyl phthalate	16.0	17.6		ug/L		110	58 - 149
Di-n-octyl phthalate	16.0	20.0		ug/L		125	55 - 167
Dibenz(a,h)anthracene	16.0	18.2		ug/L		114	57 - 148
Dibenzofuran	16.0	14.4		ug/L		90	49 - 137
Diethyl phthalate	16.0	12.9		ug/L		81	59 - 146
Dimethyl phthalate	16.0	13.4		ug/L		84	59 - 141
Fluoranthene	16.0	18.0		ug/L		112	55 - 147
Fluorene	16.0	15.1		ug/L		94	55 - 143
Hexachlorobenzene	16.0	13.9		ug/L		87	14 - 130
Hexachlorobutadiene	16.0	9.58		ug/L		60	14 - 130
Hexachlorocyclopentadiene	16.0	8.32		ug/L		52	13 - 130
Hexachloroethane	16.0	9.77		ug/L		61	14 - 130
Indeno(1,2,3-cd)pyrene	16.0	17.7		ug/L		110	69 - 146
Isophorone	16.0	13.9		ug/L		87	48 - 133
N-Nitrosodi-n-propylamine	16.0	13.5		ug/L		85	56 - 120
N-Nitrosodiphenylamine	32.0	32.9		ug/L		103	25 - 125
Naphthalene	16.0	13.2		ug/L		83	35 - 130
Nitrobenzene	16.0	12.9		ug/L		81	45 - 123
Pentachlorophenol	32.0	23.6		ug/L		74	39 - 136
Phenanthrene	16.0	17.3		ug/L		108	57 - 147
Phenol	16.0	8.05		ug/L		50	17 - 120
Pyrene	16.0	16.5		ug/L		103	58 - 136

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

Lab Sample ID: LCS 480-262060/2-A
Matrix: Water
Analysis Batch: 262587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262060

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*96*		*52 - 132*
2-Fluorobiphenyl	*81*		*48 - 120*
2-Fluorophenol	*65*		*20 - 120*
Nitrobenzene-d5	*84*		*46 - 120*
p-Terphenyl-d14	*99*		*67 - 150*
Phenol-d5	*50*		*16 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-261889/1-A
Matrix: Water
Analysis Batch: 262554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/04/15 11:03	09/08/15 17:04	1
Antimony	ND		0.020	0.0068	mg/L		09/04/15 11:03	09/08/15 17:04	1
Arsenic	ND		0.015	0.0056	mg/L		09/04/15 11:03	09/08/15 17:04	1
Barium	ND		0.0020	0.00070	mg/L		09/04/15 11:03	09/08/15 17:04	1
Beryllium	ND		0.0020	0.00030	mg/L		09/04/15 11:03	09/08/15 17:04	1
Cadmium	ND		0.0020	0.00050	mg/L		09/04/15 11:03	09/08/15 17:04	1
Calcium	ND		0.50	0.10	mg/L		09/04/15 11:03	09/08/15 17:04	1
Chromium	ND		0.0040	0.0010	mg/L		09/04/15 11:03	09/08/15 17:04	1
Cobalt	ND		0.0040	0.00063	mg/L		09/04/15 11:03	09/08/15 17:04	1
Copper	ND		0.010	0.0016	mg/L		09/04/15 11:03	09/08/15 17:04	1
Iron	ND		0.050	0.019	mg/L		09/04/15 11:03	09/08/15 17:04	1
Lead	ND		0.010	0.0030	mg/L		09/04/15 11:03	09/08/15 17:04	1
Magnesium	ND		0.20	0.043	mg/L		09/04/15 11:03	09/08/15 17:04	1
Manganese	0.000560	J	0.0030	0.00040	mg/L		09/04/15 11:03	09/08/15 17:04	1
Nickel	ND		0.010	0.0013	mg/L		09/04/15 11:03	09/08/15 17:04	1
Potassium	0.187	J ^	0.50	0.10	mg/L		09/04/15 11:03	09/08/15 17:04	1
Selenium	ND		0.025	0.0087	mg/L		09/04/15 11:03	09/08/15 17:04	1
Silver	ND		0.0060	0.0017	mg/L		09/04/15 11:03	09/08/15 17:04	1
Sodium	ND		1.0	0.32	mg/L		09/04/15 11:03	09/08/15 17:04	1
Thallium	ND		0.020	0.010	mg/L		09/04/15 11:03	09/08/15 17:04	1
Vanadium	ND		0.0050	0.0015	mg/L		09/04/15 11:03	09/08/15 17:04	1
Zinc	ND		0.010	0.0015	mg/L		09/04/15 11:03	09/08/15 17:04	1

Lab Sample ID: LCS 480-261889/2-A
Matrix: Water
Analysis Batch: 262554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.35		mg/L		104	80 - 120
Antimony	0.200	0.206		mg/L		103	80 - 120
Arsenic	0.200	0.200		mg/L		100	80 - 120
Barium	0.200	0.207		mg/L		103	80 - 120
Beryllium	0.200	0.208		mg/L		104	80 - 120
Cadmium	0.200	0.208		mg/L		104	80 - 120

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

Lab Sample ID: LCS 480-261889/2-A
Matrix: Water
Analysis Batch: 262554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	9.83		mg/L		98	80 - 120
Chromium	0.200	0.208		mg/L		104	80 - 120
Cobalt	0.200	0.202		mg/L		101	80 - 120
Copper	0.200	0.211		mg/L		105	80 - 120
Iron	10.0	9.99		mg/L		100	80 - 120
Lead	0.200	0.207		mg/L		104	80 - 120
Magnesium	10.0	10.26		mg/L		103	80 - 120
Manganese	0.200	0.205		mg/L		103	80 - 120
Nickel	0.200	0.197		mg/L		99	80 - 120
Potassium	10.0	10.09	^	mg/L		101	80 - 120
Selenium	0.200	0.201		mg/L		101	80 - 120
Silver	0.0500	0.0555		mg/L		111	80 - 120
Sodium	10.0	10.21		mg/L		102	80 - 120
Thallium	0.200	0.200		mg/L		100	80 - 120
Vanadium	0.200	0.207		mg/L		104	80 - 120
Zinc	0.200	0.201		mg/L		100	80 - 120

Method: 1010A - Ignitability, Pensky-Martens Closed Cup Method

Lab Sample ID: LCS 480-262177/1
Matrix: Water
Analysis Batch: 262177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	82.00		Degrees F		101	97.5 - 102.5

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 480-262084/1-A
Matrix: Water
Analysis Batch: 262097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262084

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0	10.0	mg/L		09/04/15 03:45	09/04/15 11:48	1

Lab Sample ID: LCS 480-262084/2-A
Matrix: Water
Analysis Batch: 262097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262084

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Reactive	1000	316.3		mg/L		32	10 - 100

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 480-262085/1-A
Matrix: Water
Analysis Batch: 262116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262085

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		10.0	10.0	mg/L		09/04/15 03:45	09/04/15 12:30	1

Lab Sample ID: LCS 480-262085/2-A
Matrix: Water
Analysis Batch: 262116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262085

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide, Reactive			1000	681.3		mg/L		68	10 - 100		

Method: 9040C - pH

Lab Sample ID: LCS 480-261986/1
Matrix: Water
Analysis Batch: 261986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	6.980		SU		100	99 - 101		

QC Association Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

GC/MS VOA

Analysis Batch: 263525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	8260C	
LCS 480-263525/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-263525/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 263582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1 - DL	TL-1-090215	Total/NA	Water	8260C	
LCS 480-263582/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-263582/7	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 262060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	3510C	
LCS 480-262060/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-262060/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 262587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-262060/2-A	Lab Control Sample	Total/NA	Water	8270D	262060
MB 480-262060/1-A	Method Blank	Total/NA	Water	8270D	262060

Analysis Batch: 262855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	8270D	262060

Metals

Prep Batch: 261889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	3005A	
LCS 480-261889/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-261889/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 262554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	6010C	261889
LCS 480-261889/2-A	Lab Control Sample	Total/NA	Water	6010C	261889
MB 480-261889/1-A	Method Blank	Total/NA	Water	6010C	261889

General Chemistry

Analysis Batch: 261986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	9040C	
LCS 480-261986/1	Lab Control Sample	Total/NA	Water	9040C	

General Chemistry (Continued)

Prep Batch: 262084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	7.3.3	
LCS 480-262084/2-A	Lab Control Sample	Total/NA	Water	7.3.3	
MB 480-262084/1-A	Method Blank	Total/NA	Water	7.3.3	

Prep Batch: 262085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	7.3.4	
LCS 480-262085/2-A	Lab Control Sample	Total/NA	Water	7.3.4	
MB 480-262085/1-A	Method Blank	Total/NA	Water	7.3.4	

Analysis Batch: 262097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	9012	262084
LCS 480-262084/2-A	Lab Control Sample	Total/NA	Water	9012	262084
MB 480-262084/1-A	Method Blank	Total/NA	Water	9012	262084

Analysis Batch: 262116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	9034	262085
LCS 480-262085/2-A	Lab Control Sample	Total/NA	Water	9034	262085
MB 480-262085/1-A	Method Blank	Total/NA	Water	9034	262085

Analysis Batch: 262177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-86587-1	TL-1-090215	Total/NA	Water	1010A	
LCS 480-262177/1	Lab Control Sample	Total/NA	Water	1010A	

Lab Chronicle

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Client Sample ID: TL-1-090215
Date Collected: 09/02/15 12:00
Date Received: 09/03/15 02:30

Lab Sample ID: 480-86587-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	263525	09/15/15 03:21	GVF	TAL BUF
Total/NA	Analysis	8260C	DL	100	263582	09/15/15 13:21	JWG	TAL BUF
Total/NA	Prep	3510C			262060	09/04/15 09:33	CPH	TAL BUF
Total/NA	Analysis	8270D		20	262855	09/10/15 18:03	PJQ	TAL BUF
Total/NA	Prep	3005A			261889	09/04/15 11:03	KJ1	TAL BUF
Total/NA	Analysis	6010C		1	262554	09/08/15 18:23	AMH	TAL BUF
Total/NA	Analysis	1010A		1	262177	09/04/15 16:40	ZRJ	TAL BUF
Total/NA	Prep	7.3.3			262084	09/04/15 03:45	LAW	TAL BUF
Total/NA	Analysis	9012		1	262097	09/04/15 11:48	LAW	TAL BUF
Total/NA	Prep	7.3.4			262085	09/04/15 03:45	LAW	TAL BUF
Total/NA	Analysis	9034		1	262116	09/04/15 12:30	LAW	TAL BUF
Total/NA	Analysis	9040C		1	261986	09/03/15 17:40	NDB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
1010A		Water	Flashpoint
9012	7.3.3	Water	Cyanide, Reactive
9034	7.3.4	Water	Sulfide, Reactive
9040C		Water	pH

Method Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
1010A	Ignitability, Pensky-Martens Closed Cup Method	SW846	TAL BUF
9012	Cyanide, Reactive	SW846	TAL BUF
9034	Sulfide, Reactive	SW846	TAL BUF
9040C	pH	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: O'Brien & Gere Engineers, Inc.
Project/Site: K&K Stripping Site, Lima, NY

TestAmerica Job ID: 480-86587-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-86587-1	TL-1-090215	Water	09/02/15 12:00	09/03/15 02:30

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Scott Tucker	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-71572-18192.1
Client Contact: Scott Tucker	Phone:	E-Mail: melissa.deyo@testamericainc.com		Page: Page 1 of 1
Company: O'Brien & Gere Engineers, Inc.				Job #:
Address: PO BOX 4873	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13221-4873	PO #: Purchase Order Requested			
Phone:	WO #:			
Email: scott.tucker@obg.com	Project #: 48012596			
Project Name: K&K Stripping Site, Lima, NY	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - TCL Semivolatiles	8260C - TCL Volatiles	9012_ReactiveCN, 9034_Reactive	9040C - Corrosivity	1010A - Ignitability	6010C - metals	Total Number of containers	Special In
			Preservation Code:				N	A	N	N	N			
TL-1-090215	9/2/15	1200	G	Water			X	XX	X	X	X			

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/2/15 @ 1413	OBG		9/2/15 1413	SVR
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		9-2-15, 19:00			9/3/15 0230	TAB
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		0.3 #1

Login Sample Receipt Checklist

Client: O'Brien & Gere Engineers, Inc.

Job Number: 480-86587-1

Login Number: 86587
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	OBG
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix B

Existing Tank Removal Assessment of K&K Building

O'BRIEN & GERE

September 24, 2015

Mr. Eric Hausamann
Environmental Engineer II
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7012

RE: Existing Tank Removal Assessment of K&K Stripping Building
FILE: 8653/61247

Dear Eric,

At the request of the NYSDEC, we visited the building in question located at 1916 Buell Avenue in Lima New York on September 2, 2015. The purpose of the site visit was to perform a visual condition survey of the building to assess the feasibility of removing an existing concrete tank housed within the building. The general focus of our observations was directed towards:

- General condition and construction of:
  - Exterior Building Walls
  - Interior Building Walls
  - Roof Framing
  - Tank area and Raised Floor Section

This report documents our onsite observations and includes photos which are attached as Appendix A – Photographic Log.

EXISTING CONSTRUCTION

The building located at 1916 Buell Avenue is a single story pre-engineered steel structure. The building is approximately 84-feet long in the east/west direction and 37-feet wide in the north/south direction. The exterior building walls are a combination of 10 inch concrete masonry units (CMU) construction and metal wall panel. Interior partition wall construction consists of concrete masonry units (CMU) or timber studs and wood sheathing. The interior floors are constructed of concrete supported by soil sub-base. Roof framing construction consists of steel main frames spaced approximatly16-feet 8-inches on center, with steel purlins spanning between them spaced approximately 4-feet 8-inches on center. The roofing material appears to be corrugated steel panel with aluminum flashing around the edges and openings. The existing tank located roughly in the center of the building appears to be constructed of cast in place concrete. It is approximately 15-feet long in the east/west direction and 12-feet 6-inches wide in the north/south direction and approximately 3-feet 4-inches deep.

OBSERVATIONS

The following observations were made during our site visit. Our comments herein are limited to areas that were readily accessible and visible at the time of our visit.

EXTERIOR BUILDING WALLS:

1. The exterior building walls have 10" CMU that extends 4-feet 8-inches above the finished floor elevation, from the top of the CMU to the eave height of approximately 14-feet is corrugated steel wall panel. (P1, P2)
2. The west end of the building has two overhead doors, one that is approximately 12-feetwide by 12-feet tall and another that is approximately 10-feet wide by 10-feet tall. Both doors appear to be inoperable. (P3)
3. Along the south wall a section of the CMU (in the area of the raised floor section) has some minor cracking and two block face shells that are broken out. (P4).

INTERIOR BUILDING WALLS:

1. There are two interior partition walls that run north and south within the building, these walls are constructed of CMU to an elevation approximately 3-feet 6-inches above the finished floor, then 2x6 timber framing from the top of the CMU to the underside of the roof. These walls are not load bearing. (P5).
2. There is an additional pair of interior walls that are constructed of 6-inch CMU, these walls are constructed on top of the elevated slab section and are not load bearing. (P6)

FLOOR CONSTRUCTION:

1. All floors within the building are cast in place concrete supported by soil; it is unclear how thick the floor slabs are.

ROOF FRAMING:

1. Roof main frames consists of custom fabricated tapered steel sections welded to W8 columns. (P7, P8)
2. Spanning approximatly16-feet 8-inches are 10-inch deep W-sections that are spaced approximately 4-feet 8-inches on center that support insulation and the roofing materials. (P9)

RAISED FLOOR AND TANK:

1. In the center section of the building is a raised section of floor that is approximately 3-feet 6-inches above the slab on grade. The center area of the floor has a depressed area that is approximately 10-feet wide by 12-feet 9-inches long and 6-inches below the top of slab. (P10)
2. Below the north section of the elevated slab is a tank that is approximately 15-feet long in the east/west direction and 12-feet 6-inches wide in the north/south direction, the depth from the bottom of the tank to the elevated floor is approximately 3-feet 6-inches. It is believed that this tank is constructed of cast in place concrete; the roof section of the tank is formed and supported by w sections and timber plank forms. (P11, P12)

CONCLUSIONS & RECOMMENDATIONS

The exterior walls of the K&K Stripping building are comprised of 10-inch CMU at the lower section and steel purlins with corrugated metal wall panel to the eave. With the exception of the cracked CMU on the south wall the exterior walls are in acceptable condition for accessing the interior of the building. The noted cracked CMU on the south wall does not compromise the structural integrity of the building. The two overhead doors on the west end of the building are inoperable; however the openings in the wall may be used by demolition crews for access purposes.

None of the interior walls including walls constructed of CMU or timber framing are load bearing. Removal of interior walls does not compromise the structural integrity of the building structure.

The concrete slab on grade appears to be in acceptable condition. With no deficiencies noted.

The exposed roof framing shows some corrosion due to lack of paint, no instances where the roof framing is of a safety concern.

Based on our recent observations of the building located at 1916 Buell Avenue O'Brien & Gere makes the following recommendations:

- Entry to this building should be restricted to competent individuals trained to access construction demolition sites and that have the appropriate Personal Protection Equipment PPE to safely enter the site.
- It is acceptable to remove the west most non-load bearing interior partition wall that is constructed of CMU and timber framing to access the cast in place concrete tank that needs to be remediated.
- Once the west most interior wall is removed the elevated floor slab and interior 6-inch CMU walls supported by it may be removed and properly disposed of.
- It is anticipated that structural fill will be encountered below the elevated slab and around the concrete tank walls. This fill and the interior tank walls may be removed and properly disposed of.

