

# PRE-DEMOLITION HAZARDOUS BUILDING MATERIALS SURVEY

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598

November 28, 2018



Report Prepared By:



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Report Reviewed By:



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Gregory Donovan  
Certified Project Manager

## PRE-DEMOLITION HAZARDOUS BUILDING MATERIALS SURVEY

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598

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Date:

November 28, 2018

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## 1 INTRODUCTION

Arcadis of New York, Inc. (Arcadis) conducted a Pre-Demolition Hazardous Building Materials Survey (survey) at the Catherine Street Pump Station located on Garden Lane and Old Crompond Road in Yorktown, New York (site).

The objective of the survey was to ascertain the general presence, quantity, and location of asbestos-containing materials (ACMs), lead paint, polychlorinated biphenyls (PCBs), and regulated materials and universal waste at the site. The results of the survey will assist in the preparation of an abatement scope of work and subsequent abatement of identified ACMs, lead paint, PCBs, and regulated materials and universal waste that may be required prior to demolition activities. Arcadis' survey and report are subject to the Limitations and Service Constraints provided in Appendix A.

The survey was conducted from November 7, 2018 by Mr. Brandon Wabble of Arcadis. A copy of Mr. Wabble's accreditations are provided in Appendix B.

## 2 SURVEY METHODOLOGY

### 2.1 Asbestos Survey Approach

Arcadis conducted the pre-demolition asbestos survey of the site for compliance with the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and Part 56 of Title 12 of the Official Compilation of Codes, Rules, and Regulation of the State of New York (cited as 12 NYCRR Part 56).

This was accomplished by initially conducting a visual inspection of the structure and collecting samples of suspect ACM based on these observations. Arcadis conducted the asbestos survey in general accordance with ASTM International (ASTM) E2356 Standard Practice for Comprehensive Building Asbestos Surveys. ASTM E2356 meets the applicable requirements of current United States Environmental Protection Agency (USEPA) NESHAP Standard 40 Code of Federal Regulations (CFR) 61, Subpart M (Asbestos), USEPA Asbestos Hazard Emergency Response Act (AHERA) 40 CFR 763, Subpart E, and Occupational Safety and Health Administration (OSHA) asbestos survey and/or sampling regulations.

The survey included an inspection of the existing pump station providing a general sense of the overall location, type, quantity, and condition of potential ACMs present. It was thorough in that most accessible functional spaces were inspected, and bulk samples taken of suspect materials observed. The presence of asbestos in suspect materials was assumed or presumed in some cases without bulk samples being collected or analyzed. This was necessary for locations where materials were inaccessible or areas that were unsafe to access (e.g., energized equipment, confined spaces, inside mechanical equipment). For those areas that were not safely accessible, suspect materials observed or presumed to be present were documented and assumed as ACMs.

The survey included destructive, intrusive, and/or exploratory testing. The sampling areas requiring destructive sampling were left in an orderly manner. Arcadis endeavored to observe normally inaccessible areas, such as, but not limited to, under primary floor systems, wall cavities and pipe chases for suspect ACMs.

## PRE-DEMOLITION HAZARDOUS BUILDING MATERIALS SURVEY

The asbestos survey included a visual and physical assessment of each accessible space to locate suspect ACMs. Suspect materials were divided into "Homogeneous Areas" (HAs) (i.e., building materials that were determined by the inspector to be homogeneous based on their color, texture, and assumed date of installation). A representative number of samples were collected from each HA.

Bulk material samples were collected in 4-mil plastic bags, and tightly sealed for transport to EMSL Analytical, Inc. (EMSL) located in Cinnaminson, New Jersey. Each sample collected by Arcadis was assigned its own unique coded number. Samples were sent to EMSL for laboratory analysis under a chain-of-custody protocol.

### 2.2 Lead Paint Survey Approach

Arcadis conducted a lead paint survey of representative interior and exterior surfaces for the purpose and compliance with USEPA Resource Conservation and Recovery Act (RCRA) (Standard 40 CFR 240-280) and OSHA Lead in Construction (Standard 29 CFR 1926.62). Suspect lead paint was identified based upon a visual inspection of painted building components. Samples of suspect lead paint were collected and assigned their own unique identification number, placed in 4-mil sealable plastic bags, and tightly sealed for subsequent shipment under a chain of custody protocol to EMSL in Cinnaminson, New Jersey.

### 2.3 Polychlorinated Biphenyls Survey Approach

Arcadis conducted a limited PCB survey of representative materials for the purpose and compliance with the Toxic Substances Control Act (TSCA) PCB regulations in 40 CFR, Part 76. Suspect PCB-containing materials were identified based upon a visual inspection of building components. Samples of suspect PCB-containing materials were collected and assigned their own unique identification number, placed in 4-mil sealable plastic bags, and tightly sealed for subsequent shipment under a chain of custody protocol to EMSL in Cinnaminson, New Jersey.

### 2.4 Regulated Materials and Universal Waste Survey Approach

Arcadis conducted a survey of potentially regulated materials and universal waste for the purpose and compliance of the RCRA Universal Waste Rule and Subtitle C hazardous waste regulations. Potentially regulated materials and universal waste was identified visually, and the information was collected in chart format. The information collected included: type of material, container type/size, and the approximate quantity of the material. No testing of the regulated materials and universal waste identified was performed. Materials were identified to be included during the removal of regulated materials from the site or for future characterization.

## 3 ANALYTICAL METHODS

### 3.1 Asbestos

Bulk samples were analyzed for asbestos following the New York State Department of Health Environmental Laboratory Accreditation Program protocol methods 198.1 and 198.6 (depending on

material), and 198.4, which require the analysis of friable materials utilizing polarized light microscopy (PLM) with dispersion staining and PLM stratified point counting. Non-friable organically bound (NOB) materials were analyzed using PLM and transmission electron microscopy (TEM) for NOB matrices.

EMSL is a member of the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP). EMSL's NVLAP format laboratory analysis results and bulk sample summary reports are provided as Appendix C.

### 3.2 Lead Paint

Paint chip samples were analyzed for total lead content (reported in total percent by weight) by flame atomic adsorption spectrometry (AAS) in accordance with USEPA Method 7420, SW 846-3050B/7000B. Strict quality control/quality assurance (QA/QC) provisions were adhered to for analysis of all lead samples. EMSL conformed to its own in-house QA/QC procedures established by their accreditation manual. EMSL's laboratory analysis results for lead are provided in Appendix D.

### 3.3 Polychlorinated Biphenyls

Bulk samples were analyzed for PCBs in accordance with USEPA Method SW-846 8082A with 3540 Soxhlet Extraction. The method tests each sample for nine of the most common PCB Aroclor's. PCB results were then reported in concentrations in relation to the reporting limit for each sample. EMSL is a state of New York certified laboratory. Laboratory analytical reports are provided in Appendix E.

## 4 FINDINGS

### 4.1 Asbestos

Arcadis identified eleven (11) HAs, of which, twenty (20) suspect ACM bulk samples were collected and submitted for laboratory analysis. A listing of the identified HAs, including each HA material description, location, condition, asbestos content, and estimated quantity, are presented in Table 1. Approximate sampling locations are shown on Figure 1.

One (1) HA was assumed to contain asbestos at concentrations above 1% (ACM is defined as a material containing more than 1% of asbestos by weight). Two (2) HAs have been determined to contain trace amounts of asbestos and their disturbance is regulated by OSHA.

The following HA has been assumed to be ACM:

- HA-11: Electrical Components/Wire Wrap

The following HAs have been determined to contain trace amounts of asbestos, i.e. one percent or less (1% or <1%) by laboratory analysis and their disturbance is regulated by OSHA:

- HA-2: Gray Paint on Pumps/Pipes/Valves
- HA-9: Black Vapor Barrier Associated with Roof

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The remaining bulk samples collected by Arcadis as part of the survey were reported by the laboratory as “None Detected” for asbestos. Representative photographs are provided in Appendix F.

### 4.2 Lead Paint

Five (5) paint chip samples were collected and submitted for laboratory analysis. Lead in paint was detected in four (4) samples analyzed at concentrations ranging from 0.011% by weight to 4.3% by weight. Details regarding material description, location, substrate, condition, and reporting limit of each paint chip sampled are presented in Table 2. Approximate sampling locations are shown on Figure 1.

The following paint chip samples were confirmed to contain detectable levels of lead:

- LP-2: Green Paint with Metal Door - Exterior
- LP-3: White/Red Paint with Metal Door - Interior
- LP-4: Gray Paint on Concrete Wall - Interior
- LP-5: Gray Paint with Pipes/Pumps/Valves - Interior

The remaining paint chip samples collected by Arcadis as part of the survey were reported by the laboratory as “None Detected” or below the laboratory’s limit of detection for lead.

### 4.3 Polychlorinated Biphenyls

Three (3) bulk samples were collected and submitted for laboratory analysis. PCBs were detected in one (1) sample at a concentration of 16.3 mg/Kg. Details regarding the material description, location, reporting limit and results of each material sampled are presented in Table 3. Approximate sampling locations are shown on Figure 1.

The following bulk samples were confirmed to contain detectable levels of PCBs:

- PCB-01: Gray Paint on Pipes/Pumps/Valves - Interior

The remaining bulk samples collected by Arcadis as part of the survey were reported by the laboratory as “None Detected” or below the laboratory’s limit of detection for PCBs.

### 4.4 Regulated Materials and Universal Waste

Arcadis’ regulated materials and universal waste survey identified potentially regulated materials and universal waste at the site. Potentially regulated materials and universal waste identified included, but is not limited to, fluorescent light bulbs, ballasts, switchgears, thermostats, gauges, motors and pumps.

