



Environment



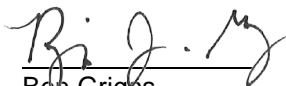

Prepared for:
City of Meriden, Connecticut

Prepared by:
AECOM
Rocky Hill, Connecticut
60430270
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Assessment of Building Components Asbestos, PCB, and Lead Impacts Mills Memorial Housing Complex Low Rise 3, 52 & 58 Mill Street, Meriden, Connecticut 06450



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Contents

1.0 Introduction.....	1-1
2.0 Asbestos Survey	2-1
3.0 TCLP Sampling.....	3-1
4.0 PCB Sampling.....	4-1

List of Tables

Table 2-1	Asbestos-Containing Building Materials	2-1
Table 3-1	TCLP Results	3-1
Table 4-1	PCB Analytical Results	4-1

List of Figures

Figure 1 - Low Rise 3 Exterior

Figure 2 - Low Rise 3 Floor 1

Figure 3 - Low Rise 3 Floor 2

Figure 4 - Low Rise 3 Floor 3

List of Attachments

Attachment A - Table of Asbestos Samples and Results

Attachment B - Asbestos Analytical Results

Attachment C - TCLP Lead Results

Attachment D - PCB Analytical Results

1.0 Introduction

AECOM Technical Services, Inc. (AECOM) was retained by the City of Meriden to perform a pre-demolition hazardous building materials survey of the Mills Memorial Housing Complex Low Rise 3 building located at 52 and 58 Mill Street, Meriden, Connecticut. The purpose of the survey was to identify the presence of asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls (PCBs) containing materials. The materials that were assessed and sampled are anticipated to be removed prior to and during a planned building demolition effort.

The purpose of this project was to conduct a U.S. Environmental Protection Agency (USEPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) ACM survey, as well as a lead-based paint and PCB assessment in the subject building areas prior to undertaking building demolition or renovation work. The ACM survey conducted by AECOM consisted of a walkthrough of the subject areas including visual observations of building materials suspect of being ACM. The survey also included the collection of samples of building materials suspected of containing lead-based paint and PCBs.

Low Rise 3 is a three story brick, block and concrete apartment building. There are two sets of stairs that service each of the floors. The vast majority of the building was occupied during the hazardous building materials survey.

Since the identified building is scheduled for demolition, the survey was destructive in nature. However, limited destructive sampling techniques were employed within occupied units to access suspect materials in hidden or concealed spaces that were identified during the survey. Likewise, due to the conditions of the building, not all areas were accessible. Pipe chases within occupied apartment units and crawl spaces below the building were inaccessible and will require additional investigation prior to demolition activities.

Pipe chases were observed in the roof leading down through apartment units and pipe fittings should be presumed to be present in many or most pipe chases that supply the kitchens and bathrooms.

2.0 Asbestos Survey

State of Connecticut Asbestos Inspectors-Consultants, Mr. Ray Lavery (License No. 000761) and Ms. Samantha Avis (License No. 000888) visited the site on July 22, 2015 and collected samples of suspect ACM.

A total of ninety-nine (99) bulk samples of suspect materials were collected and analyzed for asbestos content. The samples were delivered, under full chain-of-custody to EMSL Analytical, Inc. (EMSL) located in Wallingford, Connecticut. The samples were analyzed in accordance with the USEPA recommended analytical method of polarized light microscopy (PLM) with dispersion staining.

EMSL is fully accredited to perform bulk sample analysis under the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology (NIST). EMSL is also certified by the Connecticut Department of Labor Standards to provide asbestos analytical services. Samples were handled and stored in a manner so as to maintain their integrity and are routinely retained for a period of 90 days after results are reported to allow for any desired analytical follow-up and/or re-analysis.

The State of Connecticut Department of Public Health has established a level of greater than 1% asbestos content for a material to be considered as ACM. Those materials confirmed to be ACM and their quantities are listed in Table 2-1. A table of all materials sampled is located in Attachment A. The chain of custody forms and laboratory analytical results can be found in Attachment B. Asbestos Sample locations are illustrated in the attached figures.

Once the demolition plans are further defined, AECOM recommends developing an asbestos abatement work plan/specification for soliciting contractor quotes to remove the asbestos-containing materials.

If at any point during the demolition, should suspect ACM or other hazardous materials be encountered during renovation activities, work should stop immediately and these suspect materials should be sampled and analyzed.

Table 2-1 Asbestos-Containing Building Materials

Sample Number	Material Type	Color	Location	Approximate Quantity	Asbestos Percent and Type
LR3-R-3A-C	Roof Tar, on Flashing	Black	Roof	400 LF	2% Chrysotile
LR3-1A-26A/B	Pipe Fitting Insulation	Gray	1 st Floor, Unit 1A	Estimated 150 Throughout Building	25% Chrysotile
LR3-3-27A/B	Floor Tile, Third Layer	Black	3 rd Floor, Hallway	175 SF	2% Chrysotile
LR3-B-30A-C	Mudded Pipe Fitting	Gray	Basement	Estimated 150 Throughout Building	40% Chrysotile

* SF = Square feet

3.0 TCLP Sampling

Although federal and state regulations do not require pre-demolition removal of LBP, federal regulations do require that demolition or renovation wastes from a building be tested to determine proper waste disposal following demolition. This test involves a determination of the leachability characteristics of the lead in the LBP and is known as a Toxicity Characteristic Leaching Procedure (TCLP) test. The regulatory limit for lead in LBP materials which have to be disposed of as hazardous waste is 5.0 milligrams per liter (mg/L) of leachable lead.

On July 23, 2015, Hygenix collected samples of building materials representative of the likely waste stream from building renovation work for TCLP testing. One sample was submitted for analysis of leachable lead.

The samples were delivered under chain-of-custody to Schneider Laboratories located in Richmond, Virginia. Results of TCLP analyses, contained in Table 3-1, indicate that the samples of building materials were below the regulatory limit for leachable lead. The chain of custody form and laboratory analytical report is contained in Attachment C. Sample locations are illustrated in the attached figures.

Table 3-1 TCLP Results

Sample Name	Material	Sample Weight (g)	Lead Concentration (mg/L)
LR3	Interior & Exterior Building Material Composite	100	0.535

* g = Grams

* mg/L = Milligrams per Liter

4.0 PCB Sampling

AECOM collected a limited number of suspect PCB samples from the interior and exterior of the building. AECOM collected five (5) samples of building materials and submitted the samples to Con-Test Analytical (Con-Test) in East Longmeadow, Massachusetts. Con-Test is an analytical laboratory approved by both the State of Connecticut Department of Public Health (CT DPH) and Department of Energy and Environmental Protection (CT DEEP). The results of AECOM's PCB testing are contained in Table 4-1. The chain of custody forms and laboratory analytical results can be found in Attachment D.

Results of the analyses indicate that the samples were below the analytical method detection limit for PCBs.

Table 4-1 PCB Analytical Results

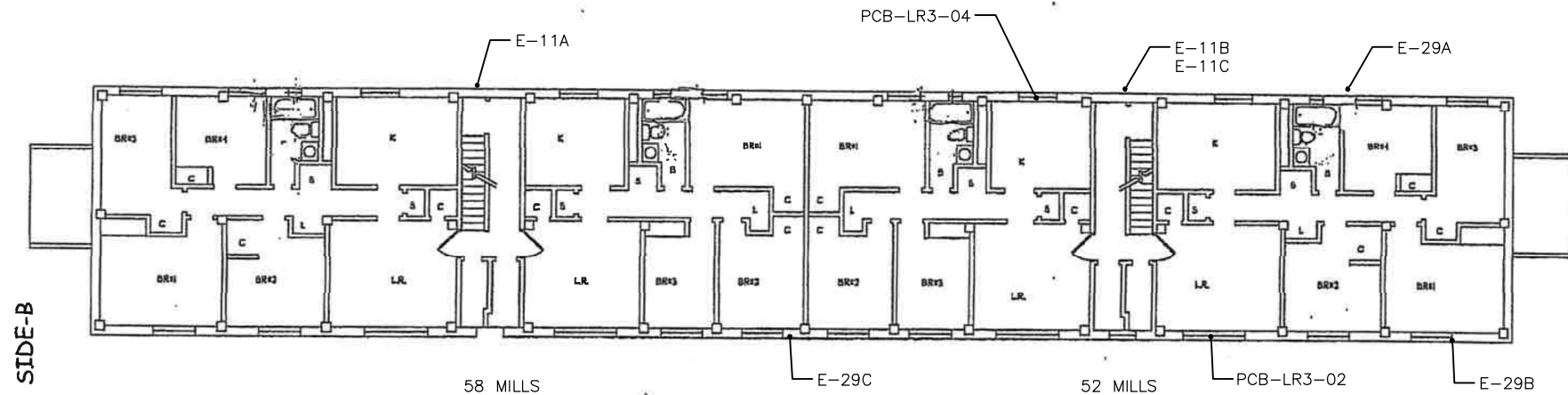
Sample #	Material	Location	PCB Concentration (PPM)
PCB-LR3-01	Interior Window Caulk	Unit 1B, Kitchen, Bldg. 52	Non-Detect
PCB-LR3-02	Exterior Window Caulk	Exterior, Level 1, Bldg. 52	Non-Detect
PCB-LR3-03	Interior Window Caulk	2 nd Floor Hallway, Bldg. 52	Non-Detect
PCB-LR3-03 DUP	Interior Window Caulk	2 nd Floor Hallway, Bldg. 52	Non-Detect
PCB-LR3-04	Exterior Window Caulk	Exterior, Level 1, Bldg. 52	Non-Detect

* PPM = parts per million

* DUP = Duplicate Sample

Figures

Note - This drawing is based on survey information plan titled,
 "Pre-Renovation Hazardous Building Materials Inspection" by
 Eagle Environmental, Inc., Bristol, December 28, 2009



LOW-RISE BUILDINGS 1, 2, & 3
TYPICAL FLOOR PLAN

AECOM provides this drawing for orientation to sampling locations completed by AECOM. AECOM has not verified the accuracy of the base map features on this drawing and they are not intended to be relied on for any other purposes, such as determining abatement and/or demolition cost estimating.