We hope this report meets your needs at this time. Should you have any questions or concerns about the information provided here please contact the undersigned at (315) 956-6312.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Benjamin R. Carmon, PE
Senior Project Engineer

CC:

Leonard W. Woods, PE

Senior Technical Director

Attachment:

Appendix A – Photographic Log

APENDIX A – PHOTOGRAPHIC LOG

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P1	9/2/15

DESCRIPTION

East/South Building Walls

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P2	9/2/15

DESCRIPTION

South Building Wall

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P3	9/2/15

DESCRIPTION

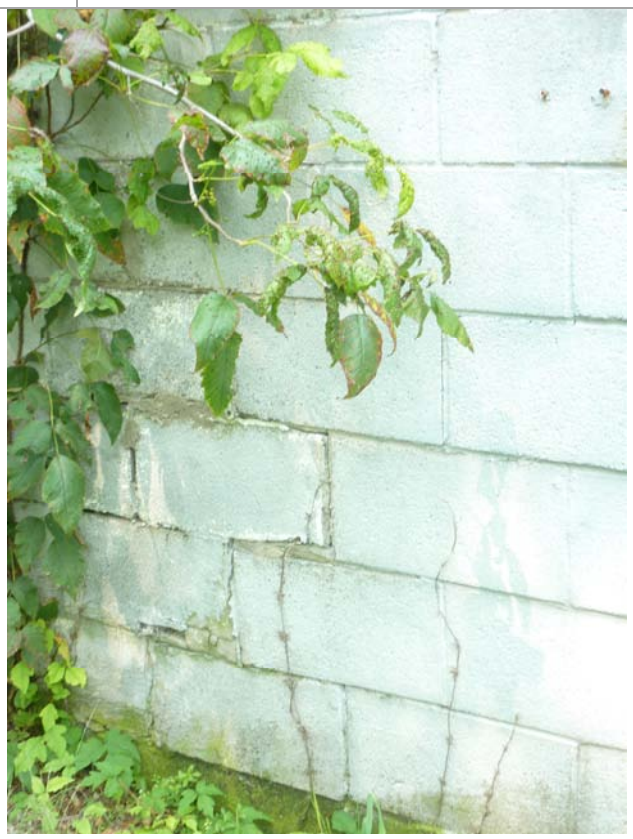
West Building Wall

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P4	9/2/15

DESCRIPTION

Vertical wall crack at southerly building wall



CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P5	9/2/15

DESCRIPTION

North/South interior Building Walls

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P6	9/2/15

DESCRIPTION

East/West interior Building Wall

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P7	9/2/15

DESCRIPTION

Typical Building Portal Frame

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P8	9/2/15

DESCRIPTION

Portal Frame Connection to Steel Column

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P9	9/2/15

DESCRIPTION

General Roof Framing

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P10	9/2/15

DESCRIPTION

Interior Elevated Slab

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P11	9/2/15

DESCRIPTION

Concrete Tank Access

CLIENT NAME:	SITE LOCATION:	PROJECT NO.
NYSDEC	1916 Buell Avenue	8653|61247

PHOTO NO.	DATE:
P12	9/2/15

DESCRIPTION

Interior View of Concrete Tank

Appendix C

Photographic Log and Notes

IRM Work Plan
K&K Stripping Site
1920 Buell Ave
Lima, New York

Photographic Log and Notes

1. Red arrows: Overhead doors are in disrepair and will likely fall apart when opened.
    a. If door is not operable at completion of activities, doorway to be sealed with wooden structure by Contractor.

IRM Work Plan
K&K Stripping Site
1920 Buell Ave
Lima, New York

Photographic Log and Notes

1. Red box: Wooden wall/divider will be demolished by Contractor to access the elevated structure and tank.
2. Blue box: Cinder block elevated structure (to be demolished by Contractor), tank inside (to be demolished by Contractor), and fill material inside (to be removed by Contractor).
3. Green box: approximate location of tank.
4. Elevated work surface will be cleared of debris and equipment by Contractor and set in other portion of building to facilitate access to area for demolition. Cleared materials will be placed elsewhere in building.

IRM Work Plan
K&K Stripping Site
1920 Buell Ave
Lima, New York

Photographic Log and Notes

1. Blue arrow: Bump out for stairway will be demolished by Contractor for access to tank.
2. Entire floor of elevated work surface will be demolished by Contractor to access the tank.

IRM Work Plan
K&K Stripping Site
1920 Buell Ave
Lima, New York

Photographic Log and Notes

1. Blue arrow: As noted in previous picture, bump out to be demolished by Contractor.
2. Red arrow: Tank actually spans under these divider walls. As a result, the walls will be demolished by Contractor. At least one more wall perpendicular to the visible walls will be demolished by Contractor as well.
3. Any items on this platform (*e.g.* tool box, cylinders, sink, etc…) will be removed by Contractor and left in main building.
4. Black arrow: Access port covered with plywood.
5. Green circle: Sump B sediment/soil assumed hazardous for lead.
6. Tank dimensions as measured in field with laser are approximately 12.5' x 15' x 40" deep
7. Previous tank cleaning activities left a significant amount of sediment in tank in area not immediately under access port. Assumed sediment is 1 ft thick.
8. Approximately 2 ft of standing water in tank

IRM Work Plan
K&K Stripping Site
1920 Buell Ave
Lima, New York

Photographic Log and Notes

Tank Interior


East wall


South wall

IRM Work Plan
K&K Stripping Site
1920 Buell Ave
Lima, New York

Photographic Log and Notes


West wall


North wall

1. Assumed tank construction is concrete

Attachment 1

Limited Hazardous Materials Survey

ATLANTIC TESTING LABORATORIES

WBE certified company

Rochester
3495 Winton Place
Building B – Suite 4A
Rochester, NY 14623
585-427-9020 (T)
atlantictesting.com

August 18, 2015

Livingston County Highway Department
4389 Gypsy Lane
Mt. Morris, New York 14510

Attn: Mr. Donald Higgins
Superintendent of Highways

Re: Limited Hazardous Materials Survey
Single-Story Commercial Structure
Lima, New York
ATL Report No. RT5250CE-01-08-15

Ladies/Gentlemen:

Enclosed is a copy of the Limited Hazardous Materials Survey report prepared for the referenced site. This project was completed in accordance with the scope of work outlined in our contract (ATL No. RT5998-30-07-15), dated July 2, 2015, and authorized by Donald Higgins on July 7, 2015.

Please contact our office should you have any questions, or if we may be of further assistance.

Sincerely,
ATLANTIC TESTING LABORATORIES, Limited

Andrew S. Amell
Project Manager

ASA/JDG/rr

Enclosures

LIMITED HAZARDOUS MATERIALS SURVEY

SINGLE-STORY COMMERCIAL STRUCTURE
LIMA, NEW YORK

WBE certified company

PREPARED BY:
ATLANTIC TESTING LABORATORIES, LIMITED
3495 Winton Place
Building B – Suite 4A
Rochester, New York 14623

PREPARED FOR:

Livingston County Highway Department
4389 Gypsy Lane
Mt. Morris, New York 14510

ATL REPORT NO. RT5250CE-01-08-15

August 18, 2015

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 Purpose

Atlantic Testing Laboratories, Limited (ATL) was retained by Livingston County Highway Department, to perform a limited hazardous materials survey of a single-story commercial structure. The limited survey was performed on July 22, 2015. The purpose of the limited hazardous materials survey was to identify asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls (PCB)-containing caulks that are present on exposed surfaces within the subject areas, and may have a significant impact on planned demolition activities. The limited hazardous materials survey procedures and report format that follow are in general compliance with applicable local, state, and federal rules and regulations.

1.2 Project Team and Certifications

Members of the ATL project team included Andrew S. Amell, Project Manager; and Joseph D. Grabowski, Asbestos Services Manager. Certifications of ATL's field survey team members and a copy of applicable company licenses maintained by ATL are included in Appendix A.

2.0 SCOPE OF WORK

2.1 Project Description

The project site is located at 1920 Buell Street, Lima, Livingston County, New York.

The intent of the limited hazardous materials survey was to identify suspect ACM, LBP, and PCB-containing materials that are located within the single-story commercial structure and may be impacted during a proposed building demolition project.

The limited hazardous materials survey was conducted for the subject areas, as directed by Mr. Donald Higgins, representing Livingston County Highway Department. The subject areas were not occupied and operational at the time of the sampling event.

2.2 Inaccessible Areas

The extent of inaccessible areas is dependent upon the building type, construction materials, history of renovations and repairs, and project scope. Concealed materials may exist in areas that are not readily exposed to view. Although this limited hazardous materials survey was performed to identify ACM, LBP, and PCB-containing caulk within the subject areas, potential ACM, LBP, and/or PCB-containing caulk may have escaped detection that could be encountered during future building demolition and/or renovation activities. Wall, ceiling, floor, roofing, and/or other component systems may contain concealed suspect ACM, LBP, and/or PCB-containing caulk. It was observed that wood flooring existed in the front office area. This area was inaccessible at the time of the survey. If any suspect ACM, LBP, and/or PCB-containing caulk are encountered during demolition and/or renovation activities, the activities disturbing the suspect ACM, LBP, and/or PCB-containing caulk must stop and the material must be sampled and laboratory analyzed in accordance with applicable regulations.

2.3 Document Review

No historical asbestos or hazardous materials survey reports or sampling and analysis data were available for review at the time of the limited hazardous materials survey.

2.4 Limitations

This report has been prepared in accordance with the scope of work outlined in ATL's contract (ATL No. RT5998-30-07-15), dated July 2, 2015, and should not be used as abatement specifications or design documents. The findings, conclusions, and recommendations presented in this report are based on the field observations made by representatives of ATL and the information provided by representatives of Livingston County Highway Department.

Quantities and locations of sampled materials are approximate, and should be verified by the abatement contractor(s) prior to providing actual cost quotations and/or initiating abatement activities. Variations in reported quantities and locations for sampled materials, in addition to the discovery of suspect materials not identified in this report, is possible due to the presence of inaccessible areas, as described in Section 2.2 of this report.

The findings and opinions are relevant to the dates of our site work and should not be relied on to represent conditions at substantially later dates.

3.0 ASBESTOS

3.1 Methodology

A visual examination of the subject areas was conducted by an Asbestos Building Inspector to identify suspect ACM. Functional spaces were identified to assist while locating suspect ACM. A functional space is defined as a spatially distinct area within a building that contains identifiable populations of building occupants. A functional space may include a room, a group of rooms, or other defined area, and several functional spaces may comprise a single homogeneous sampling area. A homogeneous sampling area is defined as an area that is uniform by color, texture, construction/application, and general appearance. Each identified functional space was visually examined to determine the locations of suspect ACM. These materials were then delineated into homogeneous sampling areas.

Samples of each accessible homogeneous area were collected and placed in clean, labeled containers. The appropriate custody documentation was completed and the suspect ACM samples were submitted to AmeriSci New York (AmeriSci), located in New York, New York. The samples were laboratory analyzed by polarized light microscopy (PLM) and transmission electron microscopy (TEM) methodologies, as applicable. AmeriSci is a New York State Department of Health (NYSDOH) certified laboratory for PLM and TEM analysis under Environmental Laboratory Approval Program (ELAP) No. 11480. AmeriSci is also accredited by the National Institute of Standards and Technology (NIST), under the National Voluntary Laboratory Accreditation Program (NVLAP).

3.2 Regulatory Compliance

In New York State, there are multiple regulatory agencies that have jurisdiction over ACM in buildings. Asbestos survey requirements are primarily regulated or specified by the New York State Department of Labor (NYSDOL), the New York State Department of Health (NYSDOH),

the Occupational Safety and Health Administration (OSHA), and the United States Environmental Protection Agency (EPA).

The NYSDOL established Part 56 of The Official Compilation of Codes, Rules, and Regulations (cited as 12 NYCRR, Part 56) to address the proper identification, handling, removal, and disposal of ACM in buildings. Asbestos survey requirements are specified in Subpart 56-5.1 "Asbestos Survey Requirements for Building/Structure Demolition, Renovation, Remodeling and Repair." The NYSDOL also works in conjunction with the NYSDOH to establish and maintain asbestos safety training program requirements, and enforce personnel certifications and licensing protocol for asbestos contractors.

The OSHA defines requirements for asbestos surveys and identification of ACM and presumed asbestos-containing materials (PACM) in 29 CFR 1926.1101 (k) "Communication of Hazards." Under this regulation, OSHA makes reference to conducting inspections according to 1926.1101 (k)(5)(ii)(B) and 1926.1101 (k)(5)(iii) or pursuant to the requirements of the Asbestos Hazard Emergency Response Act (AHERA) 40 CFR Part 763, Subpart E "Asbestos-Containing Materials in Schools." The AHERA is regulated by the EPA, and applies to primary and secondary schools only; however, the procedures mandated under AHERA are generally considered the industry standards for surveys, as these are typically the most stringent.

3.3 Summary of Findings

A total of 26 homogeneous areas of suspect ACM were identified during the visual examination, from which 50 bulk samples were collected and subsequently submitted to a NYSDOH approved laboratory for analysis. Approximate sample locations are depicted on the Sample Location Plans, contained in Appendix B. A copy of laboratory reports and sample custody documentation are contained in Appendix C. Table I below provides a summary of the identified suspect ACM and associated analytical results.

Table I
Summary of Suspect ACM and Analytical Results

Material	General Location[1]	Friable	% Asbestos[2]	Condition	Sample Numbers	Estimated Quantity[3, 4]
White Exterior Caulk	**Exterior Man Doors**	**No**	**1.6**	**Poor**	**RT5250AI01A RT5250AI01B**	**12 Square Feet**
White Exterior Caulk	Seams of Blue Metal Exterior Walls	No	NAD	Poor	RT5250AI02A RT5250AI02B	NA
Light Gray Exterior Caulk	Exterior Garage Doors	No	NAD	Poor	RT5250AI03A RT5250AI03B	NA
Cream Exterior Caulk	**Rear Addition Exterior Doors**	**No**	**2.2**	**Poor**	**RT5250AI04A RT5250AI04B**	**5 Square Feet**
Beige Exterior Caulk	Exterior Penetration Through Wall	No	NAD	Poor	RT5250AI05A RT5250AI05B	NA
Brown Homosote Board	Exterior Walls; Rooms D and E	No	NAD	Fair	RT5250AI06A RT5250AI06B	NA

Table I (continued)
Summary of Suspect ACM and Analytical Results

Material	General Location[1]	Friable	% Asbestos[2]	Condition	Sample Numbers	Estimated Quantity[3, 4]
White Canvas Insulation Wrap	Throughout Main Building	No	NAD	Fair	RT5250AI07A RT5250AI07B	NA
Brown Insulation Backing	Room C	No	NAD	Poor	RT5250AI08A RT5250AI08B	NA
White Gypsum Board	Room B	Yes	NAD	Poor	RT5250AI09A RT5250AI09B	NA
2- by 1- Foot White Smooth Ceiling Tile	Room G	Yes	NAD	Poor	RT5250AI10A RT5250AI10B	NA
1- by 1- Foot White Swirled and Dotted Ceiling Tile	Rooms G and H	Yes	NAD	Poor	RT5250AI11A RT5250AI11B	NA
1- by 2- Foot White Lined Ceiling Tile	Room F	Yes	NAD	Fair	RT5250AI12A RT5250AI12B	NA
1- by 1- Foot Brown Cork Ceiling Tile	Room F	Yes	NAD	Poor	RT5250AI13A RT5250AI13B	NA
Black Adhesive Associated with 1- by 1- Foot Brown Cork Ceiling Tile	Room F	No	NAD	Poor	RT5250AI14A RT5250AI14B	NA
Brown Adhesive Associated with Paneling (Dark)	Rooms F and G	No	Trace	Fair	RT5250AI15A RT5250AI15B	NA
Tan Adhesive Associated with Paneling (Light)	Rooms F and H	No	NAD	Fair	RT5250AI16A RT5250AI16B	NA
Silver Foil Paper Insulation Backing	Rooms F, G, and H	No	NAD	Poor	RT5250AI17A RT5250AI17B	NA
Black Sink Coating	**Room G**	**No**	**1.5**	**Good**	**RT5250AI18A RT5250AI18B**	**4 Square Feet**

Table I (continued)
Summary of Suspect ACM and Analytical Results

Material	General Location[1]	Friable	% Asbestos[2]	Condition	Sample Numbers	Estimated Quantity[3, 4]
White Gypsum Board	Rooms F, G, and H	Yes	NAD	Poor	RT5250AI19A RT5250AI19B	NA
Cream Formica Countertop	Room G	No	NAD	Fair	RT5250AI20A RT5250AI20B	NA
Tan Carpet Adhesive	Rooms F, G, and H	No	NAD	Fair	RT5250AI21A RT5250AI21B	NA
Tan Adhesive Associated with Corkboard Wall	Room H	No	NAD	Poor	RT5250AI22A RT5250AI22B	NA
Silver Roof Paint	**Main Roof**	**No**	**5.7**	**Poor**	**RT5250AI23A RT5250AI23B**	**2,000 Square Feet**
Black Penetration Repair Sealant	**Main Roof**	**No**	**5.5**	**Poor**	**RT5250AI24A RT5250AI24B**	**11 Square Feet**
Gray Metal Roof Seam Sealant	**Main Roof**	**No**	**3.2**	**Poor**	**RT5250AI25A RT5250AI25B**	**400 Square Feet**
Brown Loose Fill Vermiculite[5]	**Exterior Foundation Area**	**Yes**	**Assumed[5]**	**Poor**	**RT5250AI26**	**400 Square Feet**

Notes:

[1] Sample Location Plans are enclosed in Appendix B. Areas of the structure were alphabetically labeled at the time of the survey event.

[2] NAD = No Asbestos Detected

[3] Quantities and locations are approximate and must be verified by asbestos abatement contractors prior to providing actual cost quotations and/or initiating abatement activities.

[4] NA = Not Applicable

[5] In accordance to New York State Department of Health Interim Guidance Document for vermiculite dated July 9, 2013, vermiculite is to be treated as asbestos due to its use as loose insulation fill.

The EPA, NYSDOL, and other regulatory agencies define ACM as any material containing greater than 1% of asbestos. Materials listed in bold font in Table I above were determined or assumed to be ACM.

Materials containing trace asbestos (i.e., less than 1%) are not considered ACM; however, the OSHA recognizes materials that contain trace amounts of asbestos, and requires these materials be handled in accordance with their standard interpretation letter titled “Requirements for demolition operations involving material containing <1% asbestos “, dated August 13, 1999. As shown in Table I above, 1 material was determined to contain trace amounts of asbestos.

4.0 LEAD-BASED PAINT

4.1 Methodology

A visual examination of the subject building was conducted by an Lead Risk Assessor to identify visible and accessible painted surfaces. The painted surfaces were categorized into homogeneous areas from which tests could be conducted. Each homogeneous area was tested using a ThermoFisher Scientific Niton XLp 303A XRF Analyzer. This equipment provides instantaneous measurements for lead concentration in mg/cm^2, and displays readings that are positive or negative indications for LBP. Calibration checks for the XRF equipment were performed in accordance with the manufacturer's recommendations.