Details regarding container type, container size, quantity, and location of each potentially regulated material and universal waste identified are presented in Table 4.



## 5 RECOMMENDATIONS

### 5.1 Asbestos

As presented in Table 1, and the laboratory data provided in Appendix C, results of the asbestos survey identified assumed ACMs at the site.

ACMs identified at the site that may be disturbed during demolition activities, must be removed by a licensed asbestos abatement contractor utilizing industry standard work procedures in accordance with all federal, state, and local regulations governing asbestos.

Suspect ACMs that could not be sampled during the survey have been assumed to contain asbestos at concentrations above 1%. These materials must be managed as ACM until laboratory analysis can prove otherwise.

If other suspect materials, not referenced in this survey report, are identified during demolition activities, Arcadis recommends that these materials be considered ACM until they are inspected by an appropriately licensed asbestos inspector and proven otherwise.

Asbestos waste must be disposed at an asbestos waste receiving facility that is duly permitted by the state and/or local municipality in which it resides.

The OSHA Construction Standard for Asbestos (29 CFR 1926.1101) procedures and guidelines must be followed for personnel conducting activities that may disturb materials that contain asbestos during abatement, construction, demolition, renovation, and other similar activities, whether they are considered ACM because they contain greater than 1% asbestos or if they contain 1% or less asbestos. Materials that are confirmed to contain trace amounts of asbestos (less than one percent) by either point counting or TEM are not currently subject to the USEPA regulations. These materials, however, may still be subject to federal OSHA regulations when their disturbance may elevate, or potentially elevate, the concentration of airborne fibers above the eight-hour time weighted average (TWA) permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter of air (f/cc) or the 30-minute short term excursion limit (STEL) of 1.0 f/cc. It should be noted, despite these limits established by OSHA, that no "safe" level of asbestos exposure has been determined.

OSHA considers disturbance of building materials containing equal to or less than 1% asbestos as "unclassified asbestos operations". Unclassified asbestos operations cover employees likely to be exposed in excess of the PELs and who are performing asbestos operations that are not covered by Class I through IV asbestos operations (e.g., renovation/restoration activities). Employees must have appropriate training meeting OSHA Standard 29 CFR 1926.1101 (k)(9)(viii). In addition, the employer still must follow the requirements in 29 CFR 1926.1101 paragraphs (g)(1) [except (g)(1)(i)], (g)(2) and (g)(3) that describe engineering and work practice controls operation.

Arcadis recommends that engineering controls and work practices be utilized and that personal exposure assessment (air monitoring) be conducted on contractor's performing work in areas where materials have been identified to contain equal to or less than 1% asbestos in accordance with OSHA Standard 29 CFR 1926.1101 (f) Exposure Assessments and Monitoring. Arcadis also recommends that contractors wear applicable personal protective equipment as defined in 29 CFR 1926.1101, while performing work

## PRE-DEMOLITION HAZARDOUS BUILDING MATERIALS SURVEY

activities in these areas, and utilize appropriate engineering and work practice controls to minimize the potential fiber release.

### 5.2 Lead Paint

As presented in Table 2, and the laboratory data provided in Appendix D, detectable levels of lead in paint were identified at the site.

Arcadis recommends that the general contractor and any sub-trades be advised of the presence of lead-based paint/lead-containing paint and their requirements for compliance with the OSHA Lead in Construction standard (Title 29 CFR, Part 1962.62). Compliance with OSHA is required for any detectable levels of lead in painted surfaces.

Any work that could disturb known or suspect lead-based paint should be conducted in a way to minimize and control dust, and that the contractor performs a thorough cleanup.

If other suspect lead-based paints/lead-containing paints, not referenced in this survey report, are identified during renovation activities, Arcadis recommends that these materials be managed as lead-containing until they are inspected and proven otherwise.

Waste characterization sampling and analysis is recommended for the representative waste stream generated by renovation activities. Waste stream analyses should include toxicity characteristic leaching procedure analysis, as required.

### 5.3 Polychlorinated Biphenyls

As presented in Table 3, and the laboratory data provided in Appendix E, detectable levels of PCBs were identified in one sample collected at the site.

PCBs in materials are regulated in accordance with the TSCA PCB regulations in 40 CFR, Part 761. In accordance with 40 CFR, Part 761.3, PCB-containing materials are considered PCB bulk product waste if the concentration of PCBs is greater than or equal to ( $\geq$ ) 50 mg/Kg. PCB bulk product waste includes waste derived from manufactured products containing PCBs in a non-liquid state where the concentration at the time of designation for disposal is  $\geq$  50 mg/Kg PCBs (see, 40 CFR. Parts 761.3 & 761.62). The disposal requirements for PCB contaminated building materials are regulated by the provisions located in 40 CFR 761.62.

Concentrations less than 50 mg/Kg may require special handling and disposal depending upon site specific conditions and disposal facility.

If other potentially PCB-containing materials that are not referenced in this report are identified during demolition activities, Arcadis recommends that these materials be managed as PCB-containing until they are inspected and proven otherwise.

### 5.4 Regulated Materials and Universal Waste

As presented in Table 4, results of the regulated materials and universal waste survey visually identified potentially regulated materials and universal waste at the site.

## PRE-DEMOLITION HAZARDOUS BUILDING MATERIALS SURVEY

Regulated materials and universal waste identified that are not scheduled for reuse and may be disturbed during demolition activities, must be removed and/or recycled prior to demolition. Arcadis recommends the proper removal, transportation, and recycling or disposal of identified regulated materials and universal waste.

Regulated materials and universal waste identified herein may be regulated under the RCRA Universal Waste Rule and Subtitle C hazardous waste regulations.

## 6 ADDITIONAL SURVEY LIMITATIONS

Arcadis' survey is subject to the following limitations in addition to those presented in Appendix A:

- Utilities/services, including electric, water, and heat, were active in most areas surveyed. Materials associated with electrical components and energized equipment were not safely accessible and were not sampled.
- The investigation did not include access or inspection of confined spaces, underground piping, conduits, building footings, and extent of subsurface soil asbestos contamination, if any.

# TABLES



**Table 1  
Homogeneous Areas**

**Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598**

| HA No. | Material Description                  | Material Location            | Sample Number | Condition | Friability  | Asbestos Content  | Estimated Quantity | Unit | Notes  |
|--------|---------------------------------------|------------------------------|---------------|-----------|-------------|-------------------|--------------------|------|--|
| HA-1   | Interior Window Glazing               | Interior - North Window      | 1A, 1B        | Damaged   | Non-Friable | NAD               | 20                 | LF   |  |
| HA-2   | Gray Paint on Pumps/Pipes/Valves      | Interior -Throughout         | 2A, 2B        | Damaged   | Non-Friable | <1% Anthophyllite | 200                | LF   |  |
| HA-3   | Concrete Block Mortar                 | Throughout                   | 3A, 3B        | Good      | Non-Friable | NAD               | 1,080              | SF   |  |
| HA-4   | Exterior Window Caulk                 | Exterior - North Window      | 4A, 4B        | Good      | Non-Friable | NAD               | 20                 | LF   |  |
| HA-5   | Gray Textured Paint on Floor and Beam | Interior - Wooden Frame Room | 5A, 5B        | Good      | Non-Friable | NAD               | 45                 | SF   |  |
| HA-6   | Fissured Ceiling Tile                 | Interior - Weight Scale Room | 6A, 6B        | Damaged   | Friable     | NAD               | 2                  | SF   | Debris located on floor.   |
| HA-7   | Asphalt Roofing Shingles              | Roof                         | 7A, 7B        | Good      | Non-Friable | NAD               | 1,000              | SF   |  |
| HA-8   | Black Glue Strips with HA-7           | Roof                         | 8A, 8B        | Good      | Non-Friable | NAD               | 1,000              | SF   |  |
| HA-9   | Black Vapor Barrier Below HA-7        | Roof                         | 9A, 9B        | Good      | Non-Friable | <1% Chrysotile    | 1,000              | SF   |  |
| HA-10  | Valve Gasket                          | Interior - Throughout        | 10A, 10B      | Good      | Non-Friable | NAD               | 20                 | EA   | Sample collected from open accessible gasket. May not be homogeneous of all gaskets throughout. Destructive sampling required.                                       |
| HA-11  | Electrical Components                 | Main House                   | Not Sampled   | Good      | Non-Friable | Assumed ACM       | 2                  | EA   | Internal materials associated with electrical boxes. Material is assumed asbestos-containing until laboratory analysis can confirm or deny the presence of asbestos. |

**Table 1  
Homogeneous Areas**

**Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598**

| HA No.   | Material Description | Material Location | Sample Number | Condition | Friability | Asbestos Content | Estimated Quantity | Unit | Notes |
|--|----------------------|-------------------|---------------|-----------|------------|------------------|--------------------|------|-------|
| <u>Notes:</u>  |                      |                   |               |           |            |                  |                    |      |       |
| Assumed ACM = Material determined by the inspector to be suspect Asbestos-Containing Material and is considered asbestos-containing until labatory analysis can prove otherwise. |                      |                   |               |           |            |                  |                    |      |       |
| EA = Each  |                      |                   |               |           |            |                  |                    |      |       |
| LF = Linear Foot   |                      |                   |               |           |            |                  |                    |      |       |
| NAD = No Asbestos Detected   |                      |                   |               |           |            |                  |                    |      |       |
| SF = Square Foot   |                      |                   |               |           |            |                  |                    |      |       |