NOTE: DRAWING NOT TO SCALE

FIGURE 1
SAMPLE LOCATION PLAN

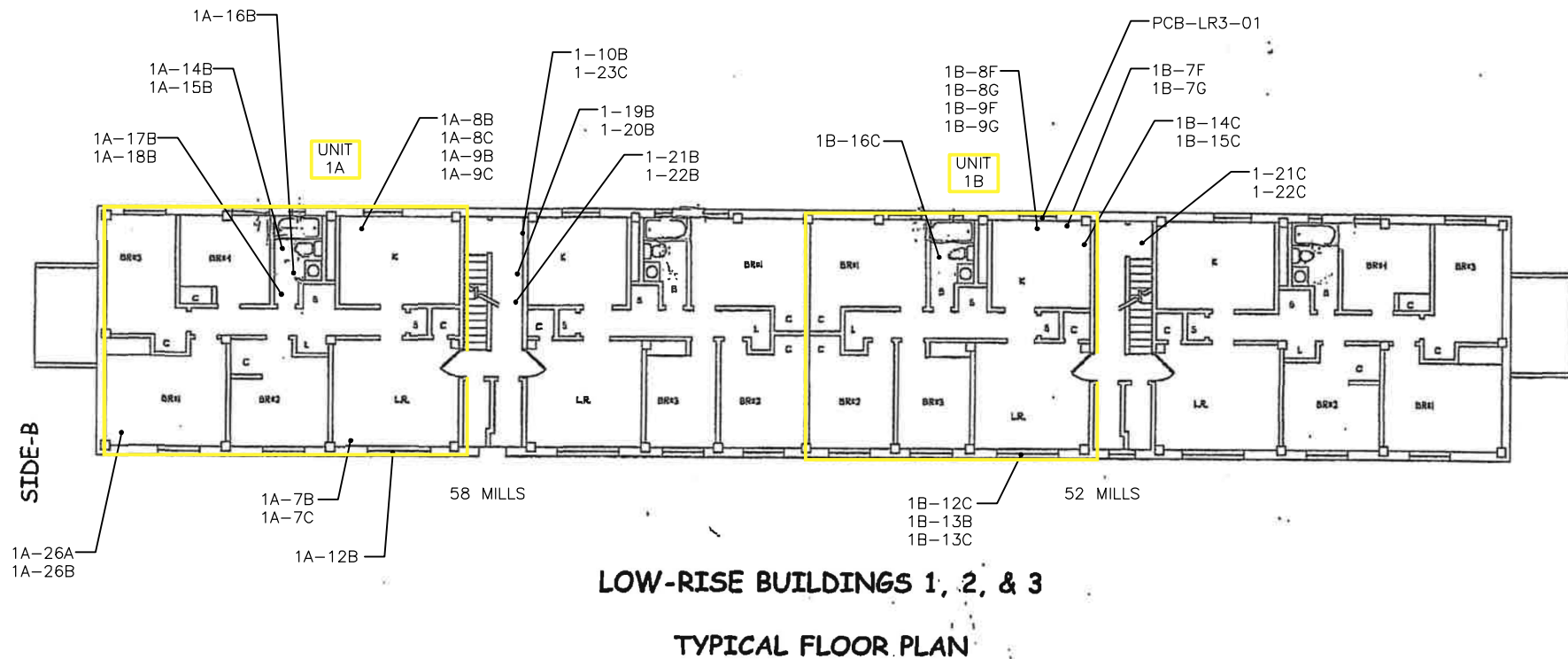
LOW RISE 3
EXTERIOR

52 & 58 MILLS STREET
MERIDEN, CT

JOB NUMBER: 60430270

AECOM

Note - This drawing is based on survey information plan titled,
 "Pre-Renovation Hazardous Building Materials Inspection" by
 Eagle Environmental, Inc., Bristol, December 28, 2009



AECOM provides this drawing for orientation to sampling locations completed by AECOM. AECOM has not verified the accuracy of the base map features on this drawing and they are not intended to be relied on for any other purposes, such as determining abatement and/or demolition cost estimating.

NOTE: DRAWING NOT TO SCALE

FIGURE 2
 SAMPLE LOCATION PLAN

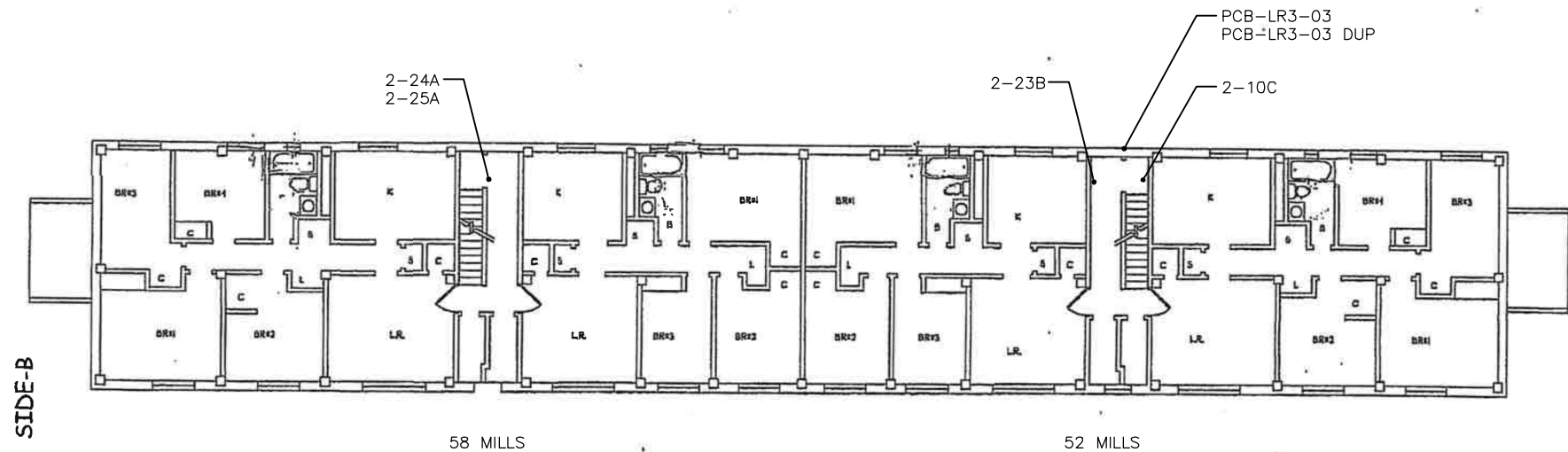
LOW RISE 3
 FLOOR 1

52 & 58 MILLS STREET
 MERIDEN, CT

JOB NUMBER: 60430270

AECOM

Note - This drawing is based on survey information plan titled,
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LOW-RISE BUILDINGS 1, 2, & 3
TYPICAL FLOOR PLAN