4.2 Regulatory Compliance

Although New York State has established Title X, Part 67 of The Official Compilation of Codes, Rules, and Regulations (cited as NYCRR Title X, Part 67) for "Lead Poisoning Prevention and Control," LBP inspections and risk assessments are generally subject to the requirements of federal regulations. The United States Department of Housing and Urban Development (HUD), EPA, and OSHA are the primary federal regulatory agencies responsible for the establishment and enforcement of such regulations. On a state level, the NYSDOH does require laboratories to be certified to perform lead analysis under the ELAP.

The HUD "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" include details pertaining to sampling and analysis of suspect LBP, in addition to the identification and control of LBP hazards. The HUD guidelines pertain to federally owned or assisted housing; however, these are commonly referenced and made mandatory by other regulatory agencies. The EPA requirements for LBP activities, specified in 40 CFR Part 745, apply to targeted housing and child-occupied facilities, and are similar to HUD guideline requirements.

The OSHA Construction Standard for Lead (29 CFR 1926.62) applies to employees of an employer who may or will be exposed to occupational levels of lead. OSHA requires employees to maintain, at a minimum, awareness, respiratory protection, and hazard communication training.

4.3 Summary of Findings

A total of 34 locations were tested using the XRF spectrometer. Approximate sample locations are depicted on the Sample Location Plan, contained in Appendix B. A summary of the XRF calibration checks are provided in Table D-IV of Appendix D. The XRF results provided in Table D-I of Appendix D identifies painted surfaces that contain detectable concentrations of lead, but are not considered LBP, as compared to HUD criteria. Painted surfaces that did not contain lead at a concentration above the method detection limits are summarized in Table D-II of Appendix D.

5.0 POLYCHLORINATED BIPHENYLS

5.1 Methodology

A visual examination of the subject areas was conducted by an Environmental Scientist to identify suspect PCB-containing caulk/sealant. The identified materials were classified into

homogeneous sampling areas. A homogeneous sampling area is defined as an area that is uniform by color, texture, construction/application, and general appearance.

Samples of each accessible homogeneous area were collected and placed in clean, labeled containers. The appropriate custody documentation was completed and the suspect PCB-containing caulk samples were submitted to Pace Analytical, located in Schenectady, New York. The samples were laboratory analyzed for PCB, in accordance with EPA Method 8082. Pace Analytical is a NYSDOH certified laboratory for PCB analysis under ELAP No. 11078.

5.2 Regulatory Compliance

PCB are primarily regulated by the EPA. The EPA has issued several documents and enforces federal mandated laws and regulations governing the usage, management, and disposal of PCB-containing materials. State and local regulatory agencies have also enacted laws and regulations concerning PCB materials, many of which are consistent with the regulations set forth by the EPA. In accordance with the regulations and guidelines presented in 40 CFR Parts 750 and 761 "Disposal of Polychlorinated Biphenyls; Final Rule," PCB wastes are generally regulated for disposal under the Toxic Substances Control Act (TSCA) if the concentrations are 50 ppm or greater. Per New York State Department of Environmental Conservation (NYSDEC) regulations, material containing greater than 50 ppm is regulated hazardous waste.

5.3 Summary of Findings

A total of 7 homogeneous suspect PCB-containing caulk materials were identified during the visual examination, from which 21 bulk samples were collected, composited, and subsequently submitted to a NYSDOH approved laboratory for analysis. Approximate sample locations are depicted on the Sample Location Plans, contained in Appendix B. A copy of laboratory reports and associated sample custody documentation are contained in Appendix C. Table II below provides a summary of the identified suspect PCB-containing caulk and associated analytical results.

Table II
Summary of Suspect PCB-Containing Caulk and Analytical Results

Material Description/ Color	General Location [1]	Sample Number	Total PCB[2] (ppm)
White Exterior Caulk	Exterior Man Doors	RT5250PI01	ND
White Exterior Caulk	Seams of Blue Metal Exterior Walls	RT5250PI02	ND
Light Gray Exterior Caulk	Exterior Garage Doors	RT5250PI03	ND
Cream Exterior Caulk	Exterior Doors	RT5250PI04	ND
Beige Exterior Caulk	Exterior Penetration Through Wall	RT5250PI05	ND
Black Penetration Repair Sealant	Main Roof	RT5250PI06	ND
Gray Metal Roof Seam Sealant	Main Roof	RT5250PI07	ND

Notes:

[1] Sample Location Plans are contained in Appendix B.

[2] ND = Not detected above the laboratory method detection limit.

PCB-containing caulk is regulated under the TSCA as an "unauthorized use," and is considered a regulated hazardous material at concentrations equal to or greater than 50 ppm. None of the samples collected contained greater than 50 ppm total PCB.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are prepared from ATL's understanding that the subject building may be subject to demolition project. Should the management of the building areas change, it is recommended that the findings be revisited to reflect appropriate operations and management practices for ACM, LBP, and PCB-containing caulk.

6.1 General

1. Concealed regulated ACM, LBP, or PCB may exist at the site that could be encountered during future building renovation activities. Wall, ceiling, floor, roofing, and/or other component systems may contain concealed suspect ACM, LBP, and/or PCB. If any suspect ACM, LBP, and/or PCB is encountered during demolition and/or renovation activities, the activities disturbing the suspect ACM, LBP, or PCB must stop and the material must be sampled and laboratory analyzed in accordance with applicable regulations.

6.2 Asbestos-Containing Materials

1. The materials listed in bold in Table I of Section 3.3 were determined to be ACM. The referenced table also shows materials that contain trace concentrations of asbestos and are regulated under OSHA.

2. Subpart 56-5(h) of 12 NYCRR Part 56 requires that no demolition, renovation, remodeling, or repair work be commenced by any owner or the owner's agent prior to the completion of asbestos abatement. Asbestos abatement must be performed by an asbestos abatement contractor that maintains a current asbestos handling license, and employs NYSDOL certified asbestos handlers and supervisors. It is recommended that a 12 NYCRR 56 certified Project Monitor oversee abatement activities.

3. Subpart 56-5(g) of 12 NYCRR Part 56 specifies requirements for transmittal of asbestos survey information by the owner or owner's agent. One copy of the asbestos survey report shall be sent to the local government entity charged with issuing a permit for such demolition, renovation, remodeling, or repair work under applicable State or local laws. If controlled demolition or pre-demolition activities will be performed, one copy of the asbestos survey report shall be submitted to the appropriate Asbestos Control Bureau district office. One copy of the asbestos survey report must be kept on the construction site throughout the duration of the asbestos project and any associated demolition, renovation, remodeling, or repair project.

6.3 Lead-Based Paint

1. The materials listed in Table D-I of Appendix D lists materials that are not considered LBP per HUD criteria, but contain detectable concentrations of lead and are regulated under OSHA.

2. Identified LBP or paint with a detectable concentration of lead should be managed in accordance with applicable EPA and OSHA requirements prior to or during demolition, renovation, remodeling, or repair work.

3. Demolition/renovation contractors are required to conduct exposure monitoring or use historical objective data to ensure that employee exposures do not exceed the action level of 30 $\mu g/m^3$.

6.4 PCB-Containing Materials

1. None of the caulk materials sampled contained PCB concentrations exceeding 50 ppm, and are therefore not considered hazardous materials/hazardous waste.

2. The EPA considers caulk with a PCB concentration greater than 50 ppm as an “unauthorized use”, and requires that these materials be properly removed and disposed of.

APPENDIX A

LICENSES AND CERTIFICATIONS

Asbestos Certificate Code Classifications

The following letter codes shown on the enclosed asbestos certificates represent the corresponding asbestos classifications:

A - Asbestos Handler
B - Allied Trades
C - Air Sampling Technician
D - Building Inspector
E - Management Planner
F - Operations & Maintenance
G - Asbestos Supervisor
H - Asbestos Project Monitor
I - Asbestos Project Designer

New York State – Department of Labor
Division of Safety and Health
License and Certificate Unit
State Campus, Building 12
Albany, NY 12240

ASBESTOS HANDLING LICENSE

Atlantic Testing Laboratories, Limited

P.O. Box 29

Canton, NY 13617

FILE NUMBER: 99-0911
LICENSE NUMBER: 29276
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 10/09/2014
EXPIRATION DATE: 10/31/2015

Duly Authorized Representative – Marijean B Remington:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Eileen M. Franko, Director
For the Commissioner of Labor

SH 432 (8/12)

United States Environmental Protection Agency

This is to certify that

Atlantic Testing Laboratories, Limited

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226

In the Jurisdiction of:

New York

This certification is valid from the date of issuance and expires March 25, 2016

NY-8962-4

Certification #

February 06, 2013

Issued On

Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

STATE OF NEW YORK - DEPARTMENT OF LABOR
ASBESTOS CERTIFICATE

ANDREW S AMELL
CLASS(EXPIRES)
C ATEC(04/16) D INSP(04/16)
H PM (04/16) I PD (04/16)

CERT# 01-00754
DMV# 336294367

MUST BE CARRIED ON ASBESTOS PROJECTS

01213 0004085890 02

EYES BLU
HAIR BRO
HGT 5' 11"

IF FOUND RETURN TO:
NYSDOL - L&C UNIT
ROOM 161A BUILDING 12
STATE OFFICE CAMPUS
ALBANY NY 12240

New York State Department of Health Certificate of Asbestos Safety Training

This form is the official record of successful completion of a New York State accredited asbestos safety training course.

Certificate No. 707694

I – To be completed by Trainee

Name of Trainee (print)	NYS Depart. of Motor Vehicles ID (DMV ID)[1]	
Andrew Amell	336 294 367	
Signature of Trainee	Telephone Number	Date of Birth[1]
A Amell	315-699-5281	04/01/1977

Address: 6085 Court street Road (Street or PO Box) Syracuse (City) NY (State) 13145 (Zip Code)

II – To be completed by Training Sponsor

Provider's Name	Telephone Number
ECMC	315 657 9435
Address 115 Genesee St	Course Location: Chittenango
Zip Code Chittenango NY 13037	

Course Title: Building Inspector ☐ Initial ☑ Refresher

NYS DOH use only ☐ DOH Equivalency[2]

Training Language: ☑ English ☐ Other: _____ Exam Grade/Date: 92% 12/9/14

Dates of Training: From: 12/9/14 To: 12/9/14 Expires: 12/9/15

I certify that the asbestos safety training course given on the above date complied with both 10 NYCRR Part 73 and TSCA Title II, was consistent with the curriculum and instructors approved by the New York State Department of Health, and the trainee receiving this certificate completed the training course and successfully passed the examination.

Training Director[2]: MICHAEL J. GILLS (Print) _____ (Signature)

STUDENT

DOH-2832 (10/03) [1]Optional Information [2]DOH Equivalency signed by NYS DOH representative only

United States Environmental Protection Agency

This is to certify that

Andrew Stewart Amell

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

New York

This certification is valid from the date of issuance and expires November 14, 2017

NY-R-72973-1

Certification #

November 14, 2014

Issued On

John Gorman, Chief

Pesticides & Toxic Substances Branch

STATE OF NEW YORK - DEPARTMENT OF LABOR
ASBESTOS CERTIFICATE

N.Y.S

JOSEPH D GRABOWSKI
CLASS(EXPIRES)
C ATEC(12/15) D INSP(12/15)
E MGPL(12/15) H PM (12/15)
I PD (12/15)

CERT# 01-08166
DMV# 687157453

EXCELSIOR

MUST BE CARRIED ON ASBESTOS PROJECTS

New York State Department of Health Certificate of Asbestos Safety Training

This form is the official record of successful completion of a New York State accredited asbestos safety training course.

Certificate No. 705852

I – To be completed by Trainee

Name of Trainee (print)	NYS Depart. of Motor Vehicles ID (DMV ID)[1]	
Joseph D. Grabowski	687157453	
Signature of Trainee	Telephone Number	Date of Birth[1]
Joseph D Grabowski	315-324-5905	12/11/76

Address: 2 Scot Acres (Street or PO Box) | Hammond (City) | NY (State) | 13646 (Zip Code)

II – To be completed by Training Sponsor

Provider's Name: ECMC | Telephone Number: 315 687 9435

Address: 115 Genesee St | Course Location: Cheektowaga

Zip Code: Cheektowaga NY 13037

Course Title: Project Designer ☐ Initial ☑ Refresher | NYS DOH use only ☐ DOH Equivalency[2]

Training Language: ☑ English ☐ Other: _____ Exam Grade/Date: 100% 9/19/14

Dates of Training: From: 9/19/14 To: 9/19/14 Expires: 9/19/15

I certify that the asbestos safety training course given on the above date complied with both 10 NYCRR Part 73 and TSCA Title II, was consistent with the curriculum and instructors approved by the New York State Department of Health, and the trainee receiving this certificate completed the training course and successfully passed the examination.

Training Director[2]: Charles Kirch (Print) _____ (Signature)

STUDENT

DOH-2832 (10/03) [1]Optional Information [2]DOH Equivalency signed by NYS DOH representative only

New York State Department of Health Certificate of Asbestos Safety Training

This form is the official record of successful completion of a New York State accredited asbestos safety training course.

Certificate No. 710251

I – To be completed by Trainee

Name of Trainee (print)	NYS Depart. of Motor Vehicles ID (DMV ID)[1]	
Joseph D. Grabowski	687157453	
Signature of Trainee	Telephone Number	Date of Birth[1]
Joseph D Grabowski	315-324-5905	12/11/76

Address: 2 Scot Acres (Street or PO Box) | Hammond (City) | NY (State) | 13646 (Zip Code)

II – To be completed by Training Sponsor

Provider's Name: ECMC | Telephone Number: 315 687 9435

Address: 115 Genesee St | Course Location: Cheektowaga

Zip Code: Cheektowaga NY 13037

Course Title: Building Inspector ☐ Initial ☑ Refresher | NYS DOH use only ☐ DOH Equivalency[2]

Training Language: ☑ English ☐ Other: _____ Exam Grade/Date: 92% 10/28/14

Dates of Training: From: 10/28/14 To: 10/28/14 Expires: 10/28/15

I certify that the asbestos safety training course given on the above date complied with both 10 NYCRR Part 73 and TSCA Title II, was consistent with the curriculum and instructors approved by the New York State Department of Health, and the trainee receiving this certificate completed the training course and successfully passed the examination.

Training Director[2]: Charles Kirch (Print) _____ (Signature)

STUDENT

DOH-2832 (10/03) [1]Optional Information [2]DOH Equivalency signed by NYS DOH representative only

United States Environmental Protection Agency

This is to certify that

Joseph Donald Grabowski

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

New York

This certification is valid from the date of issuance and expires April 09, 2018

NY-R-17990-3

Certification #

October 21, 2014

Issued On

John Gorman, Chief

Pesticides & Toxic Substances Branch

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2016
Issued April 01, 2015

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. PAUL J. MUCHA
AMERICA SCIENCE TEAM NEW YORK INC
117 EAST 30TH ST
NEW YORK, NY 10016

NY Lab Id No: 11480

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	Item 198.1 of Manual
	EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual

Serial No.: 52773

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised May 08, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

Is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Petroleum Hydrocarbons	
Gasoline Range Organics	EPA 8015D
Phthalate Esters	
Benzyl butyl phthalate	EPA 625
	EPA 8270D
Bis(2-ethylhexyl) phthalate	EPA 625
	EPA 8270D
Diethyl phthalate	EPA 625
	EPA 8270D
Dimethyl phthalate	EPA 625
	EPA 8270D
Di-n-butyl phthalate	EPA 625
	EPA 8270D
Di-n-octyl phthalate	EPA 625
	EPA 8270D
Polychlorinated Biphenyls	
PCB 1	EPA 8082A
PCB 10	EPA 8082A
PCB 100	EPA 8082A
PCB 101	EPA 8082A
PCB 102	EPA 8082A
PCB 103	EPA 8082A
PCB 104	EPA 8082A
PCB 105	EPA 8082A
PCB 106	EPA 8082A
PCB 107	EPA 8082A
Polychlorinated Biphenyls	
PCB 108	EPA 8082A
PCB 109	EPA 8082A
PCB 11	EPA 8082A
PCB 110	EPA 8082A
PCB 111	EPA 8082A
PCB 112	EPA 8082A
PCB 113	EPA 8082A
PCB 114	EPA 8082A
PCB 115	EPA 8082A
PCB 116	EPA 8082A
PCB 117	EPA 8082A
PCB 118	EPA 8082A
PCB 119	EPA 8082A
PCB 12	EPA 8082A
PCB 120	EPA 8082A
PCB 121	EPA 8082A
PCB 122	EPA 8082A
PCB 123	EPA 8082A
PCB 124	EPA 8082A
PCB 125	EPA 8082A
PCB 126	EPA 8082A
PCB 127	EPA 8082A
PCB 128	EPA 8082A
PCB 129	EPA 8082A
PCB 13	EPA 8082A
PCB 130	EPA 8082A

Serial No.: 51185

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised May 08, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

Is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Polychlorinated Biphenyls		Polychlorinated Biphenyls	
PCB 131	EPA 8082A	PCB 155	EPA 8082A
PCB 132	EPA 8082A	PCB 156	EPA 8082A
PCB 133	EPA 8082A	PCB 157	EPA 8082A
PCB 134	EPA 8082A	PCB 158	EPA 8082A
PCB 135	EPA 8082A	PCB 159	EPA 8082A
PCB 136	EPA 8082A	PCB 16	EPA 8082A
PCB 137	EPA 8082A	PCB 160	EPA 8082A
PCB 138	EPA 8082A	PCB 161	EPA 8082A
PCB 139	EPA 8082A	PCB 162	EPA 8082A
PCB 14	EPA 8082A	PCB 163	EPA 8082A
PCB 140	EPA 8082A	PCB 164	EPA 8082A
PCB 141	EPA 8082A	PCB 165	EPA 8082A
PCB 142	EPA 8082A	PCB 166	EPA 8082A
PCB 143	EPA 8082A	PCB 167	EPA 8082A
PCB 144	EPA 8082A	PCB 168	EPA 8082A
PCB 145	EPA 8082A	PCB 169	EPA 8082A
PCB 146	EPA 8082A	PCB 17	EPA 8082A
PCB 147	EPA 8082A	PCB 170	EPA 8082A
PCB 148	EPA 8082A	PCB 171	EPA 8082A
PCB 149	EPA 8082A	PCB 172	EPA 8082A
PCB 15	EPA 8082A	PCB 173	EPA 8082A
PCB 150	EPA 8082A	PCB 174	EPA 8082A
PCB 151	EPA 8082A	PCB 175	EPA 8082A
PCB 152	EPA 8082A	PCB 176	EPA 8082A
PCB 153	EPA 8082A	PCB 177	EPA 8082A
PCB 154	EPA 8082A	PCB 178	EPA 8082A