**Table 2  
Lead Paint Summary**

**Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598**

| Sample ID   | Description     | Substrate                    | Sample Location       | Material Location     | Condition | Result (% wt.) | Classification | Notes |
|---|-----------------|------------------------------|-----------------------|-----------------------|-----------|----------------|----------------|-------|
| LP-1  | Green Paint     | Concrete Block Wall          | Exterior - North      | Exterior - Throughout | Flaking   | <0.0080%       | ND             |       |
| LP-2  | Green Paint     | Metal Door                   | Exterior - North      | Exterior - North      | Flaking   | 4.3%           | LBP            |       |
| LP-3  | White/Red Paint | Metal Door                   | Interior - North Door | Interior - North Door | Flaking   | 1.5%           | LBP            |       |
| LP-4  | Gray Paint      | Concrete/Concrete Block Wall | Interior - Throughout | Interior - Throughout | Flaking   | 0.021%         | LCP            |       |
| LP-5  | Gray Paint      | Metal Pipes/Pumps/Valves     | Interior - Throughout | Interior - Throughout | Flaking   | 0.011%         | LCP            |       |
| <u>Notes:</u>   |                 |                              |                       |                       |           |                |                |       |
| LBP = Lead-Based Paint (Greater than or equal to 0.5% lead by weight) |                 |                              |                       |                       |           |                |                |       |
| LCP = Lead-Containing Paint (Any detectable % lead by weight)         |                 |                              |                       |                       |           |                |                |       |
| ND = None Detected  |                 |                              |                       |                       |           |                |                |       |

**Table 3  
Polychlorinated Biphenyls Summary**

**Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598**

| Sample ID           | Description                       | Sample Location              | Reporting Limit (mg/Kg) | Aroclor      | Results (mg/Kg) | Notes  |
|---------------------|-----------------------------------|------------------------------|-------------------------|--------------|-----------------|--|
| PCB-01              | Gray Paint on Pipes/Pumps/Valves  | Interior                     | 0.97                    | Aroclor 1242 | 2               | Concentrations less than 50 mg/Kg may require special handling and disposal depending upon site specific conditions and disposal facility. |
|                     |                                   |                              |                         | Aroclor 1254 | 9               |  |
|                     |                                   |                              |                         | Aroclor 1260 | 5.3             |  |
| PCB-02              | Gray Textured Paint on Floor/Beam | Interior                     | 0.98                    | NA           | ND              |  |
| PCB-03              | Interior Window Glazing           | Interior - Wooden Frame Room | 0.95                    | NA           | ND              |  |
| <u>Notes:</u>       |                                   |                              |                         |              |                 |  |
| NA = Not Applicable |                                   |                              |                         |              |                 |  |
| ND = None Detected  |                                   |                              |                         |              |                 |  |



**Table 4  
Regulated Materials and Universal Waste Inventory**

**Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 10598**

| <b>Material</b>                            | <b>Container Type</b> | <b>Container Size</b> | <b>Approximate Quantity</b> | <b>Location</b>      | <b>Notes</b>                         |
|--|-----------------------|-----------------------|-----------------------------|----------------------|--------------------------------------|
| Fluorescent Bulbs                          | Glass                 | 8 Feet                | 3                           | Interior             |                                      |
| Ballasts associated with Fluorescent Bulbs | Metal                 | Not Determined        | 6                           | Interior             | 2 ballasts per fixture               |
| Switchgears                                | Metal                 | Not Determined        | 5                           | Interior             |                                      |
| Mercury Thermostat                         | Not Determined        | Not Determined        | 1                           | Interior - West Wall |                                      |
| Temp Gauges/Pumps/Motors                   | Glass                 | Not Determined        | 10                          | Interior             | Associated with mechanical equipment |

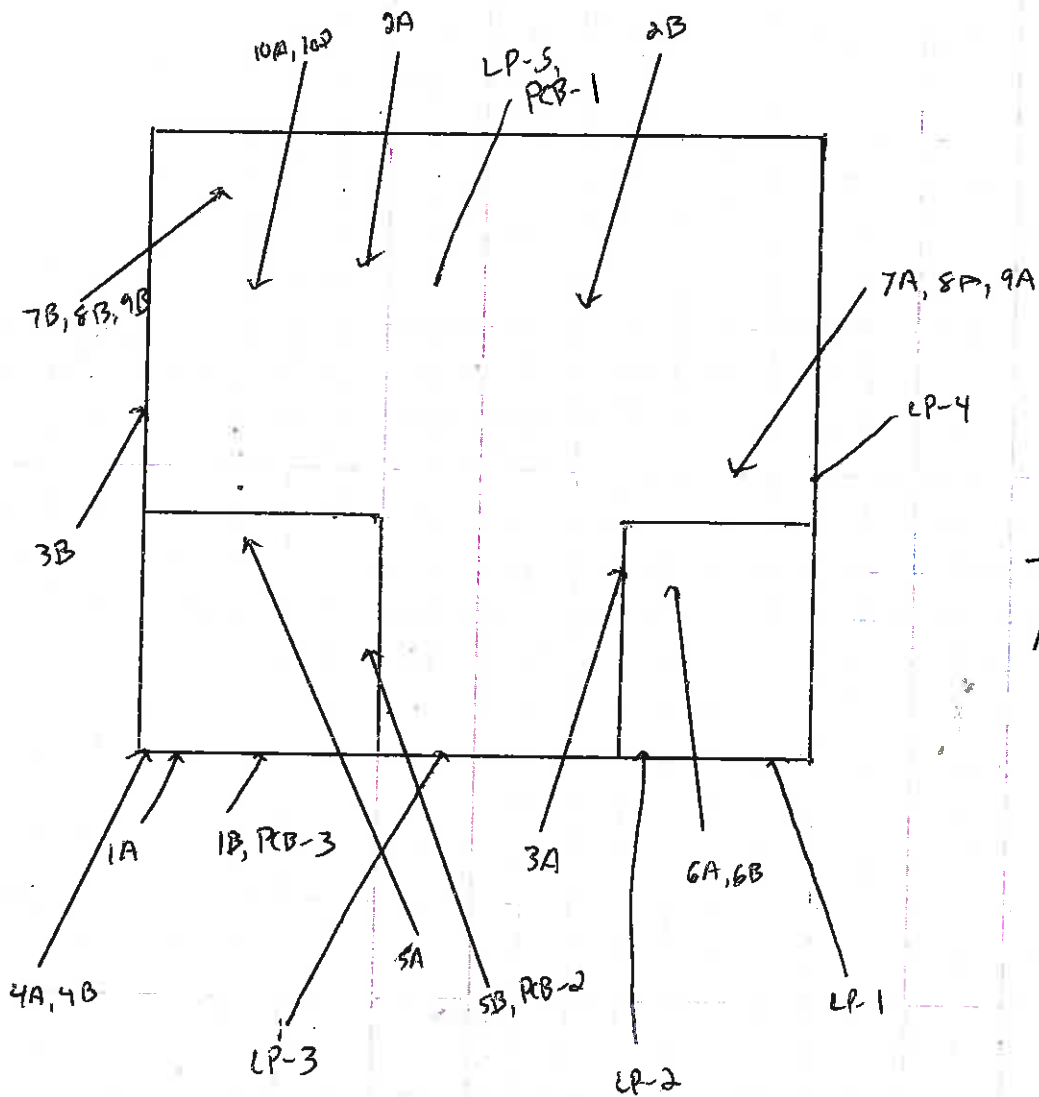
# FIGURES



Town of Yorktown, VT  
Pump Station

\* NOT TO  
SCALE \*

Sample Location Diagram  
Figure 1



# APPENDIX A

## Limitations and Service Constraints



## **Limitations and Service Constraints**

The opinions, conclusions and recommendations presented in this report are limited to the information obtained during the performance of the specific scope of service identified in the report. To the extent that ARCADIS relied upon any information prepared by other parties not under direct contract to ARCADIS, no representation as to the accuracy or completeness of such information is made. This report is an instrument of professional service and the services described in the report were performed in accordance with generally accepted standards and level of skill and care ordinarily exercised by members of the profession working under similar conditions including comparable budgetary and schedule constraints. No warranty, guarantee or certification express or implied, is intended or given with respect to ARCADIS's services, opinions, conclusions or recommendations. This statement is in lieu of any other statement either expressed or implied.

ARCADIS's observations, the results of testing and ARCADIS's opinions, conclusions and recommendations apply solely to conditions existing at the specific times when and specific locations where ARCADIS's investigative work was performed. Observation and testing activities such as those conducted by ARCADIS are inherently limited and do not represent a conclusive or complete characterization. Conditions in other parts of the project site, building or area may vary from conditions at the specific locations where observations were made and where testing was performed by ARCADIS. Additionally, other building material hazards which were not identified by ARCADIS, such as asbestos, lead-based paint and unidentified microbial impacts, may also be present in the indoor air, un-accessed areas and in walls, ceilings, cavities and floors. Therefore, the extent of ARCADIS's opinions, conclusions and recommendations are limited and 100% confidence in these opinions, conclusions and recommendations cannot reasonably be achieved. Nothing contained in this report shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards nor shall it be considered medical advice or consultation.

This report may document whether work conducted by ARCADIS, under contract to ARCADIS or under ARCADIS's observation was done so in accordance with applicable regulatory standards. In the absence of standards such as is often the case for microbial assessment and abatement, this report may not be construed as providing clearance, approval, or authorization for use or re-occupancy of a given structure. Actual site conditions and quantities should be field verified and unless expressly stated, this report may not be used as a bid specification. Although an attempt may have been made to locate microbial growth (mold) and indoor air quality issues, in many cases only further investigation or full demolition procedures will reveal sources or impacted materials. In addition, the passage of time including the nominal passage of time may result in a change in the characteristics at the project site.