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NOTE: DRAWING NOT TO SCALE

FIGURE 3
SAMPLE LOCATION PLAN

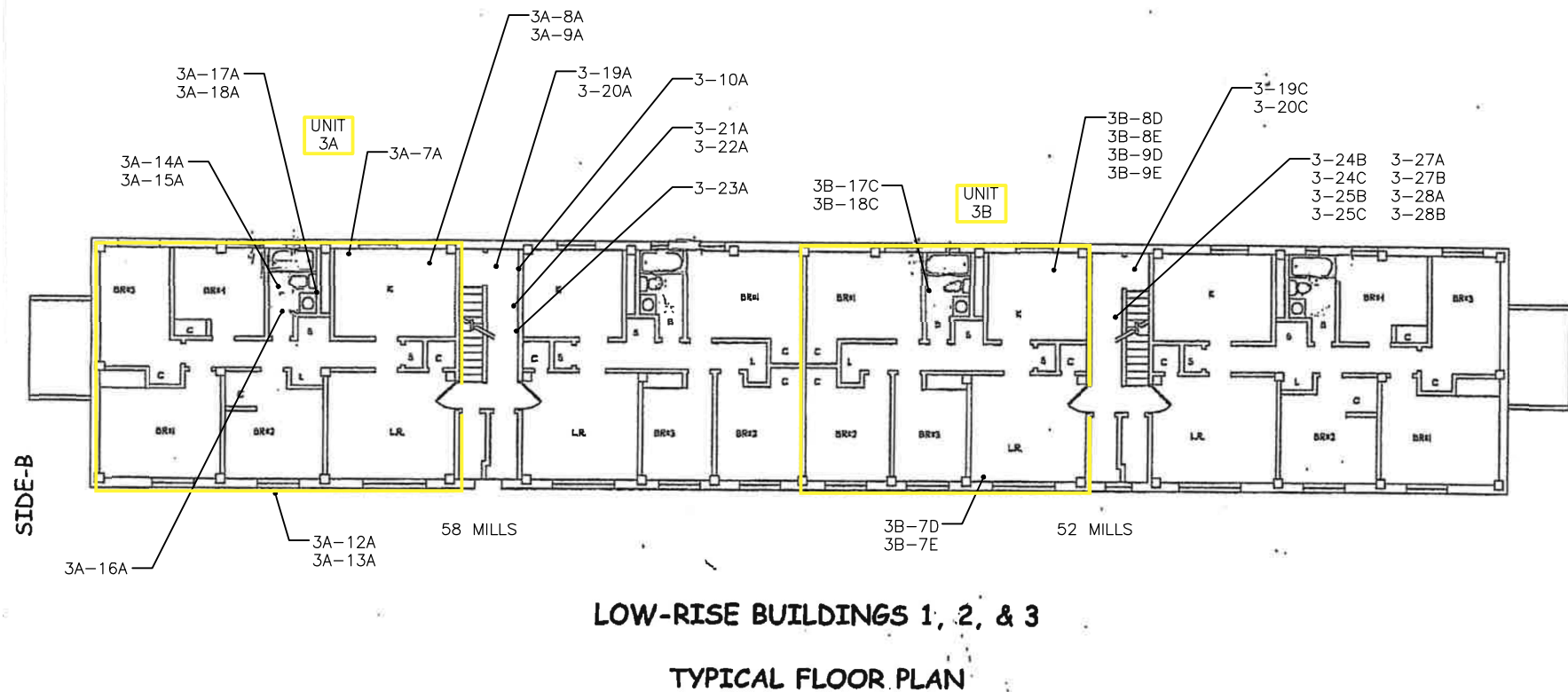
LOW RISE 3
FLOOR 2

52 & 58 MILLS STREET
MERIDEN, CT

JOB NUMBER: 60430270

AECOM

Note - This drawing is based on survey information plan titled,
 "Pre-Renovation Hazardous Building Materials Inspection" by
 Eagle Environmental, Inc., Bristol, December 28, 2009



AECOM provides this drawing for orientation to sampling locations completed by AECOM. AECOM has not verified the accuracy of the base map features on this drawing and they are not intended to be relied on for any other purposes, such as determining abatement and/or demolition cost estimating.

NOTE: DRAWING NOT TO SCALE

FIGURE 4
 SAMPLE LOCATION PLAN

LOW RISE 3
 FLOOR 3

52 & 58 MILLS STREET
 MERIDEN, CT

JOB NUMBER: 60430270

AECOM

**Attachment A
Asbestos Samples and
Results**

**LOW RISE 3
MERIDEN, CT****TABLE OF SAMPLED MATERIALS**

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-R-1A	Misc.	Roof Field	Black	Low Rise 3, Roof	Non-detect
LR3-R-1B	Misc.	Roof Field	Black	Low Rise 3, Roof	Non-detect
LR3-R-1C	Misc.	Roof Field	Black	Low Rise 3, Roof	Non-detect
LR3-R-2A	Misc.	Roof Tar Paper	Black	Low Rise 3, Roof	Non-detect
LR3-R-2B	Misc.	Roof Tar Paper	Black	Low Rise 3, Roof	Non-detect
LR3-R-2C	Misc.	Roof Tar Paper	Black	Low Rise 3, Roof	Non-detect
LR3-R-3A	Misc.	Roof Tar, on Flashing	Black	Low Rise 3, Roof	2% Chrysotile
LR3-R-3B	Misc.	Roof Tar, on Flashing	Black	Low Rise 3, Roof	2% Chrysotile
LR3-R-3C	Misc.	Roof Tar, on Flashing	Black	Low Rise 3, Roof	2% Chrysotile

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-R-4A	Misc.	Roof Flashing	Black	Low Rise 3, Roof	Non-detect
LR3-R-4B	Misc.	Roof Flashing	Black	Low Rise 3, Roof	Non-detect
LR3-R-4C	Misc.	Roof Flashing	Black	Low Rise 3, Roof	Non-detect
LR3-R-5A	Misc.	Roof Shingle	Black	Low Rise 3, Roof	Non-detect
LR3-R-5B	Misc.	Roof Shingle	Black	Low Rise 3, Roof	Non-detect
LR3-R-5C	Misc.	Roof Shingle	Black	Low Rise 3, Roof	Non-detect
LR3-R-6A	Misc.	Roof Shingle Paper	Black	Low Rise 3, Roof	Non-detect
LR3-R-6B	Misc.	Roof Shingle Paper	Black	Low Rise 3, Roof	Non-detect
LR3-R-6C	Misc.	Roof Shingle Paper	Black	Low Rise 3, Roof	Non-detect
LR3-3A-7A	Surfacing	Plaster- Skim/ Rough Coat	White/ Brown	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-7B	Surfacing	Plaster- Skim/ Rough Coat	White/ Brown	Low Rise 3, 1 st Floor, Unit 1A	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-1A-7C	Surfacing	Plaster-Skim/ Rough Coat	White/Brown	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-3B-7D	Surfacing	Plaster	White	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-3B-7E	Surfacing	Plaster	White	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-1B-7F	Surfacing	Plaster	White	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-1B-7G	Surfacing	Plaster	White	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-8A	Misc.	Floor Tile	Tan	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-8B	Misc.	Floor Tile	Tan	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-1A-8C	Misc.	Floor Tile	Tan	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-3B-8D	Misc.	Floor Tile	Tan	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-3B-8E	Misc.	Floor Tile	Tan	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-1B-8F	Misc.	Floor Tile	Tan	Low Rise 3, 1 st Floor, Unit 1B	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-1B-8G	Misc.	Floor Tile	Tan	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-9A	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-9B	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-1A-9C	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-3B-9D	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-3B-9E	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-1B-9F	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-1B-9G	Misc.	Mastic associated with Tan Floor Tile	Brown/ Black	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3-10A	Misc.	Mortar to CMU Block	Tan	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-1-10B	Misc.	Mortar to CMU Block	Tan	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-2-10C	Misc.	Mortar to CMU Block	Tan	Low Rise 3, 2 nd Floor, Hallway	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-E-11A	Surfacing	Skim Coat to Exterior Concrete	Gray	Low Rise 3, Exterior	Non-detect
LR3-E-11B	Surfacing	Skim Coat to Exterior Concrete	Gray	Low Rise 3, Exterior	Non-detect
LR3-E-11C	Surfacing	Skim Coat to Exterior Concrete	Gray	Low Rise 3, Exterior	Non-detect
LR3-3A-12A	Misc.	Interior Window Caulk	Tan	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-12B	Misc.	Interior Window Caulk	Tan	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-1B-12C	Misc.	Interior Window Caulk	Tan	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-13A	Misc.	Exterior Window Caulk	Black	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1B-13B	Misc.	Exterior Window Caulk	Black	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-1B-13C	Misc.	Exterior Window Caulk	Black	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-14A	Misc.	Floor Tile	Brown	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-14B	Misc.	Floor Tile	Brown	Low Rise 3, 1 st Floor, Unit 1A	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-1B-14C	Misc.	Floor Tile	Brown	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-15A	Misc.	Mastic associated with Brown Floor Tile	Brown	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-15B	Misc.	Mastic associated with Brown Floor Tile	Brown	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-1B-15C	Misc.	Mastic associated with Brown Floor Tile	Brown	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-16A	Misc.	Ceiling Tile	Tan	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-16B	Misc.	Ceiling Tile	Tan	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-1B-16C	Misc.	Ceiling Tile	Tan	Low Rise 3, 1 st Floor, Unit 1B	Non-detect
LR3-3A-17A	Misc.	Cove Base	Black	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect
LR3-1A-17B	Misc.	Cove Base	Black	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-3B-17C	Misc.	Cove Base	Black	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-3A-18A	Misc.	Mastic associated with Black Cove Base	Tan	Low Rise 3, 3 rd Floor, Unit 3A	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-1A-18B	Misc.	Mastic associated with Black Cove Base	Tan	Low Rise 3, 1 st Floor, Unit 1A	Non-detect
LR3-3B-18C	Misc.	Mastic associated with Black Cove Base	Tan	Low Rise 3, 3 rd Floor, Unit 3B	Non-detect
LR3-3-19A	Misc.	Floor Tile	Gray	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-1-19B	Misc.	Floor Tile	Gray	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-3-19C	Misc.	Floor Tile	Gray	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-3-20A	Misc.	Mastic associated with Gray Floor Tile	Yellow	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-1-20B	Misc.	Mastic associated with Gray Floor Tile	Yellow	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-3-20C	Misc.	Mastic associated with Gray Floor Tile	Yellow	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-3-21A	Misc.	Floor Tile	White/ Tan	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-1-21B	Misc.	Floor Tile	White/ Tan	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-1-21C	Misc.	Floor Tile	White/ Tan	Low Rise 3, 1 st Floor, Hallway	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-3-22A	Misc.	Mastic associated with Floor Tile	Brown	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-1-22B	Misc.	Mastic associated with Floor Tile	Brown	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-1-22C	Misc.	Mastic associated with Floor Tile	Brown	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-3-23A	Misc.	Caulk, between floor and block	White	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-2-23B	Misc.	Caulk, between floor and block	White	Low Rise 3, 2 nd Floor, Hallway	Non-detect
LR3-1-23C	Misc.	Caulk, between floor and block	White	Low Rise 3, 1 st Floor, Hallway	Non-detect
LR3-2-24A	Misc.	Floor Tile, Second layer	Tan	Low Rise 3, 2 nd Floor, Hallway	Non-detect
LR3-3-24B	Misc.	Floor Tile, Second layer	Tan	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-3-24C	Misc.	Floor Tile, Second layer	Tan	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-2-25A	Misc.	Mastic associated with Floor Tile, Second layer	Brown	Low Rise 3, 2 nd Floor, Hallway	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-3-25B	Misc.	Mastic associated with Floor Tile, Second layer	Brown	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-3-25C	Misc.	Mastic associated with Floor Tile, Second layer	Brown	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-1A-26A	TSI	Pipe Fitting Insulation	Gray	Low Rise 3, 1 st Floor, Unit 1A	25% Chrysotile
LR3-1A-26B	TSI	Pipe Fitting Insulation	Gray	Low Rise 3, 1 st Floor, Unit 1A	25% Chrysotile
LR3-3-27A	Misc.	Floor Tile, Third layer	Black	Low Rise 3, 3 rd Floor, Hallway	2% Chrysotile
LR3-3-27B	Misc.	Floor Tile, Third layer	Black	Low Rise 3, 3 rd Floor, Hallway	2% Chrysotile
LR3-3-28A	Misc.	Mastic associated with Floor Tile, Third layer	Brown	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-3-28B	Misc.	Mastic associated with Floor Tile, Third layer	Brown	Low Rise 3, 3 rd Floor, Hallway	Non-detect
LR3-E-29A	Misc.	Mortar associated with Exterior Brick	Brown	Low Rise 3, Exterior	Non-detect
LR3-E-29B	Misc.	Mortar associated with Exterior Brick	Brown	Low Rise 3, Exterior	Non-detect