Serial No.: 51185

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised May 08, 2014

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MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Polychlorinated Biphenyls		Polychlorinated Biphenyls	
PCB 179	EPA 8082A	PCB 201	EPA 8082A
PCB 18	EPA 8082A	PCB 202	EPA 8082A
PCB 180	EPA 8082A	PCB 203	EPA 8082A
PCB 181	EPA 8082A	PCB 204	EPA 8082A
PCB 182	EPA 8082A	PCB 205	EPA 8082A
PCB 183	EPA 8082A	PCB 206	EPA 8082A
PCB 184	EPA 8082A	PCB 207	EPA 8082A
PCB 185	EPA 8082A	PCB 208	EPA 8082A
PCB 186	EPA 8082A	PCB 209	EPA 8082A
PCB 187	EPA 8082A	PCB 21	EPA 8082A
PCB 188	EPA 8082A	PCB 22	EPA 8082A
PCB 189	EPA 8082A	PCB 23	EPA 8082A
PCB 19	EPA 8082A	PCB 24	EPA 8082A
PCB 190	EPA 8082A	PCB 25	EPA 8082A
PCB 191	EPA 8082A	PCB 26	EPA 8082A
PCB 192	EPA 8082A	PCB 27	EPA 8082A
PCB 193	EPA 8082A	PCB 28	EPA 8082A
PCB 194	EPA 8082A	PCB 29	EPA 8082A
PCB 195	EPA 8082A	PCB 3	EPA 8082A
PCB 196	EPA 8082A	PCB 30	EPA 8082A
PCB 197	EPA 8082A	PCB 31	EPA 8082A
PCB 198	EPA 8082A	PCB 32	EPA 8082A
PCB 199	EPA 8082A	PCB 33	EPA 8082A
PCB 2	EPA 8082A	PCB 34	EPA 8082A
PCB 20	EPA 8082A	PCB 35	EPA 8082A
PCB 200	EPA 8082A	PCB 36	EPA 8082A

Serial No.: 51185

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised May 08, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

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MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Polychlorinated Biphenyls		Polychlorinated Biphenyls	
PCB 37	EPA 8082A	PCB 60	EPA 8082A
PCB 38	EPA 8082A	PCB 61	EPA 8082A
PCB 39	EPA 8082A	PCB 62	EPA 8082A
PCB 4	EPA 8082A	PCB 63	EPA 8082A
PCB 40	EPA 8082A	PCB 64	EPA 8082A
PCB 41	EPA 8082A	PCB 65	EPA 8082A
PCB 42	EPA 8082A	PCB 66	EPA 8082A
PCB 43	EPA 8082A	PCB 67	EPA 8082A
PCB 44	EPA 8082A	PCB 68	EPA 8082A
PCB 45	EPA 8082A	PCB 69	EPA 8082A
PCB 46	EPA 8082A	PCB 7	EPA 8082A
PCB 47	EPA 8082A	PCB 70	EPA 8082A
PCB 48	EPA 8082A	PCB 71	EPA 8082A
PCB 49	EPA 8082A	PCB 72	EPA 8082A
PCB 5	EPA 8082A	PCB 73	EPA 8082A
PCB 50	EPA 8082A	PCB 74	EPA 8082A
PCB 51	EPA 8082A	PCB 75	EPA 8082A
PCB 52	EPA 8082A	PCB 76	EPA 8082A
PCB 53	EPA 8082A	PCB 77	EPA 8082A
PCB 54	EPA 8082A	PCB 78	EPA 8082A
PCB 55	EPA 8082A	PCB 79	EPA 8082A
PCB 56	EPA 8082A	PCB 8	EPA 8082A
PCB 57	EPA 8082A	PCB 80	EPA 8082A
PCB 58	EPA 8082A	PCB 81	EPA 8082A
PCB 59	EPA 8082A	PCB 82	EPA 8082A
PCB 6	EPA 8082A	PCB 83	EPA 8082A

Serial No.: 51185

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised May 08, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Polychlorinated Biphenyls	
PCB 84	EPA 8082A
PCB 85	EPA 8082A
PCB 86	EPA 8082A
PCB 87	EPA 8082A
PCB 88	EPA 8082A
PCB 89	EPA 8082A
PCB 9	EPA 8082A
PCB 90	EPA 8082A
PCB 91	EPA 8082A
PCB 92	EPA 8082A
PCB 93	EPA 8082A
PCB 94	EPA 8082A
PCB 95	EPA 8082A
PCB 96	EPA 8082A
PCB 97	EPA 8082A
PCB 98	EPA 8082A
PCB 99	EPA 8082A
PCB Congeners, Total	EPA 8082A
PCB-1016	SOP NE273 Rev. 1.0
	EPA 8082A
	EPA 608
PCB-1221	SOP NE273 Rev. 1.0
	EPA 8082A
	EPA 608
PCB-1232	SOP NE273 Rev. 1.0
	EPA 8082A

Polychlorinated Biphenyls	
PCB-1232	EPA 608
PCB-1242	SOP NE273 Rev. 1.0
	EPA 8082A
	EPA 608
PCB-1248	SOP NE273 Rev. 1.0
	EPA 8082A
	EPA 608
PCB-1254	SOP NE273 Rev. 1.0
	EPA 8082A
	EPA 608
PCB-1260	SOP NE273 Rev. 1.0
	EPA 8082A
	EPA 608
PCB-1262	EPA 8082A
PCB-1268	EPA 8082A
Polynuclear Aromatics	
Acenaphthene	EPA 625
	EPA 8270D
Acenaphthylene	EPA 625
	EPA 8270D
Anthracene	EPA 625
	EPA 8270D
Benzo(a)anthracene	EPA 625
	EPA 8270D
Benzo(a)pyrene	EPA 625

Serial No.: 51185

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised April 15, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

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2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Metals II	
Zinc, Total	EPA 6010C
Metals III	
Cobalt, Total	EPA 6010C
Molybdenum, Total	EPA 6010C
Thallium, Total	EPA 6010C
Tin, Total	EPA 6010C
Titanium, Total	EPA 6010C
Miscellaneous	
Boron, Total	EPA 6010C
Cyanide, Total	EPA 9014
Organic Carbon, Total	Lloyd Kahn Method
Nitroaromatics and Isophorone	
2,4-Dinitrotoluene	EPA 8270D
2,6-Dinitrotoluene	EPA 8270D
Isophorone	EPA 8270D
Nitrobenzene	EPA 8270D
Pyridine	EPA 8270D
Nitrosoamines	
N-Nitrosodi-n-propylamine	EPA 8270D
N-Nitrosodiphenylamine	EPA 8270D
Petroleum Hydrocarbons	
Diesel Range Organics	EPA 8015D
Gasoline Range Organics	EPA 8015D

Petroleum Hydrocarbons	
Oil and Grease Total Recoverable (HEM	EPA 9071B (Solvent:Hexane)
Phthalate Esters	
Benzyl butyl phthalate	EPA 8270D
Bis(2-ethylhexyl) phthalate	EPA 8270D
Diethyl phthalate	EPA 8270D
Dimethyl phthalate	EPA 8270D
Di-n-butyl phthalate	EPA 8270D
Di-n-octyl phthalate	EPA 8270D
Polychlorinated Biphenyls	
PCB 1	EPA 8082A
PCB 10	EPA 8082A
PCB 100	EPA 8082A
PCB 101	EPA 8082A
PCB 102	EPA 8082A
PCB 103	EPA 8082A
PCB 104	EPA 8082A
PCB 105	EPA 8082A
PCB 106	EPA 8082A
PCB 107	EPA 8082A
PCB 108	EPA 8082A
PCB 109	EPA 8082A
PCB 11	EPA 8082A
PCB 110	EPA 8082A
PCB 111	EPA 8082A
PCB 112	EPA 8082A

Serial No.: 51095

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised April 15, 2014

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MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Polychlorinated Biphenyls		Polychlorinated Biphenyls	
PCB 113	EPA 8082A	PCB 137	EPA 8082A
PCB 114	EPA 8082A	PCB 138	EPA 8082A
PCB 115	EPA 8082A	PCB 139	EPA 8082A
PCB 116	EPA 8082A	PCB 14	EPA 8082A
PCB 117	EPA 8082A	PCB 140	EPA 8082A
PCB 118	EPA 8082A	PCB 141	EPA 8082A
PCB 119	EPA 8082A	PCB 142	EPA 8082A
PCB 12	EPA 8082A	PCB 143	EPA 8082A
PCB 120	EPA 8082A	PCB 144	EPA 8082A
PCB 121	EPA 8082A	PCB 145	EPA 8082A
PCB 122	EPA 8082A	PCB 146	EPA 8082A
PCB 123	EPA 8082A	PCB 147	EPA 8082A
PCB 124	EPA 8082A	PCB 148	EPA 8082A
PCB 125	EPA 8082A	PCB 149	EPA 8082A
PCB 126	EPA 8082A	PCB 15	EPA 8082A
PCB 127	EPA 8082A	PCB 150	EPA 8082A
PCB 128	EPA 8082A	PCB 151	EPA 8082A
PCB 129	EPA 8082A	PCB 152	EPA 8082A
PCB 13	EPA 8082A	PCB 153	EPA 8082A
PCB 130	EPA 8082A	PCB 154	EPA 8082A
PCB 131	EPA 8082A	PCB 155	EPA 8082A
PCB 132	EPA 8082A	PCB 156	EPA 8082A
PCB 133	EPA 8082A	PCB 157	EPA 8082A
PCB 134	EPA 8082A	PCB 158	EPA 8082A
PCB 135	EPA 8082A	PCB 159	EPA 8082A
PCB 136	EPA 8082A	PCB 16	EPA 8082A

Serial No.: 51095

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WADSWORTH CENTER

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MR. DAN PFALZER
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2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Polychlorinated Biphenyls		Polychlorinated Biphenyls	
PCB 160	EPA 8082A	PCB 184	EPA 8082A
PCB 161	EPA 8082A	PCB 185	EPA 8082A
PCB 162	EPA 8082A	PCB 186	EPA 8082A
PCB 163	EPA 8082A	PCB 187	EPA 8082A
PCB 164	EPA 8082A	PCB 188	EPA 8082A
PCB 165	EPA 8082A	PCB 189	EPA 8082A
PCB 166	EPA 8082A	PCB 19	EPA 8082A
PCB 167	EPA 8082A	PCB 190	EPA 8082A
PCB 168	EPA 8082A	PCB 191	EPA 8082A
PCB 169	EPA 8082A	PCB 192	EPA 8082A
PCB 17	EPA 8082A	PCB 193	EPA 8082A
PCB 170	EPA 8082A	PCB 194	EPA 8082A
PCB 171	EPA 8082A	PCB 195	EPA 8082A
PCB 172	EPA 8082A	PCB 196	EPA 8082A
PCB 173	EPA 8082A	PCB 197	EPA 8082A
PCB 174	EPA 8082A	PCB 198	EPA 8082A
PCB 175	EPA 8082A	PCB 199	EPA 8082A
PCB 176	EPA 8082A	PCB 2	EPA 8082A
PCB 177	EPA 8082A	PCB 20	EPA 8082A
PCB 178	EPA 8082A	PCB 200	EPA 8082A
PCB 179	EPA 8082A	PCB 201	EPA 8082A
PCB 18	EPA 8082A	PCB 202	EPA 8082A
PCB 180	EPA 8082A	PCB 203	EPA 8082A
PCB 181	EPA 8082A	PCB 204	EPA 8082A
PCB 182	EPA 8082A	PCB 205	EPA 8082A
PCB 183	EPA 8082A	PCB 206	EPA 8082A

Serial No.: 51095

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

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All approved analytes are listed below:

Polychlorinated Biphenyls		Polychlorinated Biphenyls	
PCB 207	EPA 8082A	PCB 42	EPA 8082A
PCB 208	EPA 8082A	PCB 43	EPA 8082A
PCB 209	EPA 8082A	PCB 44	EPA 8082A
PCB 21	EPA 8082A	PCB 45	EPA 8082A
PCB 22	EPA 8082A	PCB 46	EPA 8082A
PCB 23	EPA 8082A	PCB 47	EPA 8082A
PCB 24	EPA 8082A	PCB 48	EPA 8082A
PCB 25	EPA 8082A	PCB 49	EPA 8082A
PCB 26	EPA 8082A	PCB 5	EPA 8082A
PCB 27	EPA 8082A	PCB 50	EPA 8082A
PCB 28	EPA 8082A	PCB 51	EPA 8082A
PCB 29	EPA 8082A	PCB 52	EPA 8082A
PCB 3	EPA 8082A	PCB 53	EPA 8082A
PCB 30	EPA 8082A	PCB 54	EPA 8082A
PCB 31	EPA 8082A	PCB 55	EPA 8082A
PCB 32	EPA 8082A	PCB 56	EPA 8082A
PCB 33	EPA 8082A	PCB 57	EPA 8082A
PCB 34	EPA 8082A	PCB 58	EPA 8082A
PCB 35	EPA 8082A	PCB 59	EPA 8082A
PCB 36	EPA 8082A	PCB 6	EPA 8082A
PCB 37	EPA 8082A	PCB 60	EPA 8082A
PCB 38	EPA 8082A	PCB 61	EPA 8082A
PCB 39	EPA 8082A	PCB 62	EPA 8082A
PCB 4	EPA 8082A	PCB 63	EPA 8082A
PCB 40	EPA 8082A	PCB 64	EPA 8082A
PCB 41	EPA 8082A	PCB 65	EPA 8082A

Serial No.: 51095

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014
Revised April 16, 2014

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MR. DAN PFALZER
PACE ANALYTICAL SERVICES, INC.
2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Polychlorinated Biphenyls	
PCB 66	EPA 8082A
PCB 67	EPA 8082A
PCB 68	EPA 8082A
PCB 69	EPA 8082A
PCB 7	EPA 8082A
PCB 70	EPA 8082A
PCB 71	EPA 8082A
PCB 72	EPA 8082A
PCB 73	EPA 8082A
PCB 74	EPA 8082A
PCB 75	EPA 8082A
PCB 76	EPA 8082A
PCB 77	EPA 8082A
PCB 78	EPA 8082A
PCB 79	EPA 8082A
PCB 8	EPA 8082A
PCB 80	EPA 8082A
PCB 81	EPA 8082A
PCB 82	EPA 8082A
PCB 83	EPA 8082A
PCB 84	EPA 8082A
PCB 85	EPA 8082A
PCB 86	EPA 8082A
PCB 87	EPA 8082A
PCB 88	EPA 8082A
PCB 89	EPA 8082A

Polychlorinated Biphenyls	
PCB 9	EPA 8082A
PCB 90	EPA 8082A
PCB 91	EPA 8082A
PCB 92	EPA 8082A
PCB 93	EPA 8082A
PCB 94	EPA 8082A
PCB 95	EPA 8082A
PCB 96	EPA 8082A
PCB 97	EPA 8082A
PCB 98	EPA 8082A
PCB 99	EPA 8082A
PCB Congeners, Total	EPA 8082A
PCB-1016	EPA 8082A
PCB-1221	EPA 8082A
PCB-1232	EPA 8082A
PCB-1242	EPA 8082A
PCB-1248	EPA 8082A
PCB-1254	EPA 8082A
PCB-1260	EPA 8082A
PCB-1262	EPA 8082A
PCB-1268	EPA 8082A
Polynuclear Aromatic Hydrocarbons	
Acenaphthene	EPA 8270D
Acenaphthylene	EPA 8270D
Anthracene	EPA 8270D

Serial No.: 51095

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WADSWORTH CENTER

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2190 TECHNOLOGY DRIVE
SCHENECTADY, NY 12308

NY Lab Id No: 11078

Is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved analytes are listed below:

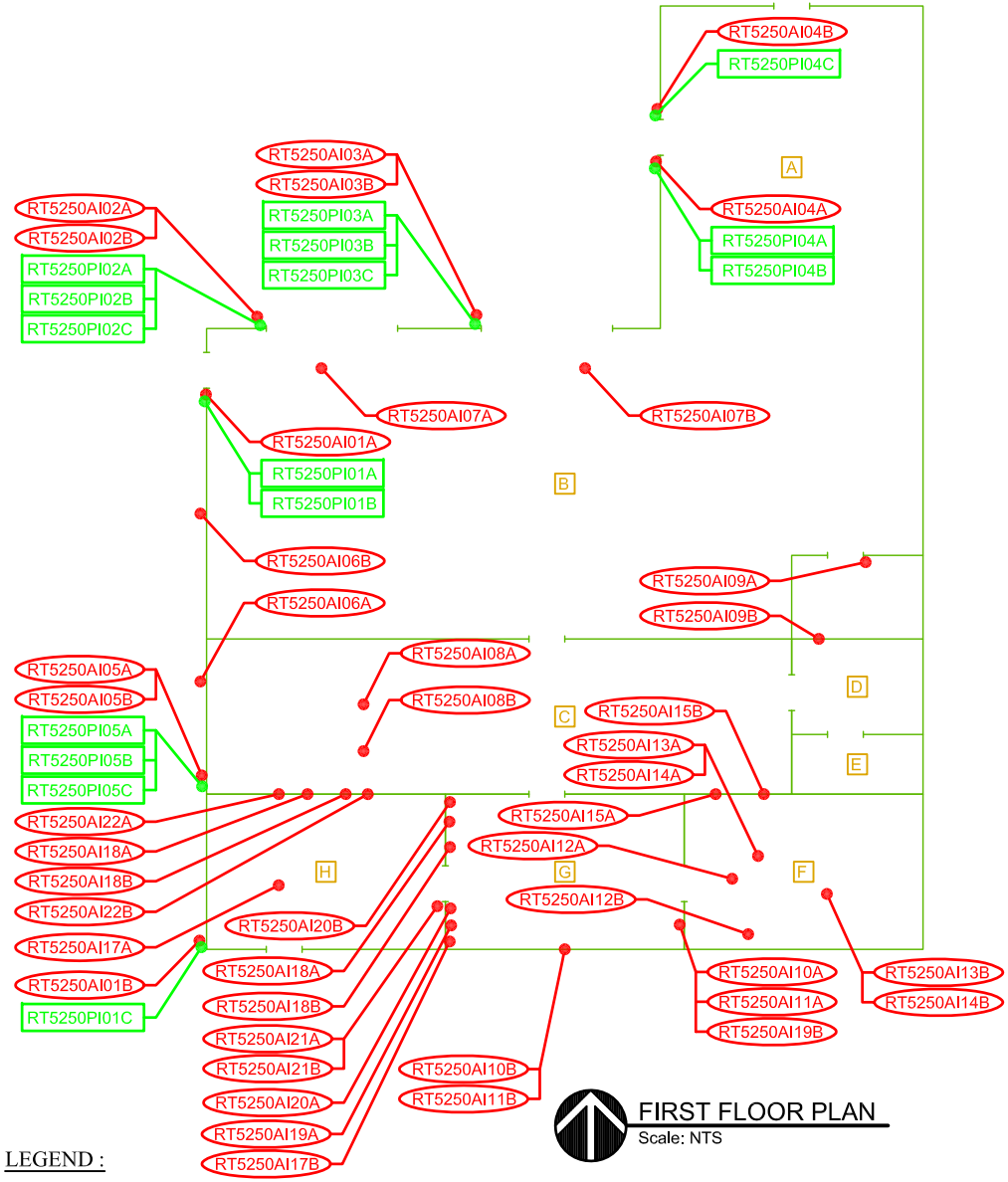
Chlorinated Hydrocarbon Pesticides	
4,4'-DDD	EPA TO-4A
4,4'-DDE	EPA TO-4A
4,4'-DDT	EPA TO-4A
Polychlorinated Biphenyls	
PCB-1016	EPA TO-10A
	EPA TO-4A
PCB-1221	EPA TO-10A
	EPA TO-4A
PCB-1232	EPA TO-10A
	EPA TO-4A
PCB-1242	EPA TO-10A
	EPA TO-4A
PCB-1248	EPA TO-10A
	EPA TO-4A
PCB-1254	EPA TO-10A
	EPA TO-4A
PCB-1260	EPA TO-10A
	EPA TO-4A