This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared and for the particular purpose outlined in the report. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

# APPENDIX B


## Accreditations



STATE OF NEW YORK - DEPARTMENT OF LABOR  
ASBESTOS CERTIFICATE



**BRANDON WABBLE**  
CLASS(EXPIRES)  
D INSP(03/19)



CERT# 12-14763  
DMV# 51B384008

**MUST BE CARRIED ON ASBESTOS PROJECTS**

PHOTO BY: [unreadable]

# APPENDIX C

Laboratory Reports – Asbestos







# EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com>

[cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

|             |               |
|-------------|---------------|
| EMSL Order: | 041833542     |
| CustomerID: | ACAD78H       |
| CustomerPO: | 02328010.0000 |
| ProjectID:  |               |

Attn: **Brandon Wabble**  
**ARCADIS U.S., Inc.**  
**160 Chapel Road**  
**Suite 201**  
**Manchester, CT 06042**

Phone: (860) 645-1084  
 Fax: (860) 645-1090  
 Received: 11/08/18 9:15 AM  
 Analysis Date: 11/16/2018  
 Collected:

Project: 02328010.0000 / Garden Ln. & Old Crompton Road, Yorktown, NY

## Test Report:Asbestos Analysis of Bulk Material

| Test                                  | Analyzed Date | Color              | Non Asbestos                                     |             | Asbestos   |
|---------------------------------------|---------------|--------------------|--|-------------|--|
|                                       |               |                    | Fibrous  | Non-Fibrous |  |
| <b>Sample ID</b> 1A<br>041833542-0001 |               | <b>Description</b> | 1st Floor North Window - Interior Window Glazing |             |  |
|                                       |               | <b>Homogeneity</b> | Homogeneous                                      |             |  |
| <b>PLM NYS 198.1 Friable</b>          |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 VCM</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018    | Gray               |  |             | <b>Inconclusive: None Detected</b>                 |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018    | Gray               |  |             | <b>None Detected</b>                               |
| <b>Sample ID</b> 1B<br>041833542-0002 |               | <b>Description</b> | 1st Floor North Window - Interior Window Glazing |             |  |
|                                       |               | <b>Homogeneity</b> | Homogeneous                                      |             |  |
| <b>PLM NYS 198.1 Friable</b>          |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 VCM</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018    | Gray               |  |             | <b>Inconclusive: None Detected</b>                 |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018    | Gray               |  |             | <b>None Detected</b>                               |
| <b>Sample ID</b> 2A<br>041833542-0003 |               | <b>Description</b> | 1st Floor Interior - Gray Paint on Pumps/Piping  |             |  |
|                                       |               | <b>Homogeneity</b> | Homogeneous                                      |             |  |
| <b>PLM NYS 198.1 Friable</b>          |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 VCM</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018    | Gray               |  |             | <b>Inconclusive: None Detected</b>                 |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018    | Gray               |  |             | <b>&lt;1% Anthophyllite</b><br><b>&lt;1% Total</b> |
| <b>Sample ID</b> 2B<br>041833542-0004 |               | <b>Description</b> | 1st Floor Interior - Gray Paint on Pumps/Piping  |             |  |
|                                       |               | <b>Homogeneity</b> | Homogeneous                                      |             |  |
| <b>PLM NYS 198.1 Friable</b>          |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 VCM</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018    | Gray               |  |             | <b>Inconclusive: None Detected</b>                 |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018    | Gray               |  |             | <b>&lt;1% Anthophyllite</b><br><b>&lt;1% Total</b> |
| <b>Sample ID</b> 3A<br>041833542-0005 |               | <b>Description</b> | 1st Floor Interior - CMU Mortar                  |             |  |
|                                       |               | <b>Homogeneity</b> | Homogeneous                                      |             |  |
| <b>PLM NYS 198.1 Friable</b>          | 11/15/2018    | Gray               | 100.00% Non-fibrous (other)                      |             | <b>None Detected</b>                               |
| <b>PLM NYS 198.6 VCM</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>PLM NYS 198.6 NOB</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |
| <b>TEM NYS 198.4 NOB</b>              |               |                    |  |             | <b>Not Analyzed</b>                                |

Report Amended 11/19/2018 12:50:32 Replaces the Initial Report. Reason Code: Data Entry-Change to Project



# EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077  
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<http://www.EMSL.com> [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

|             |               |
|-------------|---------------|
| EMSL Order: | 041833542     |
| CustomerID: | ACAD78H       |
| CustomerPO: | 02328010.0000 |
| ProjectID:  |               |

## Test Report:Asbestos Analysis of Bulk Material

| Test                                  | Color                                    | Non Asbestos  |             | Asbestos                           |
|---------------------------------------|--|---|-------------|------------------------------------|
|                                       |  | Fibrous   | Non-Fibrous |                                    |
| <b>Sample ID</b> 3B<br>041833542-0006 | <b>Description</b><br><b>Homogeneity</b> | Exterior - CMU Mortar<br>Homogeneous  |             |                                    |
| <b>PLM NYS 198.1 Friable</b>          | 11/15/2018 Gray                          | 100.00% Non-fibrous (other)   |             | <b>None Detected</b>               |
| <b>PLM NYS 198.6 VCM</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>TEM NYS 198.4 NOB</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>Sample ID</b> 4A<br>041833542-0007 | <b>Description</b><br><b>Homogeneity</b> | Exterior North Window - Exterior Window Caulk<br>Homogeneous                      |             |                                    |
| <b>PLM NYS 198.1 Friable</b>          |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018 White                         |   |             | <b>Inconclusive: None Detected</b> |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018 White                         |   |             | <b>None Detected</b>               |
| <b>Sample ID</b> 4B<br>041833542-0008 | <b>Description</b><br><b>Homogeneity</b> | Exterior North Window - Exterior Window Caulk<br>Homogeneous                      |             |                                    |
| <b>PLM NYS 198.1 Friable</b>          |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018 White                         |   |             | <b>Inconclusive: None Detected</b> |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018 White                         |   |             | <b>None Detected</b>               |
| <b>Sample ID</b> 5A<br>041833542-0009 | <b>Description</b><br><b>Homogeneity</b> | Interior Wooden Frame Room - Gray Textured Paint on Floor and Beam<br>Homogeneous |             |                                    |
| <b>PLM NYS 198.1 Friable</b>          |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018 Gray                          |   |             | <b>Inconclusive: None Detected</b> |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018 Gray                          |   |             | <b>None Detected</b>               |
| <b>Sample ID</b> 5B<br>041833542-0010 | <b>Description</b><br><b>Homogeneity</b> | Interior Wooden Frame Room - Gray Textured Paint on Floor and Beam<br>Homogeneous |             |                                    |
| <b>PLM NYS 198.1 Friable</b>          |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018 Gray                          |   |             | <b>Inconclusive: None Detected</b> |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018 Gray                          |   |             | <b>None Detected</b>               |
| <b>Sample ID</b> 6A<br>041833542-0011 | <b>Description</b><br><b>Homogeneity</b> | Interior Weight Scale Room - Residual Fissure Ceiling Tile<br>Homogeneous         |             |                                    |
| <b>PLM NYS 198.1 Friable</b>          |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>              |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b>              | 11/15/2018 White                         | 7.2% Min. Wool  |             | <b>Inconclusive: None Detected</b> |
| <b>TEM NYS 198.4 NOB</b>              | 11/16/2018 White                         |   |             | <b>None Detected</b>               |

Report Amended 11/19/2018 12:50:32 Replaces the Initial Report. Reason Code: Data Entry-Change to Project

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|             |               |
|-------------|---------------|
| EMSL Order: | 041833542     |
| CustomerID: | ACAD78H       |
| CustomerPO: | 02328010.0000 |
| ProjectID:  |               |

**Test Report:Asbestos Analysis of Bulk Material**

| Test  | Color                                    | Non Asbestos  |             | Asbestos                           |
|---|--|---|-------------|------------------------------------|
|   |  | Fibrous   | Non-Fibrous |                                    |
| <b>Sample ID</b> 6B<br>041833542-0012                                     | <b>Description</b><br><b>Homogeneity</b> | Interior Weight Scale Room - Residual Fissure Ceiling Tile<br>Homogeneous |             |                                    |
| <b>PLM NYS 198.1 Friable</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018                                       | White                                    | 8.9% Min. Wool  |             | <b>Inconclusive: None Detected</b> |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018                                       | White                                    |   |             | <b>None Detected</b>               |
| <b>Sample ID</b> 7A<br>041833542-0013                                     | <b>Description</b><br><b>Homogeneity</b> | Roof - Asphalt Roofing Shingles<br>Heterogeneous                          |             |                                    |
| <b>PLM NYS 198.1 Friable</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018                                       | Black                                    | 1.8% Glass  |             | <b>Inconclusive: None Detected</b> |
| Glue strip inseparable from shingle, prepped as composite with 8A.        |  |   |             |                                    |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018                                       | Black                                    |   |             | <b>None Detected</b>               |
| Glue strip inseparable from shingle, prepped as composite                 |  |   |             |                                    |
| <b>Sample ID</b> 7B<br>041833542-0014                                     | <b>Description</b><br><b>Homogeneity</b> | Roof - Asphalt Roofing Shingles<br>Heterogeneous                          |             |                                    |
| <b>PLM NYS 198.1 Friable</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018                                       | Black                                    | 1.6% Glass  |             | <b>Inconclusive: None Detected</b> |
| Glue strip inseparable from shingle, prepped as composite with 8B.        |  |   |             |                                    |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018                                       | Black                                    |   |             | <b>None Detected</b>               |
| Glue strip inseparable from shingle, prepped as composite                 |  |   |             |                                    |
| <b>Sample ID</b> 8A<br>041833542-0015                                     | <b>Description</b><br><b>Homogeneity</b> | Roof - Black Glue Stripes w/Ha-7  |             |                                    |
| <b>PLM NYS 198.1 Friable</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018                                       |  |   |             | <b>Not Analyzed</b>                |
| Glue strip inseparable from shingle, prepped as composite with sample 7A. |  |   |             |                                    |
| <b>TEM NYS 198.4 NOB</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>Sample ID</b> 8B<br>041833542-0016                                     | <b>Description</b><br><b>Homogeneity</b> | Roof - Black Glue Stripes w/Ha-7  |             |                                    |
| <b>PLM NYS 198.1 Friable</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 VCM</b>  |  |   |             | <b>Not Analyzed</b>                |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018                                       |  |   |             | <b>Not Analyzed</b>                |
| Glue strip inseparable from shingle, prepped as composite with sample 7B. |  |   |             |                                    |
| <b>TEM NYS 198.4 NOB</b>  |  |   |             | <b>Not Analyzed</b>                |

