



CDW CONSULTANTS, INC.  
*CIVIL & ENVIRONMENTAL ENGINEERS*

**LIMITED HAZARDOUS MATERIALS SUMMARY REPORT**

**Fuller Middle School  
31 Flagg Drive  
Framingham, Massachusetts**

Prepared for

Jonathan Levi Architects  
266 Beacon Street Boston MA 02116

November 2017

CDW Project # 1597.0



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## **1.0 INTRODUCTION**

CDW Consultants, Inc. (CDW) is pleased to present this letter report summarizing the findings of the limited suspect asbestos-containing materials (ACM), and hazardous materials inspection of the Fuller Middle School (Site). The scope of work was to review previous United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) reports and conduct an inspection to identify and quantify suspect ACM, lead based paint (LBP), and visually identify hazardous materials located in the building. The inspection was conducted in support of a feasibility study for Site renovations.

In October 2017, Ms. Susan Cahalan, (Massachusetts DOS Asbestos Inspector #AI60784) conducted a visual interior and exterior building inspection for suspect materials.

## **2.0 GENERAL SITE CONDITIONS**

Constructed in 1958 as the Framingham South High School, the building is currently used as Fuller Middle School. The Fuller Middle School houses grades 6-8. Fuller is also home to the Framingham Public Access Television Station that occupies 8,000 square feet (SF) of building space. In addition, the Buildings and Grounds Department houses its operations and storage for vehicles and equipment occupying approximately 15,000 SF of building space.

The Site building is a one-story cast-in-place concrete structure founded on precast concrete piles. The roof structure is gypsum concrete. Exterior walls are single-glazed aluminum store front with some areas of brick masonry. Two-thirds of the building area has a dirt floor crawl-space beneath it. The interior is concrete masonry block painted. Ceilings are mixed ceiling tectum with suspended ceilings in select areas throughout the building including the auditorium. Flooring is vinyl composite tile with some known to contain asbestos. Select rooms have carpet. Doors, frames and hardware are original.

The building is comprised of approximately 100 rooms of which 50 are classrooms with an average size of 732 SF. There are five science classrooms and one science laboratory with an average size 871 SF. There are two gymnasiums (one at 9,500 SF and one at 5,000 SF) and one 6,800 SF auditorium. The building was constructed on structural piles and caissons with a crawl space and a dirt floor beneath the entire building.

No additions have been made to the building since it was originally constructed. Framingham South High School became Fuller Middle School in 1995 without major capital improvement. The following capital projects and improvements have been completed at Fuller Middle School:



- 1995 Roof Replacement
- 2005 Converted heating system from oil to natural gas
- 2005 Replaced boilers, boiler room pipe abatement
- 2007 Auditorium Improvements

The heating system is comprised of 3 natural gas fired boilers and the majority of the building is hydronic forced hot water. Ventilation is provided through AHUs in the crawl-space and classroom unit-ventilators. The electrical system has original switch gear.

### 3.0 AHERA REPORTS SUMMARY

CDW reviewed the AHERA report, prepared by Fuss & O’Neill EnviroScience, dated June 2016 and the Survey Report, prepared by Universal Environmental Consultants, ND.

ACM findings of the Universal Environmental Consultants Report are presented in the below table:

<b>Material</b>	<b>Location</b>	<b>Quantity</b>
Vinyl Floor Tile and Mastic	Throughout	106,000 SF
Pipe and Hard Joint Insulation	Throughout	6,500 LF
Interior Windows and Doors	Throughout	400 Each
Blackboards	Throughout	200 Each
Flex Connectors	Throughout	15 Each
Roof Drain Insulation	Throughout	450 LF
Transite Board	Science Rooms	220 SF
Wood Flooring Paper and Mastic	Stage	500 SF
Wire Insulation	Stage	60 LF
Wood Flooring, Paper and Mastic	Gym	8,000 SF
Windows	Exterior	400 Each
Doors	Exterior	30 Each
Univent Caulk	Exterior	40 each



ACM findings from the Fuss & O'Neill EnviroScience AHERA Report are presented in the below table:

<b>Material</b>	<b>Location</b>	<b>Asbestos Content</b>	<b>Quantity</b>
Mudded Pipe Insulation	Basement Storage Room, Crawlspace, A3, A27, A17, A37, C-13, C18, C-15, C-16, D-31 Pipe Tunnel, D-32, B-37, West Penthouse on Roof	5% Chrysotile	575 Each
Corrugated Paper Type Pipe Insulation	Basement Storage Room, Crawlspace A, B, C & D, A3, A27, A17, A37, C-13, C-17 and 18, C-15, C-16, D-31 (Pipe Tunnel), D-32, B-37A, West Penthouse on Roof	80% Chrysotile	6,210
Vibration Isolators	Crawlspace, A-21, B-1A, B-26, C-13, D-9	PACM	25 Each
Roof Drain Insulation	A-24, B-8, B-18, B-15A, B-20, B-22, B-28, B-46, C-8, C-27, C-22, C-09, C-15, D-31, D-16, D-29, D-33	Sampled, Positive	20 Each
Fiber Reinforced Paneling	B-9-Lab Hood, D-31 Exhaust Vent, D-6-Upper Wall at Vent	15% Chrysotile	210 SF
Wire Insulation	Stage	PACM	60 LF
Fire Curtain	Stage	PACM	1 Each



Material	Location	Asbestos Content	Quantity
9x9 Floor Tile and Associated Mastic	Hall to Auditorium Stage, Hall outside Boy's Locker Room, Hall outside: C-14, B-32, B-35, B-37, B-39, A-8, C-1, B-1, B-3, B-4	2%-3% Chrysotile	105,300 SF

Items that do not contain ACM, from the Fuss & O'Neill EnviroScience AHERA Report are presented in the below table:

Material	Location
Spray-On Fire Proofing	Basement Stooge Room Ceiling
Red, Orange, Tan Mottled 12x12 Floor Tile and Associated Mastic	C17 Women's Bathroom
White and Beige Mottled 12x12 Floor Tile and Associated mastic	Hallway Outside B-4
Black Vinyl Baseboard and Associated Mastic	Classrooms, Hallways, Offices Throughout

## 4.0 ASBESTOS SURVEY

### 4.1 Methods

The investigative work for the asbestos survey included conducting a limited visual inspection of physically accessible areas of the interior and exterior of the building. Bulk samples of representative suspect materials identified were collected in a random manner in accordance with USEPA and OSHA regulatory guidelines. Once the visual inspection was completed, the building components were categorized into homogeneous areas. A homogenous area is an area that is similar in color, texture and date of application. Hand tools were used to collect bulk samples which were promptly placed in sealed plastic bags using a unique numbering system. Samples were not collected of non-suspect materials, including wood, fiberglass, plastic/vinyl, ceramic, concrete, neoprene/rubber, glass, and carpeting.

The bulk samples were delivered under chain of custody to Asbestos Identification Laboratory, Inc. (AIL) located in Woburn, Massachusetts, a NVLAP-accredited laboratory for asbestos analysis. Bulk samples were analyzed for asbestos content by polarized light microscopy (PLM) using EPA Method 600/R-93/116. A positive stop method was used – if one sample in a homogeneous group is positive then additional samples of the same material are not analyzed. The asbestos analytical results are provided in Attachment A. Samples analyzed to contain greater than 1% asbestos are to be treated as



ACMs as defined by the USEPA and Commonwealth of Massachusetts Department of Environmental Protection (MassDEP).

#### 4.2 Findings

Findings of the limited sampling are presented in the below table:

Laboratory ID	Description	Location	Condition	Result
1A, 1B, 1C	Interior Window Glaze on 4x4 Chix Wire Windows	Classrooms to Hall – C Classrooms C-15, C-11, C-10	Good	2% chrysotile
2A, 2B	Interior Window Glaze	Sidelight Hall Door Assembly Near C15	Good	ND
3A, 3B	Interior Window Glaze on Door	Hall Assembly Near C15	Good	ND
4A, 4B, 4C	Interior Window Glaze on 4x4 Chix Wire Windows	Classrooms to Hall – B Classrooms B-17, B-15A, B-21	Good	ND
5A, 5B	Interior Window Glaze on Sidelights	Hall Door Assembly Near B-17	Good	ND
7	Black Sink Coating	B5-Science, Standard Sink	Good	5% Chrysotile
8A, 8B	Interior Window Glaze	A-5, Adult ESL Wood Framed Window	Good	2% Chrysotile
9A, 9B, 9C	Interior Window Glaze on 4x4 Chix Wire Windows	Classrooms B-5, B-7, B10	Good	2% Chrysotile
10A, 10B, 10C	Interior Window Glaze on Chix Wire Wood Framed Windows	Near A-12, A-13	Good	3% Chrysotile
11A, 11B, 11C	Interior Window Glaze	Fancy Wood Framed Windows at Library	Good	2% Chrysotile