Serial No.: 50491

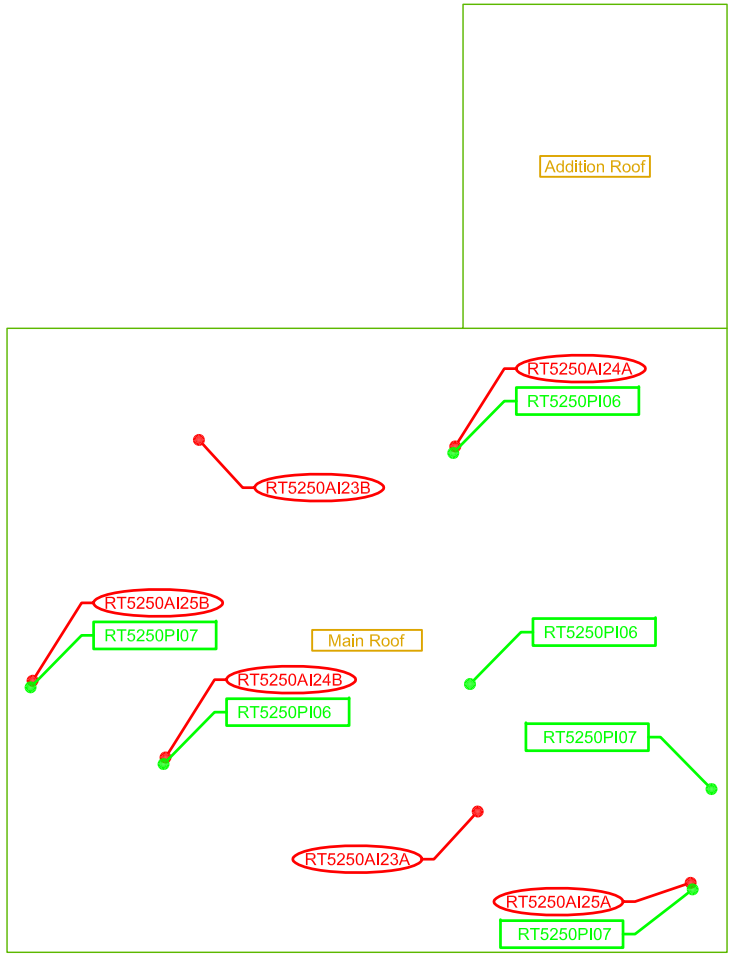
Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

APPENDIX B

SAMPLE LOCATION PLANS



FIRST FLOOR PLAN
Scale: NTS



ROOF PLAN
Scale: NTS

LEGEND :

RT5250AI01A — Suspect Asbestos Sample ID and Approximate Location

RT5250PI01 — Suspect PCB-Containing Caulk Sample ID and Approximate Location

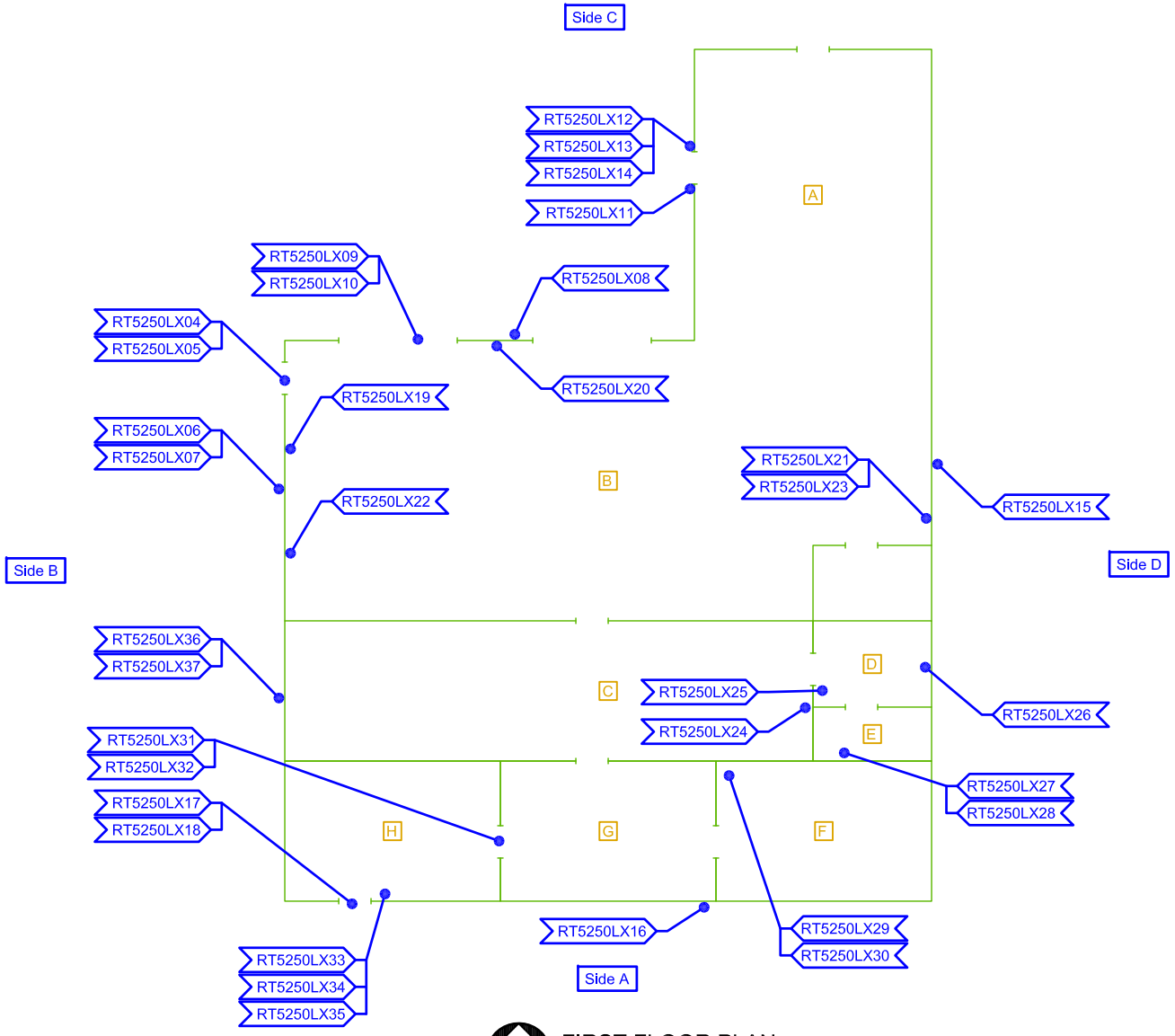
SAMPLE LOCATION PLAN	Drawn By: JDF	Drawing: 1 of 3	Scale: As Noted	Project No.: RT5250	Date : August 2015
Livingston County Highway Department 1920 Buell Street Lima, New York					

ATLANTIC TESTING LABORATORIES, Limited

Albany, NY Binghamton, NY Canton, NY Elmira, NY Poughkeepsie, NY
Plattsburgh, NY Rochester, NY Syracuse, NY Utica, NY Watertown, NY

WBE Certified Company

www.AtlanticTesting.com



FIRST FLOOR PLAN
Scale: NTS

LEGEND :

RT5250LX01 — Suspect Lead Paint XRF Sample ID and Approximate Location

Side A — Side Reference for XRF Test Results

XRF SAMPLE LOCATION PLAN	Drawn By: JDF	Drawing: 2 of 3	Scale: As Noted	Project No.: RT5250	Date : August 2015
Livingston County Highway Department 1920 Buell Street Lima, New York					

ATLANTIC TESTING LABORATORIES, Limited

Albany, NY Binghamton, NY Canton, NY Elmira, NY Poughkeepsie, NY
Plattsburgh, NY Rochester, NY Syracuse, NY Utica, NY Watertown, NY

WBE Certified Company

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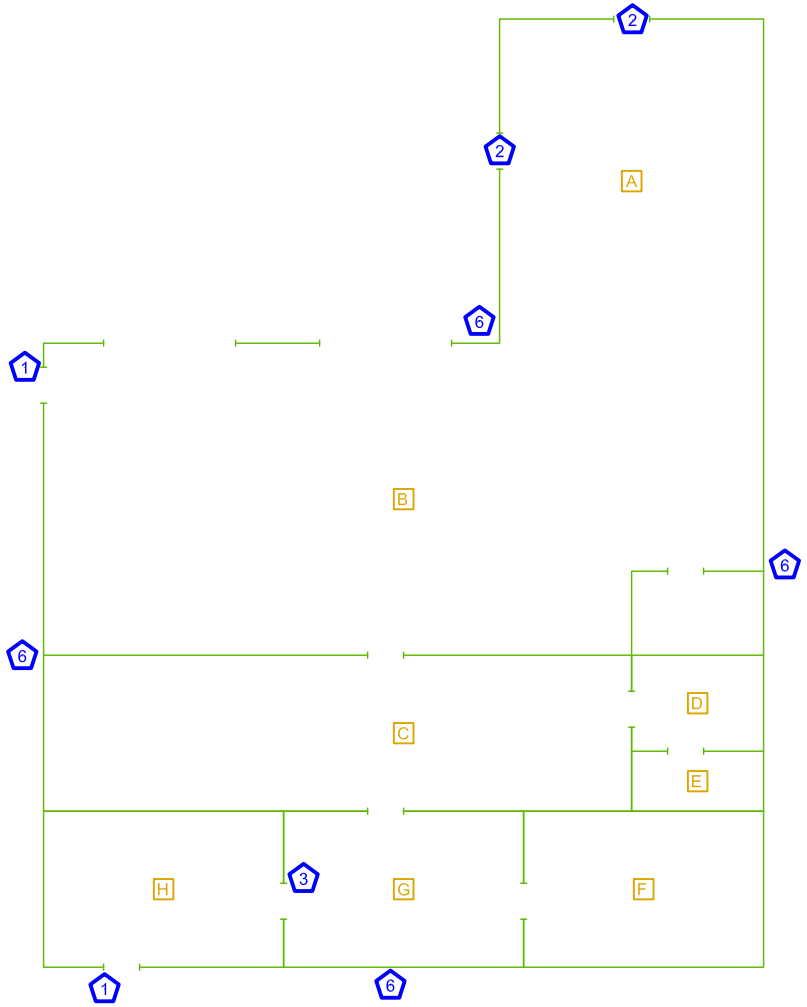
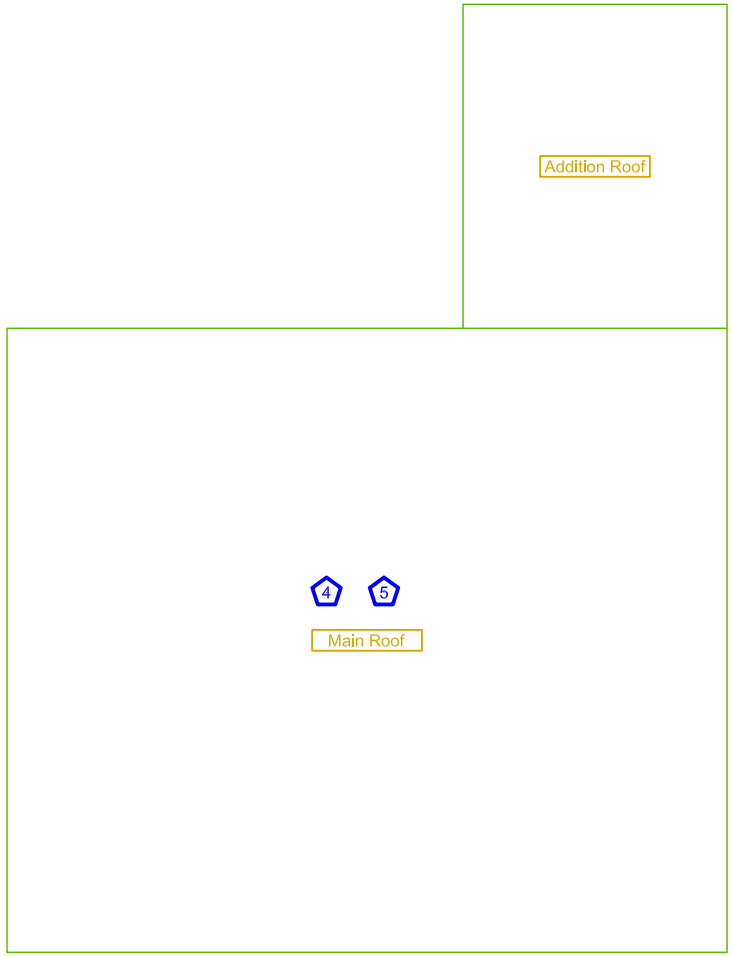


FIRST FLOOR PLAN
Scale: NTS



ROOF PLAN
Scale: NTS

LEGEND :

ASBESTOS KEY NOTES :

1. Asbestos - Containing White Exterior Caulk
2. Asbestos - Containing Cream Exterior Caulk
3. Asbestos - Containing Black Sink Coating
4. Asbestos - Containing Silver Roof Paint
5. Asbestos - Containing Grey Metal Roof Seam Sealant
6. Asbestos - Containing Brown Loose Fill Vermiculite

ASBESTOS MATERIAL LOCATION PLAN	Drawn By: JDF	Drawing: 3 of 3	Scale: As Noted	Project No.: RT5250	Date : August 2015

Livingston County Highway Department
1920 Buell Street
Lima, New York

ATLANTIC TESTING LABORATORIES, Limited
Albany, NY Binghamton, NY Canton, NY Elmira, NY Poughkeepsie, NY
Plattsburgh, NY Rochester, NY Syracuse, NY Utica, NY Watertown, NY
WBE Certified Company
www.AtlanticTesting.com

APPENDIX C

LABORATORY REPORTS AND CUSTODY DOCUMENTATION

AMERI SCI

AmeriSci New York
117 EAST 30TH ST.
NEW YORK, NY 10016
TEL: (212) 679-8600 • FAX: (212) 679-3114