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EMSL Order: 041833542  
 CustomerID: ACAD78H  
 CustomerPO: 02328010.0000  
 ProjectID:

**Test Report:Asbestos Analysis of Bulk Material**

| Test                                   | Color                                    | Non Asbestos                          |             | Asbestos   |
|--|--|---------------------------------------|-------------|--|
|  |  | Fibrous                               | Non-Fibrous |  |
| <b>Sample ID</b> 9A<br>041833542-0017  | <b>Description</b><br><b>Homogeneity</b> | Roof - Black Vapor Barrier below HA-7 |             |  |
| <b>PLM NYS 198.1 Friable</b>           |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 VCM</b>               |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018    | Black                                    |                                       |             | <b>Inconclusive : &lt;1%Chrysotile</b><br><b>Inconclusive - &lt;1% Total</b> |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018    | Black                                    |                                       |             | <b>&lt;1% Chrysotile</b><br><b>&lt;1% Total</b>                              |
| <b>Sample ID</b> 9B<br>041833542-0018  | <b>Description</b><br><b>Homogeneity</b> | Roof - Black Vapor Barrier below HA-7 |             |  |
| <b>PLM NYS 198.1 Friable</b>           |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 VCM</b>               |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018    | Black                                    |                                       |             | <b>Inconclusive : &lt;1%Chrysotile</b><br><b>Inconclusive - &lt;1% Total</b> |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018    | Black                                    |                                       |             | <b>&lt;1% Chrysotile</b><br><b>&lt;1% Total</b>                              |
| <b>Sample ID</b> 10A<br>041833542-0019 | <b>Description</b><br><b>Homogeneity</b> | Interior SW - Value Gaslat Insulation |             |  |
| <b>PLM NYS 198.1 Friable</b>           |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 VCM</b>               |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018    | Black                                    |                                       |             | <b>Inconclusive: None Detected</b>   |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018    | Black                                    |                                       |             | <b>None Detected</b>   |
| <b>Sample ID</b> 10B<br>041833542-0020 | <b>Description</b><br><b>Homogeneity</b> | Interior SW - Value Gaslat Insulation |             |  |
| <b>PLM NYS 198.1 Friable</b>           |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 VCM</b>               |  |                                       |             | <b>Not Analyzed</b>  |
| <b>PLM NYS 198.6 NOB</b> 11/15/2018    | Black                                    |                                       |             | <b>Inconclusive: None Detected</b>   |
| <b>TEM NYS 198.4 NOB</b> 11/16/2018    | Black                                    |                                       |             | <b>None Detected</b>   |




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EMSL Order: 041833542  
CustomerID: ACAD78H  
CustomerPO: 02328010.0000  
ProjectID:

## Test Report:Asbestos Analysis of Bulk Material

| Test                     | Color | Non Asbestos |             | Asbestos   |
|--------------------------|-------|--------------|-------------|--|
|                          |       | Fibrous      | Non-Fibrous |  |
| Analyst(s)               |       |              |             |  |
| <i>Benjamin Verghese</i> |       |              |             | <br>Benjamin Ellis, Laboratory Manager<br>or other approved signatory |
| <i>Edward Zambrano</i>   |       |              |             |  |
| <i>Ted Young</i>         |       |              |             |  |

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.  
All samples examined for the presence of vermiculite when analyzed via NYS 198.1.  
-NYS Guidelines for Vermiculite containing samples are available at [http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance\\_Rev070913.pdf](http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf)  
EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.  
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NYS ELAP 10872, PA ID# 68-00367



Design & Constancy  
for natural and  
built assets

041833542

**CHAIN-OF-CUSTODY FORM  
ASBESTOS BULK**

Laboratory Job #:

RECEIVED

EMSL  
CINNAMINSON, NJ

18 NOV -8 AM 11:32

PAGE 1 OF 4

ARCADIS PROJECT NO.: 07328010.0000

PROJECT NAME: Yorktown, NY

| Results To:       |                            | Invoice To:       |                               |
|-------------------|----------------------------|-------------------|-------------------------------|
| Name:             | Brandon.Wabble@arcadis.com | Name:             | Brandon Wabble                |
| Company:          | ARCADIS U.S., Inc.         | Company:          | ARCADIS U.S., Inc.            |
| Street:           | 160 Chapel Road, Suite 201 | Street:           | 160 Chapel Road, Suite 201    |
| City, State, Zip: | Manchester, CT             | City, State, Zip: | Manchester, CT 06042          |
| Phone #:          | Choose an item.            | Email:            | Brandon.wabble@arcadis-us.com |

| Email PDF Reports to:          | Email EDD Reports to: |
|--------------------------------|-----------------------|
| Brandon Wabble<br>Greg Donavin |                       |

|  |   |
|--|---|
| Site Address: <u>Garden Ln. + Old Crompton Rd., Yorktown, NY</u>   | Sample Number Sequence:   |
| Samples Collect By: <u>BFW</u>   | Analysis Turnaround Time:<br><b>**SAME DAY / RUSH**</b> <input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours<br><input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input checked="" type="checkbox"/> 5 Days |
| Date(s) Collected: <u>11/7/18</u>  | Date Emailed Results Required:  |
| Sample Type: <u>Bulk</u>   | Date Typed Results Required:  |
| <input type="checkbox"/> Analyze All Samples <input checked="" type="checkbox"/> Positive Stop <input type="checkbox"/> Automatic Point Count ≤ 3% <input type="checkbox"/> Other: |   |

|          | Printed Name   | Signature          | Affiliation | Date & Time      | # of Samples | Task for Person Handling COC |
|----------|----------------|--------------------|-------------|------------------|--------------|------------------------------|
| Remitted | Brandon Wabble | <i>[Signature]</i> | Arcadis     | 11/7/18          | 20           | Fedex                        |
| Received |                | <i>[Signature]</i> |             | 11-8-18<br>9:15L |              |                              |
| Remitted |                |                    |             |                  |              |                              |
| Received |                |                    |             |                  |              |                              |
| Remitted |                |                    |             |                  |              |                              |
| Received |                |                    |             |                  |              |                              |

Comments: Please call the ARCADIS employee named above in the "Result To" line if the laboratory has ANY questions about the samples, sample analysis, or chain-of-custody.

Special Instructions:

NY Protocol

(20)

PLEASE SEE ATTACHED FIELD FORMS FOR SAMPLE DETAIL AND DESCRIPTION

0411833542

Client:

Building/Site No.:

Project No.: 02328010.000

Town of Yorktown

Address: Garden Ln + Old Compton Yorktown, NY

Survey Date: 11/7/18

Inspector: Brandon Vahle



Design & Consultancy for natural and built assets

| HA | Sample Number | Material Type (Circle)                                 | Color Texture | Material Description    | Floor: B, 1, Mezz, Ext, Roof | Sample Location | Condition G, D, SO | Friable Y/N | Quantity SF, LF, EA | Photo |
|----|---------------|--|---------------|-------------------------|------------------------------|-----------------|--------------------|-------------|---------------------|-------|
| 1  |               | (M) S, TSI   | Beige         | Interior window Glazing |                              |                 |                    |             |                     |       |
|    | 1A            | Location:  | Gray          |                         | 1                            | North window    | P                  | N           | 20                  | 8778  |
|    | 1B            | Ceiling, (Wall) Floor, Roof, Multiple, Shaftway, Other |               |                         | 1                            | ↓               | ↓                  | ↓           |                     |       |

Mat. Location/QTY: Interior - North window

Notes: Window Size 4x4'

|   |    |   |      |                              |   |          |   |   |     |      |
|---|----|---|------|------------------------------|---|----------|---|---|-----|------|
| 2 |    | (M) S, TSI  |      | Gray Paint on Pumps / Piping |   |          |   |   |     |      |
|   | 2A | Location:   | Gray |                              | 1 | Interior | P | N | 200 | 8815 |
|   | 2B | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |      |                              | 1 | ↓        | ↓ | ↓ |     |      |