Laboratory ID	Description	Location	Condition	Result
12A, 12B, 12C, 12D, 12E	Interior White/Gray Caulk	Between Steel Beams and CMU in Classrooms- Classroom #s B-11, B-24, B-41, B-32, B-41	Painted, Good	10% chrysotile
13A, 13B, 13C, 13D, 13E	Interior Hard Yellow Caulk	Between Steel Beams and CMU ½ Wall Interior Side of Courtyard	Painted, Good	5% chrysotile
14A, 14B	Interior White Caulk	Between Steel Beam and Brick Near Door #9	Painted, Good	3% Chrysotile
15A, 15B, 15C, 15D, 15E, 15F, 15G	White 2x2 Ceiling Panel	Ceiling, Hall Outside Library, Main Offices	Good	ND
16A, 16B, 16C, 16D, 16E, 16F, 16G	Yellow Insulation	Under White 2x2 Ceiling Panels	Good	ND
17A, 17B, 17C, 17D, 17E, 17F, 17G	White 2x4 Ceiling Panel	Ceiling, Hall Outside B-20, A-18, B-48, Main Entrance Hall, Hall, Outside C-14, Hall Near Door 16, Hall Near Fitness Center	Good	ND
18A, 18B, 18C, 18D, 18E, 18F, 18G	Yellow Insulation	Under White 2x4 Ceiling Panels	Good	ND
19A, 19B, 19C, 19D, 19E, 19F, 19G	Exterior Gray Window Caulk	At the Sides of Window Banks	Poor	5% Chrysotile
20A, 20B	Exterior Thick, Chunky Window Glaze	2x2 Windows Near Kitchen	Fair	ND
21	Exterior Door Caulk	Door 16	Good	2% Chrysotile
22	Exterior Door Caulk	Door 11	Good	2% Chrysotile





Laboratory ID	Description	Location	Condition	Result
23	Exterior Door Caulk	Door 9	Good	2% Chrysotile
24A, 24B	Exterior Brown Fibrous Expansion Joint	Foundation	Fair	ND
25A, 25B, 25C, 25D, 25E, 25F, 25G	Exterior Gray Window Glaze	Window Banks, Interior Side of Exterior Window	Poor, Damp from Leaks	2% Chrysotile

The quantities for the limited sampling combined with the visual survey and AHERA report are provided in the attached Table 1. The laboratory analytical report is provided in Appendix A.

### 3.3 Recommendations

The limited inspection was conducted for feasibility. It is recommended a full destructive survey be conducted. Prior to disturbance, the ACM identified must be abated by a Commonwealth of Massachusetts-licensed asbestos abatement contractor following all federal, state & local regulations governing asbestos abatement. A copy of the asbestos Waste Shipment record must be received within 30 days of removal from the Site. Asbestos air quality sampling must be conducted under USEPA regulations following asbestos abatement and prior to re-occupancy of the spaces. If additional materials are discovered that have not been sampled, those materials should be considered ACMs until laboratory analysis determines otherwise.

## 4.0 LEAD-BASED PAINT

### 4.1 Methods

CDW performed a visual inspection of painted surfaces. CDW collected samples from different color paints on various types of building component substrates. Samples were submitted to EMSL Laboratories in Cinnaminson, New Jersey for analysis via atomic absorption spectrometry (AAS).

### 4.2 Findings

The results of the laboratory analysis are provided in the below table:

Laboratory ID	Description	Result (% Weight)
LP-1A	Blue over Yellow Paint on Steel Beams	0.69
LP-1B	Blue over Yellow Paint on Steel Beams	0.15
LP-1C	Blue over Yellow Paint on Steel Beams	0.14
LP-1D	Blue over Yellow Paint on Steel Beams	0.079



Laboratory ID	Description	Result (% Weight)
LP-1E	Blue over Yellow Paint on Steel Beams	0.27
LP-2A	Dark Blue Over Light Blue Paint on Steel Beams	0.056
LP-2B	Dark Blue Over Light Blue Paint on Steel Beams	0.11
LP-2C	Dark Blue Over Light Blue Paint on Steel Beams	0.062
LP-2D	Dark Blue Over Light Blue Paint on Steel Beams	0.49
LP-2E	Dark Blue Over Light Blue Paint on Steel Beams	0.51
LP-3A	Light Blue Paint on Steel Beams	<0.0080
LP-3B	Light Blue Paint on Steel Beams	0.036
LP-3C	Light Blue Paint on Steel Beams	0.019
LP-3D	Light Blue Paint on Steel Beams	<0.011
LP-3E	Light Blue Paint on Steel Beams	<0.0080
LP-4	Gray/White Paint on Exterior CMU Near Kitchen	<0.0080
LP-5	Gray/White Paint on Exterior Window Panels	<0.0080

The USEPA defines LBP as any paint or surface coating that contains lead equal to exceeding one milligram per square centimeter (1.0 mg/cm<sup>2</sup>) or 0.5% by weight. Two samples contain lead above 0.5% by weight. The laboratory analytical report is included in Attachment B.