PLM Bulk Asbestos Report

Atlantic Testing Laboratories, Limited
Attn: Andrew Amell
P.O. Box 29

Canton, NY 13617

Date Received 07/29/15 **AmeriSci Job #** 215075816
Date Examined 08/01/15 **P.O. #** 12588 - 91
ELAP # 11480 **Page** 1 **of** 9
RE: RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI01A 1	215075816-01 **Location:** Exterior - White Caulk	***Yes***	1.6 % (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Grey, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile 1.6 % **Other Material:** Non-fibrous 6.2 %			
RT5250AI01B 1	215075816-02 **Location:** Exterior - White Caulk		NA/PS
Analyst Description: Bulk Material **Asbestos Types:** **Other Material:**			
RT5250AI02A 2	215075816-03 **Location:** Exterior - White Caulk	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 29.4 %			
RT5250AI02B 2	215075816-04 **Location:** Exterior - White Caulk	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 23.7 %			
RT5250AI03A 3	215075816-05 **Location:** Exterior - Light Gray Caulk	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Light Grey, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 3.2 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI03B 3	215075816-06 **Location:** Exterior - Light Gray Caulk	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Light Grey, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 7.4 %			
RT5250AI04A 4	215075816-07 **Location:** Exterior - Cream Caulk	***Yes***	2.2 % (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: OffWhite/Grey, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile 2.2 % **Other Material:** Non-fibrous 19 %			
RT5250AI04B 4	215075816-08 **Location:** Exterior - Cream Caulk		NA/PS
Analyst Description: Bulk Material **Asbestos Types:** **Other Material:**			
RT5250AI05A 5	215075816-09 **Location:** Exterior - Beige Caulk	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Beige, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 29.9 %			
RT5250AI05B 5	215075816-10 **Location:** Exterior - Beige Caulk	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Beige, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 44.9 %			
RT5250AI06A 6	215075816-11 **Location:** Exterior Walls - Brown Board	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 3.9 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI06B 6	215075816-12 **Location:** Exterior Walls - Brown Board	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 4 %			
RT5250AI07A 7	215075816-13 **Location:** Ceiling - White Canvas Wrap	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Tan, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 40 %, Non-fibrous 14.6 % **Comment:** Sample Appears to be Non Friable Material.			
RT5250AI07B 7	215075816-14 **Location:** Ceiling - White Canvas Wrap	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Tan, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 40 %, Non-fibrous 17.1 % **Comment:** Sample Appears to be Non Friable Material.			
RT5250AI08A 8	215075816-15 **Location:** C - Brown Insulation Backing	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Brown/Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 2.9 %			
RT5250AI08B 8	215075816-16 **Location:** C - Brown Insulation Backing	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Brown/Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 3 %, Non-fibrous 12.9 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI09A 9	215075816-17 **Location:** Room - White Gypsum Board	***No***	NAD (by NYS ELAP 198.1) by Valeriu Voicu on 08/01/15
Analyst Description: Brown/White, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 15 %, Non-fibrous 85 %			
RT5250AI09B 9	215075816-18 **Location:** Room - White Gypsum Board	***No***	NAD (by NYS ELAP 198.1) by Valeriu Voicu on 08/01/15
Analyst Description: Brown/White, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 20 %, Non-fibrous 80 %			
RT5250AI10A 10	215075816-19 **Location:** G - White Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 21.6 %			
RT5250AI10B 10	215075816-20 **Location:** G - White Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 22.3 %			
RT5250AI11A 11	215075816-21 **Location:** G - White Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 14.8 %			
RT5250AI11B 11	215075816-22 **Location:** H - White Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 23 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI12A 12	215075816-23 **Location:** F - White Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 3 %, Non-fibrous 11 %			
RT5250AI12B 12	215075816-24 **Location:** F - White Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Fibrous glass 2 %, Non-fibrous 31.3 %			
RT5250AI13A 13	215075816-25 **Location:** F - Brown Cork Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 12.4 %			
RT5250AI13B 13	215075816-26 **Location:** F - Brown Cork Ceiling Tile	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 6.7 %			
RT5250AI14A 14	215075816-27 **Location:** F - Black Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 21.8 %			
RT5250AI14B 14	215075816-28 **Location:** F - Black Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 28.7 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI15A 15	215075816-29 **Location:** F - Brown Adhesive	***Yes***	Trace (<0.25 % pc) [1] (EPA 400 PC) by Valeriu Voicu on 08/01/15
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile <0.25 % pc **Other Material:** Non-fibrous 2.5 %			
RT5250AI15B 15	215075816-30 **Location:** G - Brown Adhesive	***Yes***	Trace (<0.25 % pc) (EPA 400 PC) by Valeriu Voicu on 08/01/15
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile <0.25 % pc **Other Material:** Non-fibrous 0.7 %			
RT5250AI16A 16	215075816-31 **Location:** F - Tan Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 7.8 %			
RT5250AI16B 16	215075816-32 **Location:** H - Tan Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 12.4 %			
RT5250AI17A 17	215075816-33 **Location:** F - Silver Foil Paper	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Silver/Tan/Black, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 14.1 %			
RT5250AI17B 17	215075816-34 **Location:** G - Silver Foil Paper	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Silver/Tan/Black, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 11.8 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI18A 18	215075816-35 **Location:** G - Black Sink Coating	***Yes***	1.5 % (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile 1.5 % **Other Material:** Non-fibrous 4.3 %			
RT5250AI18B 18	215075816-36 **Location:** G - Black Sink Coating		NA/PS
Analyst Description: Bulk Material **Asbestos Types:** **Other Material:**			
RT5250AI19A 19	215075816-37 **Location:** F - White Gypsum Board	***No***	NAD (by NYS ELAP 198.1) by Valeriu Voicu on 08/01/15
Analyst Description: Brown/White, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 15 %, Fibrous glass Trace, Non-fibrous 85 %			
RT5250AI19B 19	215075816-38 **Location:** G - White Gypsum Board	***No***	NAD (by NYS ELAP 198.1) by Valeriu Voicu on 08/01/15
Analyst Description: Brown/White, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 10 %, Non-fibrous 90 %			
RT5250AI20A 20	215075816-39 **Location:** G - Cream Countertop	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Cream/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 0.5 %			
RT5250AI20B 20	215075816-40 **Location:** G - Cream Countertop	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Cream/Brown, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 1.9 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI21A 21	215075816-41 **Location:** F - Tan Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 16.1 %			
RT5250AI21B 21	215075816-42 **Location:** H - Tan Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 10.3 %			
RT5250AI22A 22	215075816-43 **Location:** H - Tan Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 0.5 %			
RT5250AI22B 22	215075816-44 **Location:** H - Tan Adhesive	***No***	NAD (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 1.6 %			
RT5250AI23A 23	215075816-45 **Location:** Roof - Silver Paint	***Yes***	5.7 % (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Silver, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile 5.7 % **Other Material:** Non-fibrous 48.4 %			
RT5250AI23B 23	215075816-46 **Location:** Roof - Silver Paint		NA/PS
Analyst Description: Bulk Material **Asbestos Types:** **Other Material:**			

See Reporting notes on last page

PLM Bulk Asbestos Report

RT5250; Livingston County Highway Department; 1920 Buell Street

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
RT5250AI24A 24	215075816-47 **Location:** Roof - Black Sealant	***Yes***	5.5 % (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile 5.5 % **Other Material:** Non-fibrous 12.5 %			
RT5250AI24B 24	215075816-48 **Location:** Roof - Black Sealant		NA/PS
Analyst Description: Bulk Material **Asbestos Types:** **Other Material:**			
RT5250AI25A 25	215075816-49 **Location:** Roof - Gray Seam Sealant	***Yes***	Trace (<0.25 % pc) [1] (EPA 400 PC) by Valeriu Voicu on 08/01/15
Analyst Description: Grey, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile <0.25 % pc **Other Material:** Non-fibrous 4.1 %			
RT5250AI25B 25	215075816-50 **Location:** Roof - Gray Seam Sealant	***Yes***	3.2 % (by NYS ELAP 198.6) by Valeriu Voicu on 08/01/15
Analyst Description: Grey/Black, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** Chrysotile 3.2 % **Other Material:** Non-fibrous 26.9 %			

Reporting Notes:

(1) Sample prepared for analysis by ELAP 198.6 method

Analyzed by: Valeriu Voicu _____

*NAD/NSD =no asbestos detected; NA =not analyzed; NA/PS=not analyzed/positive stop; PLM Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP 200546-0), ELAP PLM Method 198.1 for NY friable samples, which includes the identification and quantitation of vermiculite or 198.6 for NOB samples or EPA 400 pt ct by EPA 600/M4-82-020 (NY ELAP Lab 11480); Note:PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that car be used to determine if this material can be considered or treated as non asbestos-containing in NY State (also see EPA Advisory for floor tile, FR 59,146,38970,8/1/94) National Institute of Standards and Technology Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the lab.This PLM report relates ONLY to the items tested. AIHA-LAP, LLC Lab ID 102843, RI Cert AAL-094, CT Cert PH-0186, Mass Cert AA000054.

Reviewed By:_____

_____END OF REPORT_____

AmeriSci Job #: **215075816**

Client Name: Atlantic Testing Laboratories, Limited

Table I
Summary of Bulk Asbestos Analysis Results

RT5250; Livingston County Highway Department; 1920 Buell Street

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
01	RT5250AI01A	1	0.192	17.2	75.0	7.8	Chrysotile 1.6	NA
Location: Exterior - White Caulk								
02	RT5250AI01B	1	0.210	14.3	57.6	28.1	NA/PS	NA
Location: Exterior - White Caulk								
03	RT5250AI02A	2	0.126	57.9	12.7	29.4	NAD	NAD
Location: Exterior - White Caulk								
04	RT5250AI02B	2	0.114	75.4	0.9	23.7	NAD	NAD
Location: Exterior - White Caulk								
05	RT5250AI03A	3	0.374	68.2	28.6	3.2	NAD	NAD
Location: Exterior - Light Gray Caulk								
06	RT5250AI03B	3	0.136	27.2	65.4	7.4	NAD	NAD
Location: Exterior - Light Gray Caulk								
07	RT5250AI04A	4	0.198	26.3	52.5	19.0	Chrysotile 2.2	NA
Location: Exterior - Cream Caulk								
08	RT5250AI04B	4	0.204	20.6	66.7	12.7	NA/PS	NA
Location: Exterior - Cream Caulk								
09	RT5250AI05A	5	0.197	48.2	21.8	29.9	NAD	NAD
Location: Exterior - Beige Caulk								
10	RT5250AI05B	5	0.127	52.8	2.4	44.9	NAD	NAD
Location: Exterior - Beige Caulk								
11	RT5250AI06A	6	0.180	93.9	2.2	3.9	NAD	NAD
Location: Exterior Walls - Brown Board								
12	RT5250AI06B	6	0.125	86.4	9.6	4.0	NAD	NAD
Location: Exterior Walls - Brown Board								
13	RT5250AI07A	7	0.196	44.9	0.5	54.6	NAD	NAD
Location: Ceiling - White Canvas Wrap								
14	RT5250AI07B	7	0.238	40.8	2.1	57.1	NAD	NAD
Location: Ceiling - White Canvas Wrap								
15	RT5250AI08A	8	0.165	84.8	7.3	7.9	NAD	NAD
Location: C - Brown Insulation Backing								
16	RT5250AI08B	8	0.296	59.8	24.3	15.9	NAD	NAD
Location: C - Brown Insulation Backing								

See Reporting notes on last page

Table I
Summary of Bulk Asbestos Analysis Results
RT5250; Livingston County Highway Department; 1920 Buell Street

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
17	RT5250AI09A	9	----	----	----	----	NAD	NA
Location: Room - White Gypsum Board								
18	RT5250AI09B	9	----	----	----	----	NAD	NA
Location: Room - White Gypsum Board								
19	RT5250AI10A	10	0.190	73.7	4.7	21.6	NAD	NAD
Location: G - White Ceiling Tile								
20	RT5250AI10B	10	0.256	72.3	5.5	22.3	NAD	NAD
Location: G - White Ceiling Tile								
21	RT5250AI11A	11	0.237	78.1	7.2	14.8	NAD	NAD
Location: G - White Ceiling Tile								
22	RT5250AI11B	11	0.225	30.2	41.8	28.0	NAD	NAD
Location: H - White Ceiling Tile								
23	RT5250AI12A	12	0.308	58.4	27.6	14.0	NAD	NAD
Location: F - White Ceiling Tile								
24	RT5250AI12B	12	0.216	29.2	37.5	33.3	NAD	NAD
Location: F - White Ceiling Tile								
25	RT5250AI13A	13	0.137	86.9	0.7	12.4	NAD	NAD
Location: F - Brown Cork Ceiling Tile								
26	RT5250AI13B	13	0.119	92.4	0.8	6.7	NAD	NAD
Location: F - Brown Cork Ceiling Tile								
27	RT5250AI14A	14	0.119	48.7	29.4	21.8	NAD	NAD
Location: F - Black Adhesive								
28	RT5250AI14B	14	0.171	34.5	36.8	28.7	NAD	NAD
Location: F - Black Adhesive								
29	RT5250AI15A	15	0.121	66.1	31.4	2.4	Chrysotile <0.25	Chrysotile Trace
Location: F - Brown Adhesive								
30	RT5250AI15B	15	0.153	71.2	28.1	0.6	Chrysotile <0.25	Chrysotile Trace
Location: G - Brown Adhesive								
31	RT5250AI16A	16	0.090	83.3	8.9	7.8	NAD	NAD
Location: F - Tan Adhesive								
32	RT5250AI16B	16	0.266	77.8	9.8	12.4	NAD	NAD
Location: H - Tan Adhesive								

See Reporting notes on last page

Table I
Summary of Bulk Asbestos Analysis Results
RT5250; Livingston County Highway Department; 1920 Buell Street

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
33	RT5250AI17A	17	0.255	75.7	10.2	14.1	NAD	NAD
Location: F - Silver Foil Paper								
34	RT5250AI17B	17	0.102	81.5	6.8	11.8	NAD	NAD
Location: G - Silver Foil Paper								
35	RT5250AI18A	18	0.121	18.2	76.0	4.3	Chrysotile 1.5	NA
Location: G - Black Sink Coating								
36	RT5250AI18B	18	0.258	20.9	71.7	7.4	NA/PS	NA
Location: G - Black Sink Coating								
37	RT5250AI19A	19	----	----	----	----	NAD	NA
Location: F - White Gypsum Board								
38	RT5250AI19B	19	----	----	----	----	NAD	NA
Location: G - White Gypsum Board								
39	RT5250AI20A	20	0.207	92.8	6.8	0.5	NAD	NAD
Location: G - Cream Countertop								
40	RT5250AI20B	20	0.159	94.3	3.8	1.9	NAD	NAD
Location: G - Cream Countertop								
41	RT5250AI21A	21	0.236	75.0	8.9	16.1	NAD	NAD
Location: F - Tan Adhesive								
42	RT5250AI21B	21	0.562	87.2	2.5	10.3	NAD	NAD
Location: H - Tan Adhesive								
43	RT5250AI22A	22	0.194	90.7	8.8	0.5	NAD	NAD
Location: H - Tan Adhesive								
44	RT5250AI22B	22	0.184	91.8	6.5	1.6	NAD	NAD
Location: H - Tan Adhesive								
45	RT5250AI23A	23	0.185	41.6	4.3	48.4	Chrysotile 5.7	NA
Location: Roof - Silver Paint								
46	RT5250AI23B	23	0.152	39.5	9.9	50.7	NA/PS	NA
Location: Roof - Silver Paint								
47	RT5250AI24A	24	0.239	52.3	29.7	12.5	Chrysotile 5.5	NA
Location: Roof - Black Sealant								
48	RT5250AI24B	24	0.425	52.9	30.8	16.2	NA/PS	NA
Location: Roof - Black Sealant								

See Reporting notes on last page

Table I
Summary of Bulk Asbestos Analysis Results
RT5250; Livingston County Highway Department; 1920 Buell Street

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
49	RT5250AI25A	25	0.098	62.2	33.7	4.1	Chrysotile <0.25	NA
Location:	Roof - Gray Seam Sealant							
50	RT5250AI25B	25	0.329	24.3	45.6	30.1	Chrysotile 3.2	NA
Location:	Roof - Gray Seam Sealant							

Analyzed by: Madell E. Collins; Date Analyzed 8/3/2015

**Quantitative Analysis (Semi/Full); Bulk Asbestos Analysis - PLM by EPA 600/M4-82-020 per 40 CFR or ELAP 198.1 for New York friable samples or ELAP 198.6 for New York NOB samples; TEM (Semi/Full) by EPA 600/R-93/116 (not covered by NVLAP Bulk accreditation) or ELAP 198.4; for New York samples; NAD = no asbestos detected during a quantitative analysis; NA = not analyzed; Trace = <1%; Quantitation for beginning weights of <0.1 grams should be considered as qualitative only; Qualitative Analysis: Asbestos analysis results of "Present" or "NVA = No Visible Asbestos" represents results for Qualitative PLM or TEM Analysis only (no accreditation coverage available from any regulatory agency for qualitative analyses): NVLAP 200546-0, NYSDOH ELAP Lab 11480, AIHA Lab 102843.

Warning Note: PLM limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris for which PLM evaluation is recommended (i.e. soils and other heterogenous materials).

Reviewed By:_____

ATLANTIC TESTING LABORATORIES

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

12588

Albany 22 Corporate Drive, Clifton Park, NY 12065, 518/383-9144 (T), 518/383-9166 (F)
Binghamton 126 Park Avenue, Binghamton, NY 13903, 607/773-1812 (T), 607/773-1835 (F)
Canton 6431 U.S. Highway 11, Canton, NY 13617, 315/386-4578 (T), 315/386-1012 (F)
Elmira 2330 Route 352, Elmira, NY 14903, 607/737-0700 (T), 607/737-0714 (F)
Plattsburgh 130 Arizona Ave, Plattsburgh, NY 12903, 518/563-5878 (T), 518/562-1321 (F)
Poughkeepsie 251 Upper North Road, Highland, NY 12528, 845/691-6098 (T), 845/691-6099 (F)
Rochester 3445 Winton Place, Rochester, NY 14623, 585/427-9020 (T), 585/427-9021 (F)
Syracuse 6085 Court Street Road, Syracuse, NY 13206, 315/699-5281 (T), 315/699-3374 (F)
Utica 301 St. Anthony Street, Utica, NY 13501, 315/735-3309 (T), 315/735-0742 (F)
Watertown 26581 NYS Route 283, Watertown, NY 13601, 315/786-7887 (T), 315/786-2022 (F)

Project No.	Project Name	Date Collected
RT5250	Livingston County Highway Department	07/22/15 Page 1 of 4
Project Contact:	Andrew Ameli	
Project Location:	1920 Buell Street	

Laboratory Instructions

Turn-Around-Time: ☐ 12hr ☐ 24hr ☐ 48hr ☐ 72hr ☑ 5day ☐

Special Instructions: ☑ Positive Stop Analysis ☐ If negative by PLM-NOB, analyze by TEM-NOB ☐ Other

Report Distribution

Send Reports To (ATL Office): Syracuse Rochester

ATL Contact: A. Ameli

Send Copy To: ameriscript@atlantictesting.com

Email Results: ☑ YES ☐ NO

Field Sample No.	Sample Location	Sample Description	Analysis Requested: PLM	PLM-NOB	TEM-NOB	TEM-ONLY	MICRO-VAC	Laboratory Sample ID No.
RT5250AI01A	Exterior	White Caulk		X	X		#21507581	
RT5250AI01B	Exterior	White Caulk		X	X			
RT5250AI02A	Exterior	White Caulk		X	X			
RT5250AI02B	Exterior	White Caulk		X	X			
RT5250AI03A	Exterior	Light Grey Caulk		X	X			
RT5250AI03B	Exterior	Light Grey Caulk		X	X			
RT5250AI04A	Exterior	Cream Caulk		X	X			
RT5250AI04B	Exterior	Cream Caulk		X	X			
RT5250AI05A	Exterior	Beige Caulk		X	X			
RT5250AI05B	Exterior	Beige Caulk		X	X			
RT5250AI06A	Exterior Walls	Brown Board		X	X			
RT5250AI06B	Exterior Walls	Brown Board		X	X			
RT5250AI07A	Ceiling	White Canvas Wrap	X					

Sampler's Name:	Andrew Ameli	Date:	07/22/15
Sampler's Signature:		Time:	1400

Received at Laboratory (Name):	Ben Horne	Date:	7/29/15
Laboratory Signature:		Time:	1025

Shipment Rec'd Intact ☐ YES ☐ NO

Samples Relinquished By:			Samples Received By:			Field and Laboratory Remarks:
Name:	Andrew Ameli	Date: 07/22/15	Name:		Date:	
Signature:		Time: 1700	Signature:		Time:	
Name:		Date:	Name:		Date:	
Signature:		Time:	Signature:		Time:	