Sample #	Material Category	Type of Material	Color	Location	ACM (%)
LR3-E-29C	Misc.	Mortar associated with Exterior Brick	Brown	Low Rise 3, Exterior	Non-detect
LR3-B-30A	TSI	Pipe Fitting Wrap	Gray	Low Rise 3, Basement	40% Chrysotile
LR3-B-30B	TSI	Pipe Fitting Wrap	Gray	Low Rise 3, Basement	40% Chrysotile
LR3-B-30C	TSI	Pipe Fitting Wrap	Gray	Low Rise 3, Basement	40% Chrysotile

*TSI – Thermal System Insulation used to control heat transfer or prevent condensation on pipes and pipe fittings, boilers, breeching, tanks, ducts, and other parts of hot and cold water systems; heating, ventilation, and air conditioning (HVAC) systems; or other mechanical systems.

*Surfacing – Interior ACBM that has been sprayed on, troweled on, or otherwise applied to surfaces (structural members, walls, ceilings, etc.) for acoustical, decorative, fireproofing, or other purposes

*Miscellaneous – Other, mostly nonfriable products and materials found on structural components, structural members or fixtures, such as floor tile, ceiling tile, construction mastic for floor and ceiling materials, sheet flooring, fire doors, asbestos cement pipe and board, wallboard, acoustical wall tile, and vibration damping cloth.

Attachment B
Asbestos Analytical Results

**EMSL Analytical, Inc.**

29 North Plains Highway, Unit # 4, Wallingford, CT 06492

Phone/Fax: 203-284-5948 / (203) 284-5978

<http://www.EMSL.com>wallingfordlab@emsl.com

EMSL Order: 241503239

CustomerID: URSC62

CustomerPO: 60430270

ProjectID:

Attn: **Ray Lavery**
AECOM
500 Enterprise Drive
Suite 3B
Rocky Hill, CT 06067

Phone: (860) 529-8882
 Fax: (860) 529-3991
 Received: 07/22/15 2:45 PM
 Analysis Date: 7/30/2015
 Collected: 7/22/2015

Project: 60430270.1.4

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos	
			% Fibrous	% Non-Fibrous	% Type	
LR3-R-1A 241503239-0001	Roof - roofing	Black Non-Fibrous Homogeneous	10% Glass	80% Matrix 10% Non-fibrous (other)	None Detected	
LR3-R-1B 241503239-0002	Roof - roofing	Black Non-Fibrous Homogeneous	5% Glass	85% Matrix 10% Non-fibrous (other)	None Detected	
LR3-R-1C 241503239-0003	Roof - roofing	Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (other)	None Detected	
LR3-R-2A 241503239-0004	Roof - tar paper	Black Non-Fibrous Homogeneous	5% Cellulose	80% Matrix 15% Non-fibrous (other)	None Detected	
LR3-R-2B 241503239-0005	Roof - tar paper	Black Non-Fibrous Homogeneous	8% Glass	75% Matrix 17% Non-fibrous (other)	None Detected	
LR3-R-2C 241503239-0006	Roof - tar paper	Tan/White Fibrous Heterogeneous	60% Cellulose 22% Glass	18% Non-fibrous (other)	None Detected	
LR3-R-3A 241503239-0007	Roof - tar on flashing	Black Fibrous Homogeneous	30% Cellulose	50% Matrix 18% Non-fibrous (other)	2% Chrysotile	
LR3-R-3B 241503239-0008	Roof - tar on flashing				Stop Positive (Not Analyzed)	
LR3-R-3C 241503239-0009	Roof - tar on flashing				Stop Positive (Not Analyzed)	

Analyst(s)

Jon Williams (26)

Yolanda Chow (70)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Initial report from 07/30/2015 08:23:30

**EMSL Analytical, Inc.**

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EMSL Order: 241503239

CustomerID: URSC62

CustomerPO: 60430270

ProjectID:

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Phone: (860) 529-8882
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 Received: 07/22/15 2:45 PM
 Analysis Date: 7/30/2015
 Collected: 7/22/2015

Project: 60430270.1.4

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos	
			% Fibrous	% Non-Fibrous	% Type	
LR3-R-4A 241503239-0010	Roof - flashing	Black Non-Fibrous Homogeneous	3% Glass	85% Matrix 12% Non-fibrous (other)	None Detected	
LR3-R-4B 241503239-0011	Roof - flashing	Black Non-Fibrous Homogeneous	10% Glass	80% Matrix 10% Non-fibrous (other)	None Detected	
LR3-R-4C 241503239-0012	Roof - flashing	Black Fibrous Heterogeneous	5% Cellulose 8% Glass	87% Non-fibrous (other)	None Detected	
LR3-R-5A 241503239-0013	Roof - shingles	Black Non-Fibrous Homogeneous	10% Glass	35% Ca Carbonate 40% Matrix 15% Non-fibrous (other)	None Detected	
LR3-R-5B 241503239-0014	Roof - shingles	Black Non-Fibrous Homogeneous	8% Glass	30% Ca Carbonate 50% Matrix 12% Non-fibrous (other)	None Detected	
LR3-R-5C 241503239-0015	Roof - shingles	Gray/Black Fibrous Heterogeneous	16% Glass	84% Non-fibrous (other)	None Detected	
LR3-R-6A 241503239-0016	Roof - shingle paper	Black Non-Fibrous Homogeneous	5% Glass	20% Ca Carbonate 60% Matrix 15% Non-fibrous (other)	None Detected	

Analyst(s)

Jon Williams (26)

Yolanda Chow (70)