Mat. Location/QTY: Interior - Throughout

Notes:

|   |    |  |      |            |   |          |   |   |    |  |
|---|----|--|------|------------|---|----------|---|---|----|--|
| 3 |    | (M) S, TSI   |      | CMU Mortar |   |          |   |   |    |  |
|   | 3A | Location:  | Gray |            | 1 | Interior | G | N | 10 |  |
|   | 3B | Ceiling, (Wall) Floor, Roof, Multiple, Shaftway, Other |      |            | E | Exterior | ↓ | ↓ |    |  |

Mat. Location/QTY: Throughout

Notes:

|   |    |  |       |                      |   |                         |   |   |    |      |
|---|----|--|-------|----------------------|---|-------------------------|---|---|----|------|
| 4 |    | (M) S, TSI   |       | Exterior window Calk |   |                         |   |   |    |      |
|   | 4A | Location:  | White |                      | E | Exterior - North window | G | Y | 20 | 8795 |
|   | 4B | Ceiling, (Wall) Floor, Roof, Multiple, Shaftway, Other |       |                      | E | ↓                       | ↓ | ↓ |    |      |

Mat. Location/QTY:

Notes: Located Behind Metal Grating on North window

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 ENVIRONMENTAL  
 CINCINNATI, OH  
 18 NOV - 8 2AM 11:32

011833542

Client: \_\_\_\_\_ Building/Site No.: \_\_\_\_\_ Project No.: \_\_\_\_\_  
 Address: \_\_\_\_\_ Survey Date: \_\_\_\_\_  
 Inspector: \_\_\_\_\_



| HA  | Sample Number | Material Type (Circle)                                | Color Texture | Material Description                       | Floor: B, 1, Mezz, Ext, Roof | Sample Location              | Condition G, D, SD | Friable Y/N | Quantity SF, LF, EA | Photo |
|---|---------------|---|---------------|--|------------------------------|------------------------------|--------------------|-------------|---------------------|-------|
| 5   |               | (M) S, TSI  |               | Grony Textured<br>Paint on floor +<br>Beam |                              |                              |                    |             |                     |       |
|   | 5A            | Location: Grony                                       |               |  | 1                            | Interior - Wooden Frame Room | 6                  | N           | 45                  | 8822  |
|   | 5B            | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |               |  | 1                            |                              | ↓                  | ↓           |                     |       |
| Mat. Location/QTY: Interior - Wooden Frame Room |               |   |               |  |                              |                              |                    |             |                     |       |
| Notes: Associated w/ floor + beam on ground     |               |   |               |  |                              |                              |                    |             |                     |       |
| 6   |               | (M) S, TSI  |               | Residual Fissured<br>Ceiling Tile          |                              |                              |                    |             |                     |       |
|   | 6A            | Location: White                                       |               |  | 1                            | Interior - weight Scale Room | D                  | Y           | 2                   | 8827  |
|   | 6B            | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |               |  | 1                            |                              | ↓                  |             |                     |       |
| Mat. Location/QTY: Interior - weight Scale Room |               |   |               |  |                              |                              |                    |             |                     |       |
| Notes: Debris located on ground                 |               |   |               |  |                              |                              |                    |             |                     |       |
| 7   |               | (M) S, TSI  |               | Asphalt Roofing<br>Shingles                |                              |                              |                    |             |                     |       |
|   | 7A            | Location: Black                                       |               |  | R                            | Roof                         | G                  | N           | 1000                | 8771  |
|   | 7B            | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |               |  | R                            |                              | ↓                  | ↓           |                     |       |
| Mat. Location/QTY: Roof                         |               |   |               |  |                              |                              |                    |             |                     |       |
| Notes:  |               |   |               |  |                              |                              |                    |             |                     |       |
| 8   |               | (M) S, TSI  |               | Black Ghe<br>strips w/<br>NA-7             |                              |                              |                    |             |                     |       |
|   | 8A            | Location: Black                                       |               |  | R                            | Roof                         | G                  | N           | 1000                | 8771  |
|   | 8B            | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |               |  | R                            |                              | ↓                  | ↓           |                     |       |
| Mat. Location/QTY:                              |               |   |               |  |                              |                              |                    |             |                     |       |
| Notes:  |               |   |               |  |                              |                              |                    |             |                     |       |

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 CINNAMINSON, NJ  
 18 NOV - 8 AM 11:32

Page 3 of 4

Order ID: 041833542



Client: \_\_\_\_\_ Building/Site No.: \_\_\_\_\_ Project No.: \_\_\_\_\_  
 Address: \_\_\_\_\_ Survey Date: \_\_\_\_\_  
 Inspector: \_\_\_\_\_



| HA | Sample Number | Material Type (Circle)                                | Color Texture | Material Description           | Floor: B, I, Mezz, Ext, Roof | Sample Location | Condition G, D, SD | Friable Y/N | Quantity SF, LF, EA | Photo |
|----|---------------|---|---------------|--------------------------------|------------------------------|-----------------|--------------------|-------------|---------------------|-------|
| 9  |               | (M) S, TSI  |               | Black Vapor Barrier Below HA-7 |                              |                 |                    |             |                     |       |
|    | 9A            | Location:   | Black         |                                | R                            | Roof            | G                  | N           | 1000                | 8783  |
|    | 9B            | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |               |                                | R                            | ↓               | ↓                  | ↓           |                     |       |

Mat. Location/QTY: \_\_\_\_\_

Notes: \_\_\_\_\_

|    |     |   |       |                        |   |               |   |   |    |      |
|----|-----|---|-------|------------------------|---|---------------|---|---|----|------|
| 10 |     | (M) S, TSI  |       | Valve Gasket Inclusion |   |               |   |   |    |      |
|    | 10A | Location:   | Black |                        | 1 | Interior - SW | G | N | 20 | 8814 |
|    | 10B | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |       |                        | 1 | ↓             | ↓ | ↓ |    |      |

Mat. Location/QTY: Interior - Gaskets

Notes: Sampled on open gasket. May not be conclusive to all gaskets

|    |  |   |  |                                 |  |                      |  |  |  |  |
|----|--|---|--|---------------------------------|--|----------------------|--|--|--|--|
| 11 |  | M, S, TSI   |  | Electrical Components/wire wrap |  |                      |  |  |  |  |
|    |  | Location:   |  |                                 |  | Suspect, Not Sampled |  |  |  |  |
|    |  | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |  |                                 |  |                      |  |  |  |  |

Mat. Location/QTY: \_\_\_\_\_

Notes: \_\_\_\_\_

|  |  |   |  |  |  |  |  |  |  |  |
|--|--|---|--|--|--|--|--|--|--|--|
|  |  | M, S, TSI   |  |  |  |  |  |  |  |  |
|  |  | Location:   |  |  |  |  |  |  |  |  |
|  |  | Ceiling, Wall, Floor, Roof, Multiple, Shaftway, Other |  |  |  |  |  |  |  |  |

Mat. Location/QTY: \_\_\_\_\_

Notes: \_\_\_\_\_

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# APPENDIX D

Laboratory Reports – Lead





# EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>

[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

|             |               |
|-------------|---------------|
| EMSL Order: | 201813005     |
| CustomerID: | ACAD78H       |
| CustomerPO: | 02328010.0000 |
| ProjectID:  |               |

Attn: **Brandon Wabble**  
**ARCADIS U.S., Inc.**  
**160 Chapel Road**  
**Suite 201**  
**Manchester, CT 06042**

Phone: (860) 645-1084  
 Fax: (860) 645-1090  
 Received: 11/08/18 10:30 AM  
 Collected: 11/7/2018

Project: 02328010.0000 / Town of Yorktown, NY

## Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

| <i>Client Sample Description</i>                       | <i>Lab ID</i>   | <i>Collected</i> | <i>Analyzed</i> | <i>Weight</i> | <i>Lead Concentration</i> |
|--|-----------------|------------------|-----------------|---------------|---------------------------|
| LP-1   | 201813005-0001A | 11/7/2018        | 11/15/2018      | 0.2568 g      | <0.0080 % wt              |
| Site: Exterior-North / Green / Concrete Wall           |                 |                  |                 |               |                           |
| LP-2   | 201813005-0002A | 11/7/2018        | 11/15/2018      | 0.2534 g      | 4.3 % wt                  |
| Site: Exterior -North / Green / Metal Door             |                 |                  |                 |               |                           |
| LP-3   | 201813005-0003A | 11/7/2018        | 11/15/2018      | 0.2575 g      | 1.5 % wt                  |
| Site: Interior of North Door / White/Red / Metal Door  |                 |                  |                 |               |                           |
| LP-4   | 201813005-0004A | 11/7/2018        | 11/15/2018      | 0.2532 g      | 0.021 % wt                |
| Site: Interior- Throughout / Gray / Concrete Wall      |                 |                  |                 |               |                           |
| LP-5   | 201813005-0005A | 11/7/2018        | 11/15/2018      | 0.2541 g      | 0.011 % wt                |
| Site: Interior -Throughout / Gray / Metal Pipes/Valves |                 |                  |                 |               |                           |

Phillip Worby, Lead Laboratory Manager  
or other approved signatory

\*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 11/16/2018 10:56:00



Design & Consultancy  
for natural and  
built assets

CHAIN-OF-CUSTODY FORM

Laboratory Job #:

201813005

ARCADIS PROJECT NO.: 02328010.0000

PROJECT NAME: Town of Yorktown, NY

PAGE 1 OF 2

| Results To:       |                            | Invoice To:       |                               |
|-------------------|----------------------------|-------------------|-------------------------------|
| Name:             | Brandon.Wabble@arcadis.com | Name:             | Brandon Wabble                |
| Company:          | ARCADIS U.S., Inc.         | Company:          | ARCADIS U.S., Inc.            |
| Street:           | 160 Chapel Road, Suite 201 | Street:           | 160 Chapel Road, Suite 201    |
| City, State, Zip: | Manchester, CT             | City, State, Zip: | Manchester, CT 06042          |
| Phone #:          | Choose an item.            | Email:            | Brandon.wabble@arcadis-us.com |

| Email PDF Reports to:          | Email EDD Reports to: |
|--------------------------------|-----------------------|
| Brandon Wabble<br>Greg Donovan |                       |

|  |   |
|--|---|
| Site Address: <u>Garden Lane + Old Crompton Rd., Yorktown, NY</u>  | Sample Number Sequence:   |
| Samples Collect By: <u>BFW</u>   | Analysis Turnaround Time:<br>**SAME DAY / RUSH**<br><input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours<br><input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input checked="" type="checkbox"/> 5 Days |
| Date(s) Collected: <u>11/7/18</u>  | Date Emailed Results Required:  |
| Sample Type: <u>Lead in Paint</u>  | Date Typed Results Required:  |
| <input checked="" type="checkbox"/> Analyze All Samples <input type="checkbox"/> Positive Stop <input type="checkbox"/> Automatic Point Count ≤ 3% <input type="checkbox"/> Other: |   |

|          | Printed Name    | Signature          | Affiliation | Date & Time     | # of Samples | Task for Person Handling COC |
|----------|-----------------|--------------------|-------------|-----------------|--------------|------------------------------|
| Remitted | Brandon Wabble  | <i>[Signature]</i> | ARCADIS     | 11/7/18         | 5            | Fedex                        |
| Received | Christina Krane | <i>[Signature]</i> | EMS/Redex   | 11/8/18<br>1030 | 5            |                              |
| Remitted |                 |                    |             |                 |              |                              |
| Received |                 |                    |             |                 |              |                              |
| Remitted |                 |                    |             |                 |              |                              |
| Received |                 |                    |             |                 |              |                              |

Comments: Please call the ARCADIS employee named above in the "Result To" line if the laboratory has ANY questions about the samples, sample analysis, or chain-of-custody.

Special Instructions:

Lead in Paint Analysis

PLEASE SEE ATTACHED FIELD FORMS FOR SAMPLE DETAIL AND DESCRIPTION

| Sample ID Number | Color     | Substrate Material (e.g. metal, concrete) | Surface Type (e.g. wall, door, pipe) | Condition (e.g. Intact, flaking) | Specific Sample Location | General Location (e.g. what rooms?) | Additional Notes (e.g. Multiple Layers?) |
|------------------|-----------|---|--------------------------------------|----------------------------------|--------------------------|-------------------------------------|--|
| 1 LP-1           | Green     | Concrete Wall                             | Wall                                 | F                                | Exterior - North         | Exterior - Thruout                  | N  |
| 2 LP-2           | Green     | Metal                                     | Door                                 | F                                | Exterior - North         | → (a DOORS)                         | N  |
| 3 LP-3           | White/Red | Metal                                     | Door                                 | F                                | Interior of North Door   | →                                   | Y  |
| 4 LP-4           | Gray      | Concrete                                  | Wall                                 | F                                | Interior Thruout         | →                                   | N  |
| 5 LP-5           | Gray      | Metal                                     | Pipes/Valves                         | F                                | Interior - Thruout       | →                                   | N  |
|                  |           |   |                                      |                                  |                          |                                     |  |
|                  |           |   |                                      |                                  |                          |                                     |  |
|                  |           |   |                                      |                                  |                          |                                     |  |

# APPENDIX E

## Laboratory Results – Polychlorinated Biphenyls





**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

---

Attn:

**Brandon Wabble**  
**ARCADIS U.S., Inc.**  
**160 Chapel Road**  
**Suite 201**  
**Manchester, CT 06042**

11/23/2018

Phone: (860) 645-1084  
Fax: (860) 645-1090

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 11/8/2018. The results are tabulated on the attached data pages for the following client designated project:

**02328010.0000**

The reference number for these samples is EMSL Order #011809617. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

---

Phillip Worby, Environmental Chemistry  
Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.  
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, CA ELAP 1877

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>[EnvChemistry2@emsl.com](mailto:EnvChemistry2@emsl.com)

EMSL Order: 011809617

CustomerID: ACAD78H

CustomerPO:

ProjectID:

Attn: **Brandon Wabble**  
**ARCADIS U.S., Inc.**  
**160 Chapel Road**  
**Suite 201**  
**Manchester, CT 06042**

Phone: (860) 645-1084  
 Fax: (860) 645-1090  
 Received: 11/08/18 9:15 AM

Project: 02328010.0000

**Analytical Results**

**Client Sample Description** PCB-1  
 Gray Paint on Pipes/Valves-Interior  
**Collected:**  
**Lab ID:** 011809617-0001

| Method         | Parameter    | Result | RL | Units      | Prep Date  | Analyst | Analysis Date | Analyst |
|----------------|--------------|--------|----|------------|------------|---------|---------------|---------|
| <b>GC-SVOA</b> |              |        |    |            |            |         |               |         |
| 3540C/8082A    | Aroclor-1016 | ND D   |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1221 | ND D   |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1232 | ND D   |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1242 | 2.0 D  |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1248 | ND D   |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1254 | 9.0 D  |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1260 | 5.3 D  |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1262 | ND D   |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1268 | ND D   |    | 0.97 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |

**Client Sample Description** PCB-2  
 Gray Textured Paint on Floor and Beam-Interior  
**Collected:**  
**Lab ID:** 011809617-0002

| Method         | Parameter    | Result | RL | Units      | Prep Date  | Analyst | Analysis Date | Analyst |
|----------------|--------------|--------|----|------------|------------|---------|---------------|---------|
| <b>GC-SVOA</b> |              |        |    |            |            |         |               |         |
| 3540C/8082A    | Aroclor-1016 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1221 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1232 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1242 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1248 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1254 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1260 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1262 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1268 | ND D   |    | 0.98 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |

**Client Sample Description** PCB-3  
 Beige/Gray Interior Window Glazing  
**Collected:**  
**Lab ID:** 011809617-0003

| Method         | Parameter    | Result | RL | Units      | Prep Date  | Analyst | Analysis Date | Analyst |
|----------------|--------------|--------|----|------------|------------|---------|---------------|---------|
| <b>GC-SVOA</b> |              |        |    |            |            |         |               |         |
| 3540C/8082A    | Aroclor-1016 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1221 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1232 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1242 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1248 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |



**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>[EnvChemistry2@emsl.com](mailto:EnvChemistry2@emsl.com)

EMSL Order: 011809617

CustomerID: ACAD78H

CustomerPO:

ProjectID:

Attn: **Brandon Wabble**  
**ARCADIS U.S., Inc.**  
**160 Chapel Road**  
**Suite 201**  
**Manchester, CT 06042**

Phone: (860) 645-1084  
 Fax: (860) 645-1090  
 Received: 11/08/18 9:15 AM

Project: 02328010.0000

**Analytical Results**

**Client Sample Description** PCB-3 **Collected:** **Lab ID:** 011809617-0003  
 Beige/Gray Interior Window Glazing

| Method         | Parameter    | Result | RL | Units      | Prep Date  | Analyst | Analysis Date | Analyst |
|----------------|--------------|--------|----|------------|------------|---------|---------------|---------|
| <b>GC-SVOA</b> |              |        |    |            |            |         |               |         |
| 3540C/8082A    | Aroclor-1254 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1260 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1262 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |
| 3540C/8082A    | Aroclor-1268 | ND D   |    | 0.95 mg/Kg | 11/16/2018 | AB      | 11/19/2018    | EH      |

**Definitions:**

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit (Analytical)

D - Dilution



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

# Chain of Custody

## EMSL Order Number (Lab Use Only):

011809617

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

|  |                           |  |                           |
|--|---------------------------|--|---------------------------|
| Company: <u>Arcadis</u>  |                           | EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different<br>If Bill to is Different note instructions in Comments** |                           |
| Street: <u>160 Chapel Road, Manchester, CT</u>   |                           | Third Party Billing requires written authorization from third party  |                           |
| City: <u>Manchester</u>  | State/Province: <u>CT</u> | Zip/Postal Code:   | Country:                  |
| Report To (Name): <u>Brandon, Whittle @ arcadis.com</u>  |                           | Fax #:   |                           |
| Telephone #:   |                           | Email Address:   |                           |
| Project Name/Number: <u>02328010.0090</u>  |                           |  |                           |
| Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email |                           | Purchase Order:  | U.S. State Samples Taken: |