Think Quality

Distribution: White with Samples
Yellow to Laboratory
Pink to ATL Files

ATLANTIC TESTING LABORATORIES

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

12589

Albany 22 Corporate Drive, Clifton Park, NY 12065, 518/383-9144 (T), 518/383-9166 (F)
Binghamton 126 Park Avenue, Binghamton, NY 13903, 607/773-1812 (T), 607/773-1835 (F)
Canton 6431 U.S. Highway 11, Canton, NY 13617, 315/386-4578 (T), 315/386-1012 (F)
Elmira 2330 Route 352, Elmira, NY 14903, 607/737-0700 (T), 607/737-0714 (F)
Plattsburgh 130 Arizona Ave, Plattsburgh, NY 12903, 518/563-5878 (T), 518/562-1321 (F)
Poughkeepsie 251 Upper North Road, Highland, NY 12528, 845/691-6098 (T), 845/691-6099 (F)
Rochester 3445 Winton Place, Rochester, NY 14623, 585/427-9020 (T), 585/427-9021 (F)
Syracuse 6085 Court Street Road, Syracuse, NY 13206, 315/699-5281 (T), 315/699-3374 (F)
Utica 301 St. Anthony Street, Utica, NY 13501, 315/735-3309 (T), 315/735-0742 (F)
Watertown 26581 NYS Route 283, Watertown, NY 13601, 315/786-7887 (T), 315/786-2022 (F)

Project No.	Project Name	Date Collected
RTS250	Livingston County Highway Department	07/22/15 Page 2 of 4
Project Contact:	Andrew Arrell	
Project Location:	1920 Buell Street	

Laboratory Instructions

Turn-Around-Time: ☐ 12hr ☐ 24hr ☐ 48hr ☐ 72hr ☒ 5day ☐

Special Instructions: ☒ Positive Stop Analysis ☒ If negative by PLM-NOB, analyze by TEM-NOB ☐ Other _____

Report Distribution

Send Reports To (ATL Office): Rochester
ATL Contact: A. Arrell
Send Copy To: amerisciart@atlantictesting.com
Fax Results: ☒ YES ☐ NO

Field Sample No.	Sample Location	Sample Description	PLM	PLM-NOB	TEM-NOB	TEM-ONLY	MICRO-VAC	Laboratory Sample ID No.
RTS250AI07B	Ceiling	White Canvas Wrap	X					
RTS250AI08A	C	Brown Insulation Backing	X	X	X			
RTS250AI08B	C	Brown Insulation Backing	X	X	X			
RTS250AI09A	Room	White Gypsum Board	X					#2150158 16
RTS250AI09B	Room	White Gypsum Board	X					
RTS250AI10A	G	White Ceiling Tile		X	X			
RTS250AI10B	G	White Ceiling Tile		X	X			
RTS250AI11A	G	White Ceiling Tile		X	X			
RTS250AI11B	H	White Ceiling Tile		X	X			
RTS250AI12A	F	White Ceiling Tile		X	X			
RTS250AI12B	F	White Ceiling Tile		X	X			
RTS250AI13A	F	Brown Cork Ceiling Tile		X	X			
RTS250AI13B	F	Brown Cork Ceiling Tile		X	X			

Sampler's Name:	Andrew Arrell	Date:	07/22/15
Sampler's Signature:		Time:	1401
Received at Laboratory (Name):	Ben Horne	Date:	7/24/15
Laboratory Signature:		Time:	1025

Shipment Rec'd Intact: ☐ YES ☐ NO

Samples Relinquished By:				Samples Received By:				Field and Laboratory Remarks:
Name:	Andrew Arrell	Date:	07/22/15	Name:		Date:		
Signature:		Time:	1700	Signature:		Time:		
Name:		Date:		Name:		Date:		
Signature:		Time:		Signature:		Time:		

Think Quality

Distribution: White with Samples
Yellow to Laboratory
Pink to ATL Files

ATLANTIC TESTING LABORATORIES

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

12590

Albany
22 Corporate Drive
Clifton Park, NY 12065
518/383-9144 (T)
518/383-9166 (F)

Binghamton
126 Park Avenue
Binghamton, NY 13903
607/773-1812 (T)
607/773-1835 (F)

Canton
6431 U.S. Highway 11
Canton, NY 13617
315/386-4578 (T)
315/386-1012 (F)

Elmira
2330 Route 352
Elmira, NY 14903
607/737-0700 (T)
607/737-0714 (F)

Plattsburgh
130 Arizona Ave
Plattsburgh, NY 12903
518/563-5878 (T)
518/562-1321 (F)

Poughkeepsie
251 Upper North Road
Highland, NY 12528
845/691-6098 (T)
845/691-6099 (F)

Rochester
3445 Winton Place
Rochester, NY 14623
585/427-9020 (T)
585/427-9021 (F)

Syracuse
6085 Court Street Road
Syracuse, NY 13206
315/699-5281 (T)
315/699-3374 (F)

Utica
301 St. Anthony Street
Utica, NY 13501
315/735-3309 (T)
315/735-0742 (F)

Watertown
26581 NYS Route 283
Watertown, NY 13601
315/786-7887 (T)
315/786-2022 (F)

Project No.	Project Name	Date Collected
RTS250	Livingston County Highway Department	07/22/15 Page 3 of 4
Project Contact:	Andrew Amell	
Project Location:	1920 Buell Street	

Laboratory Instructions

Turn-Around-Time: ☐ 12hr ☐ 24hr ☐ 48hr ☐ 72hr ☒ 5day ☐

Special Instructions: ☒ Positive Stop Analysis ☒ If negative by PLM-NOB, analyze by TEM-NOB ☐ Other _____

Report Distribution

Send Reports To (ATL Office): Rochester

ATL Contact: A. Amell

Send Copy To: amyltscirt@atlantictesting.com

e-mail Fax Results: ☒ YES ☐ NO

Field Sample No.	Sample Location	Sample Description	Analysis Requested: PLM	PLM-NOB	TEM-NOB	TEM-ONLY	MICRO-VAC	Laboratory Sample ID No.
RTS250AI14A	F	Black Adhesive		X	X			#21507581 6
RTS250AI14B	F	Black Adhesive		X	X			
RTS250AI15A	F	Brown Adhesive		X	X			
RTS250AI15B	G	Brown Adhesive		X	X			
RTS250AI16A	F	Tan Adhesive		X	X			
RTS250AI16B	H	Tan Adhesive		X	X			
RTS250AI17A	F	Silver foil Paper		X	X			
RTS250AI17B	G	Silver foil Paper		X	X			
RTS250AI18A	G	Black Sink Caulk		X	X			
RTS250AI18B	G	Black Sink Caulk		X	X			
RTS250AI19A	F	White Gypsum Board	X					
RTS250AI19B	G	White Gypsum Board	X					
RTS250AI20A	G	Cream Countertop						

Sampler's Name:	Andrew Amell	Date:	07/22/15
Sampler's Signature:		Time:	1900

Received at Laboratory (Name):	Ben Hong	Date:	7/29/15
Laboratory Signature:		Time:	1025

Shipment Rec'd Intact ☐ YES ☐ NO

Samples Relinquished By:

Name:	Andrew Amell	Date:	07/27/15
Signature:		Time:	1700
Name:		Date:	
Signature:		Time:	

Samples Received By:

Name:		Date:	
Signature:		Time:	
Name:		Date:	
Signature:		Time:	

Field and Laboratory Remarks:

Think Quality

Distribution: White with Samples
Yellow to Laboratory
Pink to ATL Files

ATLANTIC TESTING LABORATORIES

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

12591

Albany 22 Corporate Drive Clifton Park, NY 12065 518/383-9144 (T) 518/383-9166 (F)

Binghamton 126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F)

Canton 6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-1012 (F)

Elmira 2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F)

Plattsburgh 130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F)

Poughkeepsie 251 Upper North Road Highland, NY 12528 845/691-6098 (T) 845/691-6099 (F)

Rochester 3445 Winton Place Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)

Syracuse 6085 Court Street Road Syracuse, NY 13206 315/699-5281 (T) 315/699-3374 (F)

Utica 301 St. Anthony Street Utica, NY 13501 315/735-3309 (T) 315/735-0742 (F)

Watertown 26581 NYS Route 283 Watertown, NY 13601 315/786-7887 (T) 315/786-2022 (F)

Project No.	Project Name	Date Collected
RTS250	Livingston County Highway Department	07/22/15 Page 4 of 4
Project Contact:	Andrew Amell	
Project Location:	1920 Buell Street	

Laboratory Instructions

Turn-Around-Time: ☐ 12hr ☐ 24hr ☐ 48hr ☐ 72hr ☒ 5day ☐

Special Instructions: ☒ Positive Stop Analysis ☒ If negative by PLM-NOB, analyze by TEM-NOB ☐ Other _____

Report Distribution

Send Reports To (ATL Office): Rochester

ATL Contact: A. Amell

Send Copy To: amerisciRTC@atlantictesting.com

email Fax Results: ☒ YES ☐ NO

Field Sample No.	Sample Location	Sample Description	Analysis Requested: PLM	PLM-NOB	TEM-NOB	TEM-ONLY	MICRO-VAC	Laboratory Sample ID No.
RTS250AI20B	G	Cream Countertop		X	X			
RTS250AI21A	F	Tan Adhesive		X	X			
RTS250AI21B	H	Tan Adhesive		X	X		#2150158 16	
RTS250AI22A	H	Tan Adhesive		X	X			
RTS250AI22B	H	Tan Adhesive		X	X			
RTS250AI23A	Roof	Silver Paint		X	V			
RTS250AI23B	Roof	Silver Paint		X	X			
RTS250AI24A	Roof	Black Sealant		X	X			
RTS250AI24B	Roof	Black Sealant		X	X			
RTS250AI25A	Roof	Gry Seam Sealant		X	X			
RTS250AI25B	Roof	Gry Seam Sealant		X	X			

Sampler's Name: Andrew Amell — Date: 07/22/15 — Time: 1400

Sampler's Signature:

Received at Laboratory (Name): Ben Hong — Date: 7/29/15 — Time: 1025

Laboratory Signature:

Shipment Rec'd Intact ☐ YES ☐ NO

Samples Relinquished By:

Name: Andrew Amell — Date: 07/22/15 — Time: 1700

Signature:

Name: — Date: — Time:

Signature:

Samples Received By:

Name: — Date: — Time:

Signature:

Name: — Date: — Time:

Signature:

Field and Laboratory Remarks:

Think Quality

Distribution: White with Samples
Yellow to Laboratory
Pink to ATL Files

Date Issued: August 07, 2015

Pace Analytical e-Report

Report prepared for:
ATLANTIC TESTING LABORATORIES, LTD
22 CORPORATE DR
CLIFTON PARK, NY 12065
CONTACT: ANDREW AMELL

Project ID: 1920 BUELL STREET RT5250
Sampling Date(s): July 22, 2015
Lab Report ID: 15070598
Client Service Contact: Chelsea Farmer (518) 346-4592 ext. 3843

Analysis Included:
PCB Analysis

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Roy Smith
Technical Director

Certifications: New York (EPA: NY00906, ELAP: 11078), New Jersey (NY026), Connecticut (PH-0337), Massachusetts (M-NY906), Virginia (1884)

Pace Analytical Services, Inc.| 2190 Technology Drive | Schenectady, NY 12308
Phone: 518.346.4592 | internet: www.pacelabs.com

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Table of Contents

CASE NARRATIVE

August 07, 2015

CASE NARRATIVE

This data package (SDG ID: 15070598) consists of 7 caulk samples received on 07/24/2015. The samples are from Project Name: 1920 BUELL STREET RT5250.

This sample delivery group consists of the following samples:

Lab Sample ID	Client ID	Collection Date
AS19542	RT5250PI01	07/22/2015 12:00
AS19543	RT5250PI02	07/22/2015 12:00
AS19544	RT5250PI03	07/22/2015 12:00
AS19545	RT5250PI04	07/22/2015 12:00
AS19546	RT5250PI05	07/22/2015 12:00
AS19547	RT5250PI06	07/22/2015 12:00
AS19548	RT5250PI07	07/22/2015 13:15

Sample Delivery and Receipt Conditions

(1.) All samples were delivered to the laboratory via FEDEX delivery service on 07/24/2015.
(2.) All samples were received at the laboratory intact and within holding times.
(3.) All samples were received at the laboratory properly preserved, if applicable.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A. Samples were extracted by Soxhlet Extraction Method (EPA - Method 3540C). The following technical and administrative items were noted for the analysis:

(1.) Sample AS19545 was run at a dilution due to matrix interference, and the surrogates DCBP and TCMX were diluted out.

Respectfully submitted,

Nick Nicholas
Project Manager

QUALIFIERS

Definitions

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate was diluted. The analysis of the sample required a dilution such that the surrogate concentration was diluted outside the laboratory acceptance criteria.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be reanalyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

MDL – Adjusted Method Detection Limit.

P - Indicates relative percent difference (RPD) between primary and secondary gas chromatograph (GC) column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary gas chromatograph (GC) column analysis exceeds 25 %.

PQL – Practical Quantitation Limit. PQLs are adjusted for sample weight/volume and dilution factors.

RL - Reporting Limit Denotes lowest analyte concentration reportable for the sample based on regulatory or project specific limits.

U - Denotes analyte not detected at concentration greater than the Practical Quantitation Limit (PQL) or the Reporting Limit (RL) or the Method Detection Limit (MDL) as applicable.

Z - Chromatographic interference due to polychlorinated biphenyl (PCB) co-elution.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY

<15070598P1>
150705981

ATLANTIC TESTING LABORATORIES
Environmental Chain-Of-Custody Record

6860

Albany	Binghamton	Canton	Elmira	Plattsburgh	Poughkeepsie	Rochester	Syracuse	Utica	Watertown
22 Corporate Drive Clifton Park, NY 12065 518/383-9144 (T) 518/383-9166 (F)	126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F)	6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-1012 (F)	2330 Route 352 Corning, NY 14903 607/737-0700 (T) 607/737-0714 (F)	130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F)	251 Upper North Road Highland, NY 12528 845/691-6098 (T) 845/691-6099 (F)	3445 Winton Road Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)	6085 Court Street Road Syracuse, NY 13206 315/699-5281 (T) 315/699-3374 (F)	301 St. Anthony Street Utica, NY 13501 315/735-3309 (T) 315/735-0742 (F)	26581 NYS Route 283 Watertown, NY 13601 315/786-7887 (T) 315/786-2022 (F)

Project No.: RT5250 — Page 1 of 1

Client Name: Livingston County Highway Department

QA/QC Code: ☐ NYSDEC ☐ SW-846 ☐ NYSDOH ☐ CLP ☐ Other

Project Contact: Andrew Awell

Project Name: 1920 Buell Street

Project Location: New York

Parameters: Total PCB

Report Distribution
- Dates Required: 2-Week TAT
- Send Report To: amerscipte atlantictesting.com
- Email ~~Fax~~ Results: ☑ YES ☐ NO
- Custody Seal X = intact

Date	Time	Sample Location	Sample Type	No. of Containers	Total PCB	Laboratory Identification No.	Field Notes
07/22/15	1200	RT5250PI01	G/ck	3	X	AS19542	
07/22/15	1200	RT5250PI02	G/ck	3	X	AS19543 (7/24/15 TAR)	
07/22/15	1200	RT5250PI03	G/ck	3	X	AS19544	
07/22/15	1200	RT5250PI04	G/ck	3	X	AS19545	
07/22/15	1200	RT5250PI05	G/ck	3	X	AS19546	
07/22/15	1200	RT5250PI06	G/ck	3	X	AS19547 (7/24/15 SPAN)	
07/22/15	1315	RT5250PI07	G/ck	3	X	AS19548	

Samplers Name: Andrew Awell
Samplers Signature:
Date: 07/22/15 **Time:** 1400

Received for Name:
Laboratory Signature:
Date: **Time:**

Shipment Rec'd Intact? ☑ YES ☐ NO

Samples Relinquished By:

Name	Signature	Date	Time
Andrew Awell	[signature]	07/23/15	15:40
James Murphy	[signature]	7/23/15	15:40

Samples Received By:

Name	Signature	Date	Time
James Murphy	[signature]	7/23/15	15:40
Via FedEx Patricia Nguyen	[signature]	7/24/15	9:35

Sample Type Code Key:

Description		Matrix	
C	Composite	DW	Drinking Water
G	Grab	GW	Groundwater
Q	QA/QC	O	Oil
O	Other	S	Soil
		SL	Sludge
		WW	Wastewater

Laboratory Remarks: COC Seal (Y) Temp: 1.4°C

Think Quality

Distribution: White with Samples, Yellow to Laboratory, Pink to ATL Files

* Please homogenize the (3) containers in to equal parts to form one composite sample *

ENV-001B
pdrive:Forms\Environmental\OfficeForms\Environmental Chain-Of-Custody Record

<15070598P2>

150705982

Sample Condition Upon Receipt

CLIENT NAME: ATL

PROJECT: RT 5250

COURIER: FedEx ☒ UPS ☐ Client ☐ Pace ☐ Other ☐

TRACKING # 460702348 1783

CUSTODY SEAL PRESENT: Yes ☒ No ☐ INTACT: Yes ☒ No ☐ N/A ☐

PACKING MATERIAL: Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other ☐ ICE USED: Wet ☒ Blue ☐ None ☐

THERMOMETER USED: #164 ☐ IR Gun 03 ☒ #122087967 ☐ COOLER TEMPERATURE (°C): 1.4°C

BIOLOGICAL TISSUE IS FROZEN: Yes ☐ No ☐ N/A ☒ Temp should be above freezing to 6°C

COMMENTS: Temperature is Acceptable? ☒ Yes ☐ No

Chain of Custody Present:	☒ Yes	☐ No		1.
Chain of Custody Filled Out:	☒ Yes	☐ No		2.
Chain of Custody Relinquished:	☒ Yes	☐ No		3.
Sampler Name / Signature on COC:	☒ Yes	☐ No		4.
Samples Arrived within Hold Time:	☒ Yes	☐ No	7/24/15 MW	5.
Short Hold Time Analysis (<72hr):	☐ Yes	☒ No		6.
Rush Turn Around Time Requested:	☐ Yes	☒ No		7.
Sufficient Volume:	☒ Yes	☐ No		8.
Correct Containers Used:	☒ Yes	☐ No		9.
- Pace Containers Used:	☐ Yes	☒ No		
Containers Intact:	☒ Yes	☐ No		10.
Filtered volume received for Dissolved tests:	☐ Yes	☐ No	☒ N/A	11.
Sample Labels match COC: - Includes date/time/ID/Analysis	☒ Yes	☐ No		12.
All containers needing preservation have been checked:	☐ Yes	☐ No	☒ N/A	13.
All containers needing preservation are in compliance with EPA recommendation: - Exceptions that are not checked: TOC, VOA, Subcontract Analyses	☐ Yes	☐ No	☒ N/A	Initial when completed: N/A Lot # of added preservative: N/A
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present:	☐ Yes	☐ No	☒ N/A	15.
Trip Blank Custody Seals Present:	☐ Yes	☐ No	☒ N/A	
Pace Trip Blank Lot #: N/A				