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Sample	Description	Appearance	Non-Asbestos		Asbestos	
			% Fibrous	% Non-Fibrous	% Type	
LR3-R-6B 241503239-0017	Roof - shingle paper	Black Non-Fibrous Homogeneous	6% Glass	25% Ca Carbonate 60% Matrix 9% Non-fibrous (other)		None Detected
LR3-R-6C 241503239-0018	Roof - shingle paper	Brown/Black Fibrous Homogeneous	5% Cellulose 10% Glass	85% Non-fibrous (other)		None Detected
LR3-3A-7A-Skim Coat 241503239-0019	Unit 3A, 3rd floor, 58 Mills - plaster	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (other)		None Detected
LR3-3A-7A-Rough Coat 241503239-0019A	Unit 3A, 3rd floor, 58 Mills - plaster	Brown Non-Fibrous Homogeneous		45% Quartz 16% Gypsum 39% Non-fibrous (other)		None Detected
LR3-1A-7B-Skim Coat 241503239-0020	Unit 1A, 1st floor, 58 Mills - plaster	White Non-Fibrous Homogeneous		75% Ca Carbonate 25% Non-fibrous (other)		None Detected
LR3-1A-7B-Rough Coat 241503239-0020A	Unit 1A, 1st floor, 58 Mills - plaster	Brown Non-Fibrous Homogeneous		25% Quartz 1% Mica 35% Gypsum 39% Non-fibrous (other)		None Detected
LR3-1A-7C-Skim Coat 241503239-0021	Unit 1A, 1st floor, 58 Mills - plaster	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (other)		None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-1A-7C-Rough Coat 241503239-0021A	Unit 1A, 1st floor, 58 Mills - plaster	Brown Non-Fibrous Homogeneous		30% Quartz 20% Gypsum 50% Non-fibrous (other)	None Detected
LR3-3B-7D 241503239-0022	Unit 3B, 3rd floor, 52 Mills - plaster	White Non-Fibrous Homogeneous		65% Ca Carbonate 35% Non-fibrous (other)	None Detected
LR3-3B-7E 241503239-0023	Unit 3B, 3rd floor, 52 Mills - plaster	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (other)	None Detected
LR3-1B-7F 241503239-0024	Unit 1B, 1st floor, 52 Mills - plaster	White Non-Fibrous Homogeneous		65% Ca Carbonate 35% Non-fibrous (other)	None Detected
LR3-1B-7G 241503239-0025	Unit 1B, 1st floor, 52 Mills - plaster	Tan/White Non-Fibrous Heterogeneous		55% Ca Carbonate 45% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
LR3-3A-8A 241503239-0026	Unit 3A, 3rd floor, 58 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		60% Ca Carbonate 30% Matrix 10% Non-fibrous (other)	None Detected
LR3-1A-8B 241503239-0027	Unit 1A, 1st floor, 58 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		55% Ca Carbonate 40% Matrix 5% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-1A-8C 241503239-0028	Unit 1A, 1st floor, 58 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		65% Ca Carbonate 20% Matrix 15% Non-fibrous (other)	None Detected
LR3-3B-8D 241503239-0029	Unit 3B, 3rd floor, 52 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		70% Ca Carbonate 20% Matrix 10% Non-fibrous (other)	None Detected
LR3-3B-8E 241503239-0030	Unit 3B, 3rd floor, 52 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		60% Ca Carbonate 30% Matrix 10% Non-fibrous (other)	None Detected
LR3-1B-8F 241503239-0031	Unit 1B, 1st floor, 52 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (other)	None Detected
LR3-1B-8G 241503239-0032	Unit 1B, 1st floor, 52 Mills - floor tile, tan	Tan Non-Fibrous Homogeneous		22% Ca Carbonate 78% Non-fibrous (other)	None Detected
LR3-3A-9A 241503239-0033	Unit 3A, 58 Mills - floor tile mastic	Brown/Black Non-Fibrous Homogeneous	9% Cellulose	10% Ca Carbonate 70% Matrix 11% Non-fibrous (other)	None Detected
LR3-1A-9B 241503239-0034	Unit 1A, 58 Mills - floor tile mastic	Black Non-Fibrous Homogeneous		20% Ca Carbonate 70% Matrix 10% Non-fibrous (other)	None Detected

Analyst(s)

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-1A-9C 241503239-0035	Unit 1A - floor tile mastic	Brown/Black Non-Fibrous Homogeneous		25% Ca Carbonate 60% Matrix 15% Non-fibrous (other)	None Detected
LR3-3B-9D 241503239-0036	Unit 3B, 3rd floor, 52 Mills - floor tile mastic	Brown Non-Fibrous Homogeneous	2% Cellulose	15% Ca Carbonate 70% Matrix 13% Non-fibrous (other)	None Detected
LR3-3B-9E 241503239-0037	Unit 3B, 3rd floor, 52 Mills - floor tile mastic	Brown Non-Fibrous Homogeneous	5% Cellulose 2% Hair	80% Matrix 13% Non-fibrous (other)	None Detected
LR3-1B-9F 241503239-0038	Unit 1B, 1st floor, 52 Mills - floor tile mastic	Brown Non-Fibrous Homogeneous	6% Cellulose <1% Hair	25% Ca Carbonate 50% Matrix 19% Non-fibrous (other)	None Detected
LR3-1B-9G 241503239-0039	Unit 1B, 1st floor, 52 Mills - floor tile mastic	Brown/Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
LR3-310A 241503239-0040	3rd floor hallway, 58 Mills - CMU block mortar	Tan/Green Non-Fibrous Homogeneous		50% Quartz 15% Ca Carbonate 35% Non-fibrous (other)	None Detected

Inseparable paint / coating layer included in analysis

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
LR3-1-10B 241503239-0041	1st floor hallway, 58 Mills - CMU block mortar	Tan/Green Non-Fibrous Homogeneous		55% Quartz 1% Mica 10% Ca Carbonate 34% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
LR2-2-10C 241503239-0042	2nd floor hallway, 52 Mills - CMU block mortar	Tan/Blue Non-Fibrous Heterogeneous		30% Quartz 35% Ca Carbonate 35% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
LR3-E-11A 241503239-0043	Exterior - concrete skim coat, exterior	Gray Non-Fibrous Homogeneous		55% Quartz 35% Ca Carbonate 10% Non-fibrous (other)	None Detected
LR3-E-11B 241503239-0044	Exterior - concrete skim coat, exterior	Gray Non-Fibrous Homogeneous		40% Quartz 50% Ca Carbonate 10% Non-fibrous (other)	None Detected
LR3-E-11C 241503239-0045	Exterior - concrete skim coat, exterior	Brown Non-Fibrous Homogeneous		45% Quartz 12% Ca Carbonate 43% Non-fibrous (other)	None Detected
LR3-3A-12A 241503239-0046	Unit 3A 58 Mills - interior window caulking	Tan Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-1A-12B 241503239-0047	Unit 1A 58 Mills - interior window caulking	Tan Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (other)	None Detected
LR3-1B-12C 241503239-0048	Unit 1B 52 Mills - interior window caulking	Gray/White Non-Fibrous Heterogeneous		35% Matrix 65% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
LR3-3A-13A 241503239-0049	Unit 3A 58 Mills - exterior window caulking	Black Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (other)	None Detected
LR3-1B-13B 241503239-0050	Unit 1B 58 Mills - exterior window caulking	Black Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (other)	None Detected
LR3-1B-13C 241503239-0051	Unit 1B 52 Mills - exterior window caulking	Gray Fibrous Homogeneous	10% Glass	90% Non-fibrous (other)	None Detected
LR3-3A-14A 241503239-0052	Unit 3A 58 Mills - filler floor tile, brown	Brown Non-Fibrous Homogeneous		60% Ca Carbonate 30% Matrix 10% Non-fibrous (other)	None Detected
LR3-1A-14B 241503239-0053	Unit 1A 58 mills - filler floor tile, brown	Brown Non-Fibrous Homogeneous		55% Ca Carbonate 30% Matrix 15% Non-fibrous (other)	None Detected
LR3-1B-14C 241503239-0054	Unit 1B 52 Mills - filler floor tile, brown	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected

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LR3-3A-15A 241503239-0055	Unit 3A 58 Mills - filler floor tile mastic	Black Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (other)	None Detected
LR3-1A-15B 241503239-0056	Unit 1A 58 Mills - filler floor tile mastic	Brown/Black Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (other)	None Detected
LR3-1B-15C 241503239-0057	Unit 1B 52 Mills - filler floor tile mastic	Yellow Non-Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (other)	None Detected
LR3-3A-16A 241503239-0058	Unit 3A 58 Mills - ceiling tile	Tan Fibrous Homogeneous	50% Cellulose 35% Min. Wool	10% Perlite 5% Non-fibrous (other)	None Detected
LR3-1A-16B 241503239-0059	Unit 1A 58 Mills - ceiling tile	Tan Fibrous Homogeneous	45% Cellulose 35% Min. Wool	15% Perlite 5% Non-fibrous (other)	None Detected
LR3-1B-16C 241503239-0060	Unit 1B, 52 Mills - ceiling tile	Tan/White Fibrous Homogeneous	48% Cellulose 18% Min. Wool	20% Perlite 14% Non-fibrous (other)	None Detected
LR3-3A-17A 241503239-0061	Unit 3A 58 Mills - black cove base	Brown Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (other)	None Detected
LR3-1A-17B 241503239-0062	Unit 1A 58 Mills - black cove base	Brown/Gray Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected

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Initial report from 07/30/2015 08:23:30

**EMSL Analytical, Inc.**

29 North Plains Highway, Unit # 4, Wallingford, CT 06492

Phone/Fax: 203-284-5948 / (203) 284-5978

<http://www.EMSL.com>wallingfordlab@emsl.com

EMSL Order: 241503239

CustomerID: URSC62

CustomerPO: 60430270

ProjectID:

Attn: **Ray Lavery**
AECOM
500 Enterprise Drive
Suite 3B
Rocky Hill, CT 06067

Phone: (860) 529-8882
 Fax: (860) 529-3991
 Received: 07/22/15 2:45 PM
 Analysis Date: 7/30/2015
 Collected: 7/22/2015

Project: 60430270.1.4

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
LR3-3B-17C 241503239-0063	Unit 3B 52 Mills - black cove base	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
LR3-3A-18A 241503239-0064	Unit 3A 58 Mills - cove base mastic	White Non-Fibrous Homogeneous		20% Ca Carbonate 50% Matrix 30% Non-fibrous (other)	None Detected
Result includes a small amount of inseparable attached joint compound.					
LR3-1A-18B 241503239-0065	Unit 1A 58 Mills - cove base mastic	Brown Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (other)	None Detected
LR3-3B-18C 241503239-0066	Unit 3B 52 Mills - cove base mastic	Yellow Non-Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (other)	None Detected
LR3-3-19A 241503239-0067	3rd floor hallway, 58 Mills - hall floor tile, gray	Tan/White Non-Fibrous Homogeneous		70% Ca Carbonate 20% Matrix 10% Non-fibrous (other)	None Detected
LR3-1-19B 241503239-0068	1st floor hallway, 58 Mills - hall floor tile, gray	Tan/White Non-Fibrous Homogeneous		60% Ca Carbonate 30% Matrix 10% Non-fibrous (other)	None Detected
LR3-3-19C 241503239-0069	3rd floor hallway, 52 Mills - hall floor tile, gray	Gray/White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected

Analyst(s)

Jon Williams (26)

Yolanda Chow (70)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
LR3-3-20A 241503239-0070	3rd floor hallway, 58 Mills - hall floor tile mastic	Brown/Yellow Non-Fibrous Homogeneous		65% Matrix 35% Non-fibrous (other)	None Detected
LR3-1-20B 241503239-0071	1st floor hallway, 58 Mills - hall floor tile mastic	Brown/Black Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (other)	None Detected
LR3-3-20C 241503239-0072	3rd floor hallway, 52 Mills - hall floor tile mastic	Yellow Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
LR3-3-21A 241503239-0073	3rd floor hallway, 58 Mills - hall floor tile white, filler	Tan/White Non-Fibrous Homogeneous		70% Ca Carbonate 20% Matrix 10% Non-fibrous (other)	None Detected
LR3-1-21B 241503239-0074	1st floor hallway, 58 Mills - hall floor tile white, filler	Tan/White Non-Fibrous Homogeneous		65% Ca Carbonate 20% Matrix 15% Non-fibrous (other)	None Detected
LR3-1-21C 241503239-0075	1st floor hallway, 52 Mills - hall floor tile white, filler	Tan/White Non-Fibrous Homogeneous		24% Ca Carbonate 76% Non-fibrous (other)	None Detected
LR3-3-22A 241503239-0076	3rd floor hallway, 58 Mills - hall floor tile white mastic	Brown Non-Fibrous Homogeneous		20% Ca Carbonate 70% Matrix 10% Non-fibrous (other)	None Detected

Analyst(s)

Jon Williams (26)

Yolanda Chow (70)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-1-22B 241503239-0077	1st floor hallway, 58 Mills - hall floor tile white mastic	Brown Non-Fibrous Homogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (other)	None Detected
LR3-1-22C 241503239-0078	1st floor hallway, 58 Mills - hall floor tile white mastic	Black/Yellow Non-Fibrous Heterogeneous	3% Cellulose	5% Ca Carbonate 92% Non-fibrous (other)	None Detected
LR3-3-23A 241503239-0079	3rd floor hallway, 58 Mills - caulking between floor + block	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
LR3-2-23B 241503239-0080	2nd floor hallway, 52 Mills - caulking between floor + block	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected
LR3-1-23C 241503239-0081	1st floor hallway, 52 Mills - caulking between floor + block	White/Yellow Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected
LR3-2-24A 241503239-0082	2nd floor hallway, 58 Mills - 2nd layer floor tile	Tan Non-Fibrous Homogeneous		65% Ca Carbonate 20% Matrix 15% Non-fibrous (other)	None Detected
LR3-3-24B 241503239-0083	3rd floor hallway, 52 Mills - 2nd layer floor tile	Tan Non-Fibrous Homogeneous		70% Ca Carbonate 20% Matrix 10% Non-fibrous (other)	None Detected

Analyst(s)

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-3-24C 241503239-0084	3rd floor hallway, 52 Mills - 2nd layer floor tile	Tan/White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected
LR3-2-25A 241503239-0085	2nd floor hallway 58 Mills - 2nd layer floor tile mastic	Brown Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (other)	None Detected
LR3-3-25B 241503239-0086	3rd floor hallway 52 Mills - 2nd layer floor tile mastic	Brown Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (other)	None Detected
LR3-3-25C 241503239-0087	3rd floor hallway 52 Mills - 2nd layer floor tile mastic	Brown/Yellow Non-Fibrous Heterogeneous	6% Cellulose	5% Quartz 89% Non-fibrous (other)	None Detected
LR3-1A-26A 241503239-0088	Unit 1A, 1st floor, 58 Mills - pipe insulation, fitting	Gray Fibrous Homogeneous	15% Min. Wool	30% Ca Carbonate 30% Non-fibrous (other)	25% Chrysotile
LR3-1A-26B 241503239-0089	Unit 1A, 1st floor, 58 Mills - pipe insulation, fitting				Stop Positive (Not Analyzed)
LR3-3-27A 241503239-0090	3rd floor hallway, 52 Mills - 3rd layer floor tile	Black Non-Fibrous Homogeneous		60% Ca Carbonate 30% Matrix 8% Non-fibrous (other)	2% Chrysotile
LR3-3-27B 241503239-0091	3rd floor hallway, 52 Mills - 3rd layer floor tile				Stop Positive (Not Analyzed)

Analyst(s)

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
LR3-3-28A 241503239-0092	3rd floor hallway, 52 Mills - 3rd layer floor tile mastic	Brown/Yellow Non-Fibrous Homogeneous		30% Ca Carbonate 60% Matrix 10% Non-fibrous (other)	None Detected
LR3-3-28B 241503239-0093	3rd floor hallway, 52 Mills - 3rd layer floor tile mastic	Brown/Yellow Non-Fibrous Homogeneous	4% Cellulose	15% Ca Carbonate 81% Non-fibrous (other)	None Detected
LR3-E-29A 241503239-0094	Exterior - brick mortar	Brown Non-Fibrous Homogeneous		65% Quartz 20% Ca Carbonate 15% Non-fibrous (other)	None Detected
LR3-E-29B 241503239-0095	Exterior - brick mortar	Brown Non-Fibrous Homogeneous		40% Quartz 25% Ca Carbonate 35% Non-fibrous (other)	None Detected
LR3-E-29C 241503239-0096	Exterior - brick mortar	Tan Non-Fibrous Homogeneous		52% Quartz 10% Ca Carbonate 38% Non-fibrous (other)	None Detected
LR3-B-30A 241503239-0097	Basement - pipe wrap fitting	Gray Fibrous Homogeneous		20% Ca Carbonate 40% Non-fibrous (other)	40% Chrysotile
LR3-B-30B 241503239-0098	Basement - pipe wrap fitting				Stop Positive (Not Analyzed)

Analyst(s)

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Yolanda Chow (70)

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or other approved signatory

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	%	<u>Non-Asbestos</u>		<u>Asbestos</u>
				Fibrous	Non-Fibrous	% Type
LR3-B-30C 241503239-0099	Basement - pipe wrap fitting					Stop Positive (Not Analyzed)

Analyst(s)

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Yolanda Chow (70)

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Initial report from 07/30/2015 08:23:30

Attachment C
TCLP Lead Results



49 Woodside Street Stamford, CT 06902

July 29, 2015

AECOM
500 Enterprise Drive
Suite 3B
Rocky Hill, CT 06067
Attn. Ray Lavery

Re: Low Rise #3 (TCLP Lead Results)
144 Pratt Street
Hartford, CT

Dear Mr. Lavery:

On July 23, 2015, I visited Low Rise #3 at the above mentioned address to perform pre-demolition lead sampling of building materials that will be disturbed during demolition activities. At your request, one composite TCLP lead sample was collected of building materials.