### Recommendations

Based on the conclusions of this testing, the following recommendations are offered:

- Removal of the LBP is not required. However, in accordance with the EPA Lead Renovation, Repair, and Painting (RRP) Rule 40 CFR 745, workers, visitors and the general public must be protected from lead dust generated during the demolition of LBP or LCP coated surfaces.
- Components identified to contain the presence of lead should not be disturbed in an uncontrolled manner. Disturbance of these materials should only be done by properly trained personnel in a controlled and documented manner to allow for the safety of the workers, bystanders and disposal of waste materials.



- Those components/colors not tested, or in locations not inventoried in this report, should be sampled for lead content prior to disturbance that may cause airborne release of lead.

## 5.0 OTHER HAZARDOUS MATERIALS SURVEY

### OHM Visual Inspection

CDW visually inspected the Site building for universal, special and hazardous wastes associated with building materials. These included but were not limited to the following:

- Mercury-containing devices (fluorescent light tubes, thermostats, gauges, etc.);
- Polychlorinated bi-phenyl (PCB)-containing articles, equipment and devices (light ballasts, electrical switches, etc.);
- Chlorofluorocarbon (CFC)-containing equipment (refrigerants, air conditioners/HVAC equipment, water bubblers, etc.)
- Tritium-containing devices (Exit signs);
- Lead-Acid batteries (emergency lights, etc.); and
- Pressurized-cylinders (fire extinguishers, etc.).

## 5.1 Findings

### OHM

The visual survey for hazardous materials identified mercury-containing light tubes, PCB-containing light ballasts, mercury containing thermostats and switches, lead and tritium batteries, refrigerants and other hazardous materials. No hazardous materials sampling or analysis was conducted as part of this preliminary survey. A list of OHMs identified are included in the below table.

Material Description	Location	Est. Quantity	Units
Compact Fluorescent Bulbs	Throughout	200	EA
Fluorescent Bulbs (Mercury)	Throughout	18,000	Tubes



Material Description	Location	Est. Quantity	Units
DPHE and Electronic Light Ballasts	Throughout	9,000	Each
Thermostats and Switches (Mercury)	Throughout, Mechanical and HVAC	500	Ampules
Emergency Light Batteries (Lead)	Throughout	80	EA
Refrigerants Associated with HVAC	Throughout	5,000	Gallons
Fire Extinguishers (Compressed Gas)	Throughout	150	EA
Refrigerants Associated with Water Bubblers	Throughout	25	Gallons
Exit Signs (Tritium)	Throughout	150	EA
Air Conditioning Units	Sporadic, Window Mounted	100	EA
Chemicals (Mercury and Lead)	Science Sink Traps	25	Gallons
Laboratory Chemicals	Science Labs	NA	NA
Older Door Retractors, (Hydraulic Oil Dampers)	Exit Doors, A Wing Offices, Door Assemblies, Cafeteria, Gym, Locker Rooms, Main Offices, Bathrooms	150	EA
Welding Supplies, Gases	Maintenance Shop	--	Re-use
Hydraulic Fluid	Automotive Shop – Old Lift Reservoirs Under Floor	100	Gallons
PCB Fluid	Old Transformer	150	Gallons



## 5.2 Recommendations

Prior to removal, light tubes, ballasts, compact florescent bulbs, lead and tritium batteries, thermostats and switches will require proper handling, removal, transportation and off-site recycling/reclamation. Hydraulic oil from the door retractors, automobile lifts and refrigerants will require handling and disposal in accordance with regulations. Any sludge in the science sink traps and acid tank will need to be sampled for laboratory analysis of lead and mercury via TCLP to determine proper disposal requirements. Laboratory chemicals should be properly stored, in their original containers, and are recommended for re-use.