Sample Receipt form filled in: KAC 7/24/15

Line-Out (Includes Copying Shipping Documents and verifying sample pH): MJW 7/24/15

Log In (Includes notifying PM of any discrepacies and documenting in LIMS): MJW 7/24/15

Labeling (Includes Scanning Bottles and entering LAB IDs into pH logbook): MJW 7/24/15

3

SAMPLE RECEIPT

SAMPLE RECEIPT REPORT
15070598

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

CLIENT: ATLANTIC TESTING LABORATORIES, LTD
PROJECT: 1920 BUELL STREET RT5250
LRF: 15070598
REPORT: ANALYTICAL REPORT
EDD: YES
LRF TAT: 2 WEEK

RECEIVED DATE: 07/24/2015 09:35
SHIPPED VIA: FEDEX
SHIPPING ID: 8070 7348 1783
NUMBER OF COOLERS: 1
CUSTODY SEAL INTACT: YES
COOLER STATUS: CHILLED
TEMPERATURE(S): [5] 1.4(IR) °C

SAMPLE SEALS INTACT: NA
[1,2] SAMPLES PRESERVED PER METHOD GUIDANCE: YES
[3] SAMPLES REC'D IN HOLDTIME: YES
DISPOSAL: BY LAB (45 DAYS)
COC DISCREPANCY: NO

COMMENTS:

CLIENT ID (LAB ID)	TAT-DUE Date[4]	DATE-TIME SAMPLED	MATRIX	METHOD	TEST DESCRIPTION	QC REQUEST
RT5250PI01 (AS19542)	2 WEEK 08-07-15	07/22/2015 12:00	Caulk	EPA 8082A	PCB Analysis	
RT5250PI02 (AS19543)	2 WEEK 08-07-15	07/22/2015 12:00	Caulk	EPA 8082A	PCB Analysis	
RT5250PI03 (AS19544)	2 WEEK 08-07-15	07/22/2015 12:00	Caulk	EPA 8082A	PCB Analysis	
RT5250PI04 (AS19545)	2 WEEK 08-07-15	07/22/2015 12:00	Caulk	EPA 8082A	PCB Analysis	
RT5250PI05 (AS19546)	2 WEEK 08-07-15	07/22/2015 12:00	Caulk	EPA 8082A	PCB Analysis	
RT5250PI06 (AS19547)	2 WEEK 08-07-15	07/22/2015 12:00	Caulk	EPA 8082A	PCB Analysis	
RT5250PI07 (AS19548)	2 WEEK 08-07-15	07/22/2015 13:15	Caulk	EPA 8082A	PCB Analysis	

[1] The pH preservation check of Oil and Grease (Method 1664) and Total Organic Carbon (Method 5310B) are performed as soon as possible after sample receipt and may not be included in this report.
[2] The pH preservation check of aqueous volatile samples is not performed until after the analysis of the sample to maintain zero headspace and is not included in this report.
[3] Samples received for pH analysis are not marked as a hold time exceedance here. SW-846 methods suggests analysis to be done within 15 minutes of sample collection. Because of transportation time it is not possible for the laboratory to perform the test in that time. Sample Certificates of Analysis reports are noted as such.
[4] Samples arriving at the laboratory after 4:00 pm are assigned a due date as if they arrived the following business day unless other arrangements have been made. The due date represents the date the lab report is expected to be completed on or before 5:00 pm (EST) for the date specified.
[5] All samples which require thermal preservation shall be considered acceptable when received greater than 6 degrees Celsius if they are collected on the same day as received and there is evidence that the chilling process has begun, such as arrival on ice.Control limits are between 0-6 Degrees Celsius. Control limits do not apply for metals analysis.
[6] Samples requesting analysis for Orthophosphate (SM 4500-P E-99,-11) require the samples to be filtered in the field within 15 minutes of the sampling event. Samples that are received unfiltered will be noted as not method compliant on the Certificates of Analysis.

Reporting Parameters and Lists

EPA 8082A - PCB Analysis - (ug/g)

Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1262
Aroclor 1268
Total PCB Amount > RL

GC - PCB

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI01
Lab Sample ID: 15070598-01 (AS19542)

Collection Date: 07/22/2015 12:00
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-13	SW-846 8082A (PCB)	07/30/2015 14:02	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	1.50 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1221	11104-28-2	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1232	11141-16-5	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1242	53469-21-9	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1248	12672-29-6	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1254	11097-69-1	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1260	11096-82-5	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1262	37324-23-5	ND	0.333	1.00	U	GC21F-2583-13
Aroclor 1268	11100-14-4	ND	0.333	1.00	U	GC21F-2583-13
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-13

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	96.5	47.0-123		GC21F-2583-13
Decachlorobiphenyl	2051-24-3	53.9	35.0-153		GC21F-2583-13

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI02
Lab Sample ID: 15070598-02 (AS19543)

Collection Date: 07/22/2015 12:00
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-14	SW-846 8082A (PCB)	07/30/2015 14:15	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	0.597 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1221	11104-28-2	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1232	11141-16-5	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1242	53469-21-9	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1248	12672-29-6	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1254	11097-69-1	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1260	11096-82-5	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1262	37324-23-5	ND	0.838	1.00	U	GC21F-2583-14
Aroclor 1268	11100-14-4	ND	0.838	1.00	U	GC21F-2583-14
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-14

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	105	47.0-123		GC21F-2583-14
Decachlorobiphenyl	2051-24-3	113	35.0-153		GC21F-2583-14

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI03
Lab Sample ID: 15070598-03 (AS19544)

Collection Date: 07/22/2015 12:00
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-15	SW-846 8082A (PCB)	07/30/2015 14:28	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	1.46 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1221	11104-28-2	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1232	11141-16-5	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1242	53469-21-9	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1248	12672-29-6	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1254	11097-69-1	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1260	11096-82-5	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1262	37324-23-5	ND	0.344	1.00	U	GC21F-2583-15
Aroclor 1268	11100-14-4	ND	0.344	1.00	U	GC21F-2583-15
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-15

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	104	47.0-123		GC21F-2583-15
Decachlorobiphenyl	2051-24-3	70.2	35.0-153		GC21F-2583-15

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI04
Lab Sample ID: 15070598-04 (AS19545)

Collection Date: 07/22/2015 12:00
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-16	SW-846 8082A (PCB)	07/30/2015 14:41	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	1.51 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1221	11104-28-2	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1232	11141-16-5	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1242	53469-21-9	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1248	12672-29-6	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1254	11097-69-1	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1260	11096-82-5	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1262	37324-23-5	ND	3.30	10.0	U	GC21F-2583-16
Aroclor 1268	11100-14-4	ND	3.30	10.0	U	GC21F-2583-16
Total PCB Amount > RL	1336-36-3	ND		10.0	U	GC21F-2583-16

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	97.1	47.0-123	D	GC21F-2583-16
Decachlorobiphenyl	2051-24-3	49.7	35.0-153	D	GC21F-2583-16

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
Sample ran at a dilution due to matrix interference.

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI05
Lab Sample ID: 15070598-05 (AS19546)

Collection Date: 07/22/2015 12:00
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-21	SW-846 8082A (PCB)	07/30/2015 15:45	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	1.51 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1221	11104-28-2	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1232	11141-16-5	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1242	53469-21-9	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1248	12672-29-6	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1254	11097-69-1	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1260	11096-82-5	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1262	37324-23-5	ND	0.331	1.00	U	GC21F-2583-21
Aroclor 1268	11100-14-4	ND	0.331	1.00	U	GC21F-2583-21
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-21

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	96.0	47.0-123		GC21F-2583-21
Decachlorobiphenyl	2051-24-3	95.9	35.0-153		GC21F-2583-21

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI06
Lab Sample ID: 15070598-06 (AS19547)

Collection Date: 07/22/2015 12:00
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-22	SW-846 8082A (PCB)	07/30/2015 15:58	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	1.49 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1221	11104-28-2	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1232	11141-16-5	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1242	53469-21-9	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1248	12672-29-6	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1254	11097-69-1	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1260	11096-82-5	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1262	37324-23-5	ND	0.336	1.00	U	GC21F-2583-22
Aroclor 1268	11100-14-4	ND	0.336	1.00	U	GC21F-2583-22
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-22

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	98.2	47.0-123		GC21F-2583-22
Decachlorobiphenyl	2051-24-3	67.8	35.0-153		GC21F-2583-22

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: RT5250PI07
Lab Sample ID: 15070598-07 (AS19548)

Collection Date: 07/22/2015 13:15
Sample Matrix: CAULK
Received Date: 07/24/2015 09:35
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-23	SW-846 8082A (PCB)	07/30/2015 16:10	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 14:00	MH	1.48 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1221	11104-28-2	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1232	11141-16-5	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1242	53469-21-9	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1248	12672-29-6	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1254	11097-69-1	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1260	11096-82-5	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1262	37324-23-5	ND	0.337	1.00	U	GC21F-2583-23
Aroclor 1268	11100-14-4	ND	0.337	1.00	U	GC21F-2583-23
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-23

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	85.2	47.0-123		GC21F-2583-23
Decachlorobiphenyl	2051-24-3	82.6	35.0-153		GC21F-2583-23

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Samples (Lab)

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Phone: 518.346.4592
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Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: Method Blank (AS20208B)
Lab Sample ID: PBLK-05

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-5	SW-846 8082A (PCB)	07/30/2015 11:50	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 13:51	MH	10.4 g	25.0 mL	NA

Analyte	CAS No.	Result (ug/g)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1262	37324-23-5	ND	0.0500	1.00	U	GC21F-2583-5
Aroclor 1268	11100-14-4	ND	0.0500	1.00	U	GC21F-2583-5
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC21F-2583-5

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	101	47.0-123		GC21F-2583-5
Decachlorobiphenyl	2051-24-3	113	35.0-153		GC21F-2583-5

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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Quality Control Results
Lab Control Sample (LCS)

Job Number: 15070598

Client: ATLANTIC TESTING LABORATORIES, LTD
Project: 1920 BUELL STREET RT5250
Client Sample ID: Lab Control Sample (AS20208L)
Lab Sample ID: LCS-05

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC21F-2583-6	SW-846 8082A (PCB)	07/30/2015 12:03	AMR	NA	NA	Phenomenex, Zebron ZB-1MS, 20 m, 0.18 mm ID, 0.18 µm
Prep 1:	31613	EPA 3540C	07/29/2015 13:52	MH	10.1 g	25.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/g)	LCS (ug/g)	LCS % Rec.	Q[1]	Limits (%)
Aroclor 1254	11097-69-1	1.24	1.35	109		70.0-130

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
Tetrachloro-meta-xylene	877-09-8	100	47.0-123		GC21F-2583-6
Decachlorobiphenyl	2051-24-3	106	35.0-153		GC21F-2583-6

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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APPENDIX D

SUMMARY OF XRF RESULTS AND CALIBRATION CHECKS

Table D-I
Summary of XRF Test Results - Lead Detected at Less than 1 mg/cm2

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Floor	Room	Result (mg/cm^2)
RT5250LX25	7/22/2015 11:27	Wall	Block	B	Peeling	Blue	RT5250		D	0.08
RT5250LX27	7/22/2015 11:29	Wall	Block	A	Peeling	Light Blue	RT5250		E	0.08

Table D-II
Summary of XRF Test Results - No Lead Detected

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Floor	Room	Result (mg/cm^2)
RT5250LX04	7/22/2015 11:07	Door	Metal	B	Intact	Gray	RT5250	Exterior		< LOD
RT5250LX05	7/22/2015 11:07	Door Frame	Metal	B	Intact	Gray	RT5250	Exterior		< LOD
RT5250LX06	7/22/2015 11:09	Wall	Block	B	Intact	White	RT5250	Exterior		< LOD
RT5250LX07	7/22/2015 11:09	Siding	Metal	B	Intact	Blue	RT5250	Exterior		< LOD
RT5250LX08	7/22/2015 11:10	Siding	Metal	C	Intact	Blue	RT5250	Exterior		< LOD
RT5250LX09	7/22/2015 11:10	Door Frame	Metal	C	Peeling	Dark Gray	RT5250	Exterior		< LOD
RT5250LX10	7/22/2015 11:11	Siding	Metal	C	Intact	White	RT5250	Exterior		< LOD
RT5250LX11	7/22/2015 11:11	Siding	Metal	B	Intact	White	RT5250	Exterior		< LOD
RT5250LX12	7/22/2015 11:12	Door	Metal	B	Peeling	Gray	RT5250	Exterior		< LOD
RT5250LX13	7/22/2015 11:13	Door Frame	Wood	B	Peeling	Yellow	RT5250	Exterior		< LOD
RT5250LX14	7/22/2015 11:13	Door	Wood	B	Peeling	White	RT5250	Exterior		< LOD
RT5250LX15	7/22/2015 11:16	Siding	Metal	D	Intact	Blue	RT5250	Exterior		< LOD
RT5250LX16	7/22/2015 11:17	Siding	Metal	A	Intact	Blue	RT5250	Exterior		< LOD
RT5250LX17	7/22/2015 11:18	Door	Metal	A	Intact	Blue	RT5250	Exterior		< LOD
RT5250LX18	7/22/2015 11:19	Door Frame	Metal	A	Intact	Blue	RT5250	Exterior		< LOD
RT5250LX19	7/22/2015 11:21	I-Beam	Metal	B	Peeling	Dark Gray	RT5250		B	< LOD
RT5250LX20	7/22/2015 11:22	I-Beam	Metal	C	Peeling	Dark Gray	RT5250		B	< LOD
RT5250LX21	7/22/2015 11:22	I-Beam	Metal	D	Peeling	Dark Gray	RT5250		B	< LOD
RT5250LX22	7/22/2015 11:23	Wall	Block	B	Peeling	Light Gray	RT5250		B	< LOD
RT5250LX23	7/22/2015 11:24	Wall	Wood	D	Peeling	White	RT5250		B	< LOD
RT5250LX24	7/22/2015 11:27	Wall	Block	D	Peeling	Blue	RT5250		C	< LOD
RT5250LX26	7/22/2015 11:28	Wall	Wood	D	Peeling	Dark Gray	RT5250		D	< LOD
RT5250LX28	7/22/2015 11:30	Wall	Block	A	Peeling	Navy Blue	RT5250		E	< LOD
RT5250LX29	7/22/2015 11:33	Door	Wood	B	Peeling	Varnish Brown	RT5250		F	< LOD
RT5250LX30	7/22/2015 11:33	Door Frame	Wood	B	Peeling	Varnish Brown	RT5250		F	< LOD
RT5250LX31	7/22/2015 11:37	Door	Wood	D	Intact	Brown	RT5250		H	< LOD
RT5250LX32	7/22/2015 11:37	Door Frame	Wood	D	Intact	Gray	RT5250		H	< LOD
RT5250LX33	7/22/2015 11:38	Window Frame	Wood	A	Peeling	Gray	RT5250		H	< LOD
RT5250LX34	7/22/2015 11:39	Door	Wood	D	Intact	White	RT5250		H	< LOD
RT5250LX35	7/22/2015 11:39	Door Frame	Wood	D	Intact	White	RT5250		H	< LOD
RT5250LX36	7/22/2015 11:49	Soffit	Metal	B	Intact	White	RT5250	Exterior		< LOD
RT5250LX37	7/22/2015 11:50	Roof	Metal	B	Peeling	Silver	RT5250	Exterior		< LOD

Table D-III
Summary of XRF Calibration Results

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Floor	Room	Result (mg/cm^2)
RT5250LX01	7/22/2015 11:03			Calibrate			RT5250			1
RT5250LX02	7/22/2015 11:04			Calibrate			RT5250			1.1
RT5250LX03	7/22/2015 11:05			Calibrate			RT5250			1
RT5250LX38	7/22/2015 11:54			Calibrate			RT5250			1
RT5250LX39	7/22/2015 11:55			Calibrate			RT5250			1
RT5250LX40	7/22/2015 11:55			Calibrate			RT5250			0.9

Attachment 3

Parsons Online Contractor Safety Evaluation Letter

PARSONS

January 2, 2015

To: Parsons Contractor or Sub-Tier Contractor:

Re: Parsons Online Contractor Safety Evaluation (CSE) Program

Thank you for expressing an interest in working on a Parsons project, either as a direct hire contractor or as a sub-tier contractor. In an effort to make sure Parsons is utilizing contractors on their projects that possess the same level of commitment to worker safety as Parsons, all contractors are required to complete the Parsons online CSE Program prior to working on a project, and annually thereafter. When completed, the contractor will be entered into a database for consideration on all projects within Parsons for the remainder of the calendar year. **NOTE:** Even if a contractor completes the CSE Program in December, they will be required to complete the CSE Program in the following year.

In order to access the online CSE Program, click here - https://www.contractorsafetyforms.com.

- For contractors that already created a User Name and Password, go to the Existing Users login. **NOTE:** If you cannot remember your Password, click on the "Forgot Password?" link. An email will be sent to the email address provided during registration. If the email address needs to be updated, or the User Name is not known, please contact the CSE Administrator.
  - Verify responses from the previous year (i.e. company-specific questions) and upload more current documents (i.e. OSHA 300/300A forms, insurance letter/EMR, safety meetings/audits, training records, etc). Save, certify and submit. **NOTE: Submissions without current documents will be rejected and result in an "Incomplete" status.**
- For new contractors, please register as a "New User" to create a Username and Password. Make a note of your User Name and Password for completing the CSE Program next year.
  - **IMPORTANT:** After clicking on "Submit Registration", you must login with the User Name and Password that was just created in order to start the CSE Program. The CSE consists of 13 sections and should take approximately one hour to complete. After the last section (Certification), you will be taken to a final screen to review your responses. **NOTE:** You must "Submit" this page in order to complete the CSE Program.
- Do NOT close or exit the CSE Program without saving data first.

Sub-Tier Contractors: Sub-tier contractors are also required to complete the online CSE Program prior to working on a Parsons project. All contractors must be in the CSE Program database without an "Incomplete" status before they are eligible to work on a Parsons project.

Sincerely,

Gregory H. Beck, CSP
Operations Shared Services
Deputy Safety, Health and Environment Director

Attachment 4

Generic Community Air Monitoring Plan

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see Paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.