**Turnaround Time (TAT) Options\* - Please Check**

3 Hour  6 Hour  24 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

\*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

### Asbestos

|   |  |  |
|---|--|--|
| <b>PCM - Air</b><br><input type="checkbox"/> NIOSH 7400<br><input type="checkbox"/> w/ 8hr. TWA<br><b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA ONLY)<br><input type="checkbox"/> AHERA 40 CFR, Part 763<br><input type="checkbox"/> NIOSH 7402<br><input type="checkbox"/> EPA Level II<br><input type="checkbox"/> ISO 10312<br><b>TEM - Water</b><br>Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking<br>All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking | <b>PLM - Bulk</b><br><input type="checkbox"/> PLM EPA 600/R-93/116<br><input type="checkbox"/> PLM EPA NOB (<1%)<br><input type="checkbox"/> NYS 198.1 (friable-NY)<br><input type="checkbox"/> NYS 198.6 (non-friable-NY)<br>Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)<br>Point Count w/ Gravimetric<br><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)<br><b>TEM - Dust</b><br><input type="checkbox"/> Microvac - ASTM D 5755<br><input type="checkbox"/> Wipe-ASTM D6480 | <b>TEM - Bulk</b><br><input type="checkbox"/> TEM EPA NOB<br><input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)<br><input type="checkbox"/> Chatfield SOP<br><b>Soil/Rock/Vermiculite</b><br><input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity)<br><input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity)<br><input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity)<br><input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative)<br><b>Other:</b> |
|---|--|--|

|   |  |  |
|---|--|--|
| <b>Lead (Pb)</b><br><b>Flame Atomic Absorption</b><br><input type="checkbox"/> Chips SW846-7000B or AOAC 974.02<br><input type="checkbox"/> Soil SW846-7000B/7420<br><input type="checkbox"/> Air NIOSH 7082<br><input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420<br><input type="checkbox"/> ASTM Wipe SW846-7000B/7420<br><input type="checkbox"/> non ASTM Wipe SW846-7000B/7420<br><input type="checkbox"/> TCLP SW846-1311/7420/SM 3111B<br><b>Graphite Furnace Atomic Absorption</b><br><input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9<br><input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9 | <b>ICP</b><br><input type="checkbox"/> Air NIOSH 7300 Modified<br><input type="checkbox"/> non ASTM Wipe SW846-6010B or C<br><input type="checkbox"/> ASTM Wipe SW846-6010B or C<br><input type="checkbox"/> Soil SW846-6010 B or C<br><input type="checkbox"/> Waste Water SW846-6010B or C<br><input type="checkbox"/> TCLP SW846-6010B or C<br><b>Other:</b> <input type="checkbox"/> | <b>Materials Science</b><br><input type="checkbox"/> Common Particle ID (large particles)<br><input type="checkbox"/> Full Particle ID (environmental dust)<br><input type="checkbox"/> Basic Material ID (solids)<br><input type="checkbox"/> Advanced Material ID<br><input type="checkbox"/> Physical Testing (Tensile, Compression)<br><input type="checkbox"/> Combustion-by-products (soot, char, etc.)<br><input type="checkbox"/> X-Ray Fluorescence (elem. analysis)<br><input type="checkbox"/> X-Ray Diffraction (Crystalline Part.)<br><input type="checkbox"/> MMVF's (Fibrous glass, RCF's)<br><input type="checkbox"/> Particle Size (sieve/microscopy/laser)<br><input type="checkbox"/> Combustible Dust<br><input type="checkbox"/> Petrographic Examination<br><b>Other:</b> <input type="checkbox"/> |
|---|--|--|

### Microbiology

|   |   |  |
|---|---|--|
| <b>Wipe and Bulk Samples</b><br><input type="checkbox"/> Mold & Fungi - Direct Examination<br><input type="checkbox"/> Mold & Fungi Culture (Genus Only)<br><input type="checkbox"/> Mold & Fungi Culture (Genus & Species)<br><input type="checkbox"/> Bacterial Count & ID (Up to Three Types)<br><input type="checkbox"/> Bacterial Count & ID (Up to Five Types)<br><input type="checkbox"/> MRSA<br><input type="checkbox"/> <i>Pseudomonas aeruginosa</i><br><b>Water Samples</b><br><input type="checkbox"/> Total Coliform & E.coli (P/A)<br><input type="checkbox"/> Fecal Coliform (SM 9222D)<br><input type="checkbox"/> Sewage Screen<br><input type="checkbox"/> Heterotrophic Plate Count (SM 9215) | <b>Air Samples</b><br><input type="checkbox"/> Mold & Fungi (Spore Trap)<br><input type="checkbox"/> Mold & Fungi Culture (Genus Only)<br><input type="checkbox"/> Mold & Fungi (Genus & Species)<br><input type="checkbox"/> Bacterial Culture & ID (Up to Three Types)<br><input type="checkbox"/> Bacterial Culture & ID (Up to Five Types)<br><input type="checkbox"/> Endotoxin Testing<br><b>Real Time Q-PCR</b> (See Analytical Guide for Code)<br>Code:<br><b>Legionella</b><br><input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4<br><b>Other:</b> <input type="checkbox"/> | <b>IAQ</b><br>Nuisance Dust NIOSH <input type="checkbox"/> 0500 <input type="checkbox"/> 0600<br>Airborne Dust <input type="checkbox"/> PM10 <input type="checkbox"/> TSP<br>Silica Analysis: <input type="checkbox"/> All Species<br>Silica Analysis - Single Species<br><input type="checkbox"/> Alpha Quartz <input type="checkbox"/> Cristobalite <input type="checkbox"/> Tridymite<br><input type="checkbox"/> HVAC Efficiency<br><input type="checkbox"/> Carbon Black<br><input type="checkbox"/> Airborne Oil Mist<br>Radon Testing: Call for Kit and COC<br><b>Other:</b> <input type="checkbox"/> |
|---|---|--|

**\*\*Comments/Special Instructions:** PCB Analysis

|                        |                |                     |                |
|------------------------|----------------|---------------------|----------------|
| Client Sample #'s      | -              | Total # of Samples: | 3              |
| Relinquished (Client): | <u>Paul</u>    | Date:               | <u>11/7/18</u> |
| Received (Lab):        | <u>Whittle</u> | Date:               | <u>11/8/18</u> |
|                        |                | Time:               | <u>9:15am</u>  |

Analysis Completed In Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide  
Controlled Document-OneChain-R2-1/12/2010

*rec'd in plastic*  
*20.8°C*  
*Please Analyze for PCB's emailed for collection date 11/8*



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

**Chain of Custody**  
EMSL Order Number (Lab Use Only):

011809617

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

| Sample # | Sample Description                             | Volume/Area (Air)<br>HA # (Bulk) | Date/Time<br>Sampled |
|----------|--|----------------------------------|----------------------|
| ① PCB-1  | Gray Paint on Pipes/Valves - Interior          |                                  |                      |
| ② PCB-2  | Gray Textured Paint on Floor + Beam - Interior |                                  |                      |
| ③ PCB-3  | Beige/Gray Interior window Glazing             |                                  |                      |
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**\*Comments/Special Instructions:**

PN # 02328010.0000 , Town of Yorktown, NY \* PCB Analysis \*

Garden Ln., + old Crumpton Rd.,  
Yorktown, NY

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

# APPENDIX F

## Photograph Logs



## PHOTOGRAPH LOG

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 15098



**Photograph: 1**

**Description:**  
Exterior - Pump Station

**Location:**  
Garden Lane and Old  
Crompond Road,  
Yorktown, New York

**Photograph taken by:**  
Brandon Wabble

**Date:** 11/7/2018



**Photograph: 2**

**Description:**  
(HA-1) (PCB-3): Interior  
Window Glazing

**Location:**  
Interior - Wooden  
Frame Room

**Photograph taken by:**  
Brandon Wabble

**Date:** 11/7/2018

## PHOTOGRAPH LOG

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 15098



**Photograph: 3**

**Description:**

(HA-2) (LP-5) (PCB-1):  
Gray Paint on  
Pipes/Pumps/Valves

**Location:**

Interior - Throughout

**Photograph taken by:**

Brandon Wabble

**Date:** 11/7/2018



**Photograph: 4**

**Description:**

HA-3: Concrete Block  
Mortar  
LP-1: Green Paint on  
Concrete Wall  
LP-2: Green Paint on  
Metal Door

**Location:**

Interior and Exterior  
Walls

**Photograph taken by:**

Brandon Wabble

**Date:** 11/7/2018

## PHOTOGRAPH LOG

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 15098



**Photograph: 5**

**Description:**

HA-4: Exterior Window  
Caulk

**Location:**

Exterior North Window

**Photograph taken by:**

Brandon Wabble

**Date:** 11/7/2018



**Photograph: 6**

**Description:**

(HA-5) (PCB-2): Gray  
Textured Paint on Floor

**Location:**

Interior - Wooden  
Frame Room

**Photograph taken by:**

Brandon Wabble

**Date:** 11/7/2018

## PHOTOGRAPH LOG

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 15098



**Photograph: 7**

**Description:**

HA-6: Fissured Ceiling  
Tile  
LP-4: Gray Paint on  
Concrete Wall

**Location:**

Interior - Weight Scale  
Room

**Photograph taken by:**

Brandon Wabble

**Date:** 11/7/2018



**Photograph: 8**

**Description:**

HA-7: Asphalt Roofing  
Shingles  
HA-8: Black Glue Strips  
with HA-7  
HA-9: Black Vapor  
Barrier Below HA-7

**Location:**

Roof

**Photograph taken by:**

Brandon Wabble

**Date:** 11/7/2018



## PHOTOGRAPH LOG

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 15098



**Photograph: 9**

**Description:**  
HA-10: Valve Gasket

**Location:**  
Interior - Throughout

**Photograph taken by:**  
Brandon Wabble

**Date:** 11/7/2018



**Photograph: 10**

**Description:**  
HA-11: Electrical  
Components/Wire  
Wrap (Assumed ACM)

**Location:**  
Interior - Throughout

**Photograph taken by:**  
Brandon Wabble

**Date:** 11/7/2018

## PHOTOGRAPH LOG

Town of Yorktown  
Catherine Street Pump Station  
Garden Lane and Old Crompond Road  
Yorktown, New York 15098



**Photograph: 11**

**Description:**  
LP-3: White/Red paint  
on Metal Door

**Location:**  
Interior - North Door

**Photograph taken by:**  
Brandon Wabble

**Date:** 11/7/2018

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Braintree, Massachusetts 02184

[www.arcadis.com](http://www.arcadis.com)