### Limitations

The conclusions are limited to the information available at the time of the field survey and the scope of services, as defined. No subsurface soil or groundwater testing was performed. Where access to portions of the Site or to structures on the site was unavailable or limited, CDW renders no opinion as to the presence of hazardous material or the presence of indirect evidence related to hazardous material in that portion of the site or structure. This report cannot be solely relied upon for demolition. The testing performed forms the basis for conclusions expressed and areas inaccessible for testing limits those conclusions. No other conclusions, interpretations or recommendations are contained or implied in this report other than those expressed. No other use of this report is warranted without the written consent of CDW Consultants, Inc.

CDW appreciates the opportunity to provide our services to you on this project.

Very truly yours,

CDW CONSULTANTS, INC.

A handwritten signature in black ink, appearing to read 'Susan Cahalan'.

Susan Cahalan, PG, ISSP-SA  
Project Manager

## **TABLES**

**TABLE 1  
ACM Quantities  
Fuller Middle School  
Framingham, Massachusetts**

HA No.	Material Description	Laboratory Sample No. and AHERA	NESHAP Cat.	Location	Est. Quantity	Units
1	Pipe Fittings and Insulation	AHERA and Visual	Cat. 2 Friable ACM	Behind Walls, Crawlspace etc.	17,000	LF
2	Roof Drain Insulation	AHERA and Visual	Cat. 2 Friable ACM	A-24, B-8, B-18, B-15A, B-20, B-22, B-28, B-46, C-8, C-27, C-22, C-09, C-15, D-31, D-16, D-29, D-33	450	LF
3	Gaskets	Visual	Cat I. Non Friable ACM	On Steam and Hot Water Lines and Valves, Crawlspace	250	EA
4	Round Light Gaskets	Visual	Suspect ACM, Not Sampled	Round Lights in Boiler Room Area	25	EA
5	ACM Debris on Soil	Visual	Cat. 2 Friable ACM	Dirt Floor of Crawlspace	25	CY
6	Vibration Isolators on HVAC	AHERA and Visual	Cat. 2 Non Friable ACM	Crawlspace, HV-1, HV-2, HV-3, HV-4, HV-5, HV-6, HV-7, HV-8, HV-9, HV-10, HV-11, HV-12, HV-13, HV-14, A-21, B-1A, B-26, C-13, D-9	40	EA
7	9x9 Floor Tiles and associated Mastic	AHERA and Visual	Cat I. Non Friable ACM	Throughout, Halls Outside Auditorium and Locker Rooms, Halls outside C-14, B-32, B-35, B-37, B-39, A-8, C-1, B-1, Select Classrooms	108,000	SF
8	Wood Flooring Paper and Mastic	AHERA	Cat. 2 Non Friable ACM	Stage and Music Room Stage	4,000	SF
9	Wood Wall Paneling Glue	PACM	Suspect ACM, Not Sampled	Auditorium	2,000	SF
10	Wire Insulation	AHERA	Cat. 2 Non Friable ACM	Auditorium Stage	60	LF
11	Fire Curtain	AHERA and Visual	Cat. 2 Non Friable ACM	Auditorium Stage	1	EA
12	Wood Flooring Paper and Mastic	AHERA	Cat. 2 Non Friable ACM	Gym and Fitness Center	14,500	SF
13	Fiber Reinforced Paneling	AHERA	Cat. 2 Non Friable ACM	B-9 Lab Hood, D-31 Exhaust Vent, D-6 Upper Wall Vent	210	SF
14	Mastic Behind Heaters	PACM	Suspect ACM, Not Sampled	Classrooms	3,200	SF
15	Slate Board Glue Daubs	PACM	Suspect ACM, Not Sampled	Classrooms, Average 3 Per Classroom	250	EA
16	Black Science Table Tops	PACM	Suspect ACM, Not Sampled	Science	320	SF
17	Interior Window Glaze	1A, 1B, 1C, 9A, 9B, 9C,	Cat. 2 Non Friable ACM	At Classrooms and Hall Intersection B Classrooms, C Classrooms, D Classrooms	550	EA
18	Interior Window Glaze	8A, 8B, 10A, 10B, 10C, 11A, 11B, 11C	Cat. 2 Non Friable ACM	Fancy Wood Framed Windows at Admin Offices, "A" Offices, Library. 4x4, 8x4 and 2x4 Sections	150	EA
19	Black Sink Coating	7	Cat. 2 Non Friable ACM	Standard Sinks, B-5, Art, Nurses, Other Areas	30	EA
20	Interior White-Gray Caulk	12A, 12B, 12C, 12D, 12E, 14A, 14B, 14C	Cat. 2 Non Friable ACM	Between Steel Beams and CMU in Classrooms, Intermittent in Halls	3,500	LF
21	Interior Hard Yellow Caulk	13A, 13B, 13C, 13D, 13E,	Cat. 2 Non Friable ACM	Between Steel Beams and CMU 1/2 Wall Interior Side of Courtyard Near Main Office	320	LF
22	Black Mastic/Insulation	Visual	Suspect ACM, Not Sampled	Walk in Refrigerator and Freezer Coating	2	EA
23	Exterior Gray Window Caulk	19A, 19B, 19C, 19D, 19E, 19F, 19G	Cat. 2 Non Friable ACM	At Sides of Long Window Banks, Between Bank and Brick	300	LF
24	Exterior Window Glaze	25A, 25B, 25C, 25D, 25E, 25F, 25G	Cat. 2 Non Friable ACM	Interior of Exterior Window Banks. Each Window Defined by Aluminum Frame above Solid Steel Panel.	175	Each
25	Exterior Door Caulk	21, 22, 23	Cat. 2 Non Friable ACM	Exterior Doors	420	LF
26	Exterior Vapor Barrier	PACM	Suspect ACM, Not Sampled	Behind Brick Façade	6,000	SF
27	Remnant Roofing Tar	PACM	Suspect ACM, Not Sampled	Remnant	10,000	SF
28	Subsurface Transite	PACM	Suspect ACM, Not Sampled	Not Seen - Contingency	2,000	LF