A visual inspection was first performed of the entire building to determine what materials are present and the approximate percentage the material represented of each composite. Samples were then collected of the different building materials, using the percentages, and combined for the composite sample. The sample was analyzed for soluble lead (TCLP test) to determine if the building could be disposed of as general construction waste.

The sample was sent overnight to Schneider Laboratories in Richmond, VA where it was analyzed by EPA Method 1311 (TCLP) with Lead Analysis by EPA SW846-1311 Method. The results of the analysis were as follows:

<u>MATERIAL</u>	<u>RESULT</u>	<u>EPA LEVEL</u>
Interior & Exterior Building Material Composite	0.535 mg/L	5.0 mg/L

In consideration of the laboratory results, the materials generated during demolition of the building can be disposed of as general construction waste. If there are any questions, comments or concerns please do not hesitate to reach me at (203) 324-3635. Thank-you.

Sincerely,


Ryan Ebenhack
HYGENIX, Inc.
Lead inspector 2167



Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: HYGENIX, INC. (117)
Address: 49 Woodside St
Stamford, CT 06902

Order #: 136903


Matrix TCLP
Received 07/24/15
Reported 07/28/15

Attn:
Project: 144 Pratt St
Location: Meriden CT
Number: Low Rise 3

PO Number: R. Ebenhack

Sample ID	Cust. Sample ID	Location	Result	RL*	Units	Analysis Date	Analyst
Parameter		Method					
136903-001	LR3	Composite					
Metals Analysis							
Lead		EPA 7000B / 1311	0.535	0.200	mg/L	07/28/15	SA
Initial pH		EPA 1311	8.08		pH Units		
Post pH		EPA 1311	1.81		pH Units		

136903-07/28/15 06:21 PM


Reviewed By: Derek Jackson
Analyst

Certifications

Parameter	Method	Matrix	CT	NC	PA	VA
Lead	EPA 7000B	TCLP	X	X	X	X

Key

State	Regulatory Agency - Lab ID	Certificate Number
CT	CT DPH	PH-0118
NC	NC DENR	593
PA	PLAP 68-00968	009
VA	Virginia DCLS/DEQ - 460135	7936

'X' indicates that the analyte is accredited.

If your state is not listed above, call laboratory for accreditation/certification information.

EPA TCLP Regulatory Limits

Parameter	Reg. Limit	Unit
Lead	5.00	mg/L

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. PPM = mg/kg | PPB = µg/kg. The test results reported relate only to the samples submitted.

V:\136\136903

Submitting Co.	HYGENIX	Lab WO#		Phone	203 324 2222
	49 Woodside St	Acct #	117	Fax / Email	rebenhack@hygenix.c
	Stamford, CT	**State of Collection	CT	**Cert. Required	<input type="checkbox"/> Yes <input type="checkbox"/> No
Project Name:	144 Pratt St	Special Instructions [include requests for special reporting or data packages]			
Project Location:	Meriden, CT				
Project Number:	Low Rise #3				
PO Number:					

Turn Around Time	Matrix / Sample Type (Select ONE)		Tests / Analyses (Select ALL that Apply)		
<input type="checkbox"/> 2 hours*	All samples on form should be of SAME matrix type. Use additional forms as needed.		Asbestos Air / Fiber Counts	Asbestos Bulk / Asb ID	Metals Total Conc.
<input type="checkbox"/> Same day*			<input type="checkbox"/> PCM (NIOSH 7400)	<input type="checkbox"/> PLM (EPA 600/R-93/116)	<input type="checkbox"/> Lead
<input type="checkbox"/> 1 business day*	<input type="checkbox"/> Air	<input type="checkbox"/> Solid	<input type="checkbox"/> TEM (AHERA)	<input type="checkbox"/> PLM (EPA Point Count)	<input type="checkbox"/> RCRA Metals
<input type="checkbox"/> 2 business day*	<input type="checkbox"/> Aqueous	<input type="checkbox"/> Waste	<input type="checkbox"/> TEM (EPA Level II)	<input type="checkbox"/> PLM (Qualitative only)	<input type="checkbox"/> _____
<input type="checkbox"/> 3 business days*	<input type="checkbox"/> Bulk	<input type="checkbox"/> Wastewater	<input type="checkbox"/> _____	<input type="checkbox"/> NYELAP 198.1/4/6	<input type="checkbox"/> _____
<input checked="" type="checkbox"/> 5 business days*	<input type="checkbox"/> Hi-Vol Filter (PM10)	<input type="checkbox"/> Water, Drinking	Miscellaneous Tests	<input type="checkbox"/> CAELAP (EPA Interim)	Metals Extract
<input type="checkbox"/> Full TCLP (10d)	<input type="checkbox"/> Hi-Vol Filter (TSP)	<input type="checkbox"/> Compliance	<input type="checkbox"/> Total Dust (NIOSH 0500)	<input type="checkbox"/> TEM (Chatfield)	<input checked="" type="checkbox"/> TCLP / Lead
<input type="checkbox"/> Weekend*	<input type="checkbox"/> Oil	<input type="checkbox"/> Wipe	<input type="checkbox"/> Resp. Dust (NIOSH 0600)	<input type="checkbox"/> _____	<input type="checkbox"/> TCLP / RCRA Metals
* not available for all tests	<input type="checkbox"/> Paint	<input type="checkbox"/> Wipe, Composite	<input type="checkbox"/> Silica - FTIR (NIOSH 7602)	FOR ASBESTOS AIR:	
Schedule rush organics, multi-metals & weekend tests in advance	<input type="checkbox"/> Sludge	<input type="checkbox"/> _____	<input type="checkbox"/> Silica - XRD (NIOSH 7500)	TYPE OF RESPIRATOR	
	<input type="checkbox"/> Soil	<input type="checkbox"/> _____	<input type="checkbox"/> _____	USED: _____	
				TCLP / Full (w/ organics)	
				Others	
				<input type="checkbox"/> _____	

[illegible]

¹Type: A=area B=blank P=personal E=excursion ²Beginning/End of Sample Period ³Pump Calibration in Liters/Minute ⁴Volume in Liters [time in min * flow in L/min]

Sampled by NAME <u>R. Eberhach</u> SIGNATURE <u>[Signature]</u> DATE/TIME <u>7/23/15</u>		Relinquished to lab by NAME <u>R. Eberhach</u> SIGNATURE <u>[Signature]</u> DATE/TIME <u>7/23/15</u>		Sample Disposal <small>(If samples over req. weight Refer to Fee Schedule)</small> <input type="checkbox"/> Return to Sender (shipping fees) <input type="checkbox"/> Disposal by lab (\$50 fee)	
<input type="checkbox"/> Sample return requested		<input type="checkbox"/> Ambient temp		<input type="checkbox"/> Ice	
<input type="checkbox"/> CI		<input type="checkbox"/> R <input type="checkbox"/> S <input type="checkbox"/> X		<input type="checkbox"/> Receive a physical copy of report.	
				Shipping Methods <input checked="" type="checkbox"/> FX <input type="checkbox"/> UPS <input type="checkbox"/> USM <input type="checkbox"/> HD <input type="checkbox"/> DB WR <u>19.00</u>	

* Temperature taken with IR Gun A.

****Required.**

Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

WE

Attachment D
PCB Analytical Results

August 4, 2015

Ray Lavery
AECOM (URS) - Rocky Hill, CT
500 Enterprise Drive, Suite B
Rocky Hill, CT 06067

Project Location: Meriden, CT
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 15G1195

Enclosed are results of analyses for samples received by the laboratory on July 24, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa Worthington", is written on a light gray rectangular background.

Lisa A. Worthington
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
15G1195-01	5
15G1195-02	6
15G1195-03	7
15G1195-04	8
15G1195-05	9
Sample Preparation Information	10
QC Data	11
Polychlorinated Biphenyls with 3540 Soxhlet Extraction	11
B127207	11
Dual Column RPD Report	12
Flag/Qualifier Summary	14
Certifications	15
Chain of Custody/Sample Receipt	16

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

AECOM (URS) - Rocky Hill, CT
500 Enterprise Drive, Suite B
Rocky Hill, CT 06067
ATTN: Ray Lavery

REPORT DATE: 8/4/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15G1195

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Meriden, CT

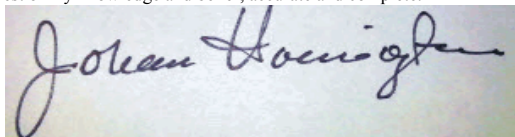
FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PCB-LR3-01	15G1195-01	Caulk		SW-846 8082A	
PCB-LR3-02	15G1195-02	Caulk		SW-846 8082A	
PCB-LR3-03	15G1195-03	Caulk		SW-846 8082A	
PCB-LR3-03 DUP	15G1195-04	Caulk		SW-846 8082A	
PCB-LR3-04	15G1195-05	Caulk		SW-846 8082A	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in dark ink, appearing to read "Johanna Harrington", is written over a light-colored, slightly textured background.

Johanna K. Harrington

Manager, Laboratory Reporting

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Meriden, CT

Sample Description:

Work Order: 15G1195

Date Received: 7/24/2015

Field Sample #: PCB-LR3-01

Sampled: 7/23/2015 00:00

Sample ID: 15G1195-01

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1221 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1232 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1242 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1248 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1254 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1260 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1262 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Aroclor-1268 [1]	ND	0.84	mg/Kg	2		SW-846 8082A	7/27/15	8/4/15 8:35	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	96.2	30-150						8/4/15 8:35	
Decachlorobiphenyl [2]	84.0	30-150						8/4/15 8:35	
Tetrachloro-m-xylene [1]	90.3	30-150						8/4/15 8:35	
Tetrachloro-m-xylene [2]	94.9	30-150						8/4/15 8:35	

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Project Location: Meriden, CT

Sample Description:

Work Order: 15G1195

Date Received: 7/24/2015

Field Sample #: PCB-LR3-02

Sampled: 7/23/2015 00:00

Sample ID: 15G1195-02

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1221 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1232 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1242 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1248 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1254 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1260 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1262 [2]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Aroclor-1268 [1]	ND	0.74	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 19:49	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	109	30-150							
Decachlorobiphenyl [2]	91.7	30-150							
Tetrachloro-m-xylene [1]	98.0	30-150							
Tetrachloro-m-xylene [2]	81.3	30-150							

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Project Location: Meriden, CT

Sample Description:

Work Order: 15G1195

Date Received: 7/24/2015

Field Sample #: PCB-LR3-03

Sampled: 7/23/2015 00:00

Sample ID: 15G1195-03

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1221 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1232 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1242 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1248 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1254 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1260 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1262 [2]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Aroclor-1268 [1]	ND	0.78	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:07	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	111	30-150							
Decachlorobiphenyl [2]	92.2	30-150							
Tetrachloro-m-xylene [1]	100	30-150							
Tetrachloro-m-xylene [2]	84.3	30-150							

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Project Location: Meriden, CT

Sample Description:

Work Order: 15G1195

Date Received: 7/24/2015

Field Sample #: PCB-LR3-03 DUP

Sampled: 7/23/2015 00:00

Sample ID: 15G1195-04

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1221 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1232 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1242 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1248 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1254 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1260 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1262 [2]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Aroclor-1268 [1]	ND	0.92	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:24	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	113	30-150							
Decachlorobiphenyl [2]	94.4	30-150							
Tetrachloro-m-xylene [1]	98.4	30-150							
Tetrachloro-m-xylene [2]	82.1	30-150							

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Project Location: Meriden, CT

Sample Description:

Work Order: 15G1195

Date Received: 7/24/2015

Field Sample #: PCB-LR3-04

Sampled: 7/23/2015 00:00

Sample ID: 15G1195-05

Sample Matrix: Caulk

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1221 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1232 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1242 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1248 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1254 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1260 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1262 [2]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Aroclor-1268 [1]	ND	0.79	mg/Kg	4		SW-846 8082A	7/27/15	8/1/15 20:42	KAL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	109	30-150							
Decachlorobiphenyl [2]	91.7	30-150							
Tetrachloro-m-xylene [1]	96.7	30-150							
Tetrachloro-m-xylene [2]	80.2	30-150							

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Sample Extraction Data

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15G1195-01 [PCB-LR3-01]	B127207	0.237	10.0	07/27/15
15G1195-02 [PCB-LR3-02]	B127207	0.538	10.0	07/27/15
15G1195-03 [PCB-LR3-03]	B127207	0.516	10.0	07/27/15
15G1195-04 [PCB-LR3-03 DUP]	B127207	0.436	10.0	07/27/15
15G1195-05 [PCB-LR3-04]	B127207	0.505	10.0	07/27/15

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QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B127207 - SW-846 3540C

Blank (B127207-BLK1)

Prepared: 07/27/15 Analyzed: 08/01/15

Aroclor-1016	ND	0.20	mg/Kg							
Aroclor-1016 [2C]	ND	0.20	mg/Kg							
Aroclor-1221	ND	0.20	mg/Kg							
Aroclor-1221 [2C]	ND	0.20	mg/Kg							
Aroclor-1232	ND	0.20	mg/Kg							
Aroclor-1232 [2C]	ND	0.20	mg/Kg							
Aroclor-1242	ND	0.20	mg/Kg							
Aroclor-1242 [2C]	ND	0.20	mg/Kg							
Aroclor-1248	ND	0.20	mg/Kg							
Aroclor-1248 [2C]	ND	0.20	mg/Kg							
Aroclor-1254	ND	0.20	mg/Kg							
Aroclor-1254 [2C]	ND	0.20	mg/Kg							
Aroclor-1260	ND	0.20	mg/Kg							
Aroclor-1260 [2C]	ND	0.20	mg/Kg							
Aroclor-1262	ND	0.20	mg/Kg							
Aroclor-1262 [2C]	ND	0.20	mg/Kg							
Aroclor-1268	ND	0.20	mg/Kg							
Aroclor-1268 [2C]	ND	0.20	mg/Kg							
Surrogate: Decachlorobiphenyl	3.73		mg/Kg	4.00		93.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.34		mg/Kg	4.00		83.6	30-150			
Surrogate: Tetrachloro-m-xylene	3.58		mg/Kg	4.00		89.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.01		mg/Kg	4.00		75.3	30-150			

LCS (B127207-BS1)

Prepared: 07/27/15 Analyzed: 08/01/15

Aroclor-1016	3.9	0.20	mg/Kg	4.00		96.3	40-140			
Aroclor-1016 [2C]	3.1	0.20	mg/Kg	4.00		76.6	40-140			
Aroclor-1260	3.9	0.20	mg/Kg	4.00		96.9	40-140			
Aroclor-1260 [2C]	3.2	0.20	mg/Kg	4.00		80.7	40-140			
Surrogate: Decachlorobiphenyl	3.93		mg/Kg	4.00		98.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.53		mg/Kg	4.00		88.2	30-150			
Surrogate: Tetrachloro-m-xylene	3.65		mg/Kg	4.00		91.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.08		mg/Kg	4.00		77.0	30-150			

LCS Dup (B127207-BSD1)

Prepared: 07/27/15 Analyzed: 08/01/15

Aroclor-1016	3.8	0.20	mg/Kg	4.00		94.5	40-140	1.89	30	
Aroclor-1016 [2C]	3.0	0.20	mg/Kg	4.00		74.9	40-140	2.27	30	
Aroclor-1260	3.8	0.20	mg/Kg	4.00		95.9	40-140	1.00	30	
Aroclor-1260 [2C]	3.2	0.20	mg/Kg	4.00		79.4	40-140	1.61	30	
Surrogate: Decachlorobiphenyl	3.85		mg/Kg	4.00		96.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	3.47		mg/Kg	4.00		86.6	30-150			
Surrogate: Tetrachloro-m-xylene	3.55		mg/Kg	4.00		88.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	3.00		mg/Kg	4.00		75.0	30-150			

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B127207-BS1 Date(s) Analyzed: 08/01/2015 08/01/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	3.9	
	2	0.00	0.00	0.00	3.1	22
Aroclor-1260	1	0.00	0.00	0.00	3.9	
	2	0.00	0.00	0.00	3.2	19

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B127207-BSD1 Date(s) Analyzed: 08/01/2015 08/01/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	3.8	
	2	0.00	0.00	0.00	3.0	23
Aroclor-1260	1	0.00	0.00	0.00	3.8	
	2	0.00	0.00	0.00	3.2	18

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FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
---------	----------------

No certified Analyses included in this Report

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	09/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com



Page 1 of 2



Sample Receipt Checklist

CLIENT NAME: AELCOM RECEIVED BY: LMP DATE: 7/24/15

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.3

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

7) Location where samples are stored:

19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz <u>amber</u> /clear jar	<u>5</u>
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____	Time and Date Frozen:
Doc# 277 # Bisulfate _____ # DI Water _____	
Rev. 4 August 2013 # Thiosulfate _____ Unpreserved _____	

Login Sample Receipt Checklist**(Rejection Criteria Listing - Using Sample Acceptance Policy)****Any False statement will be brought to the attention of Client**

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	N/A	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	N/A	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	N/A	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	N/A	
21) Samples do not require splitting or compositing.	T	

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials: LMP

Date/Time:

Date/Time: 7/24/15

LMP

7/24/15



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Con-Test Analytical Laboratory

Client: AECOM (URS) - Rocky Hill, CT

Project Location: Meriden, CT

Project Number: 15G1195

Laboratory Sample ID(s):

Sample Date(s):

15G1195-01 thru 15G1195-05

07/23/2015

List RCP Methods Used:

SW-846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (< 6 degrees C.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5A	Were reporting limits specified or referenced on the chain-of-custody?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5B	Were these reporting limits met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:
Reporting

Position: Manager, Laboratory

Printed Name: Johanna K. Harrington

Date: 08/04/15

This certification form is to be used for RCP methods only.