ACM = Asbestos Containing Material. PACM = Presumed Asbestos Containing Material. LF = Linear Foot. SF = Square Foot

## **APPENDIX A**





## Asbestos Identification Laboratory

165 New Boston St., Ste 227  
Woburn, MA 01801  
781-932-9600

Web: [www.asbestosidentificationlab.com](http://www.asbestosidentificationlab.com)  
Email: [mikemanning@asbestosidentificationlab.com](mailto:mikemanning@asbestosidentificationlab.com)

Batch: 27227



November 03, 2017

Susan Cahalan  
CDW Consultants, Inc.  
6 Huron Drive  
Natick, MA 01760

**Project Number:**

**Project Name:** Fuller Middle School, Framingham MA

**Date Sampled:** 2017-10-27  
**Work Received:** 2017-10-31  
**Work Analyzed:** 2017-11-03

**Analysis Method:** BULK PLM ANALYSIS EPA/600/R-93/116

Dear Susan Cahalan,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project .

The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Susan Cahalan for your business.

Michael Manning  
Owner/Director

Susan Cahalan  
CDW Consultants, Inc.  
6 Huron Drive  
Natick, MA 01760

**Project Number:****Project Name:** Fuller Middle School, Framingham MA**Date Sampled:** 2017-10-27**Work Received:** 2017-10-31**Work Analyzed:** 2017-11-03**Analysis Method:** BULK PLM ANALYSIS EPA/600/R-93/116

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
1A	Interior Window Glaze	4' X 4' Chix Wire Classrooms to Hall / C- Wing Area	multi	Non-Fibrous 98	Detected Chrysotile 2
306480					
1B	Interior Window Glaze	4' X 4' Chix Wire Classrooms to Hall / C- Wing Area			Not Analyzed
306481					
1C	Interior Window Glaze	4' X 4' Chix Wire Classrooms to Hall / C- Wing Area			Not Analyzed
306482					
2A	Interior Window Glaze	Sidelight Hall Door Assembly near C15	multi	Non-Fibrous 100	None Detected
306483					
2B	Interior Window Glaze	Sidelight Hall Door Assembly near C15	multi	Non-Fibrous 100	None Detected
306484					
3A	Interior Window Glaze	Hall Assembly near C15	white	Non-Fibrous 100	None Detected
306485					
3B	Interior Window Glaze	Hall Assembly near C15	white	Non-Fibrous 100	None Detected
306486					
4A	Interior Window Glaze	Chix Wire 4 X 4, 2 Classrooms / B-Wing Area	multi	Non-Fibrous 100	None Detected
306487					
4B	Interior Window Glaze	Chix Wire 4 X 4, 2 Classrooms / B-Wing Area	multi	Non-Fibrous 100	None Detected
306488					
4C	Interior Window Glaze	Chix Wire 4 X 4, 2 Classrooms / B-Wing Area	multi	Non-Fibrous 100	None Detected
306489					
5A	Interior Window Glaze	Hall Assembly near B-17	multi	Non-Fibrous 100	None Detected
306490					
5B	Interior Window Glaze	Hall Assembly near B-17	multi	Non-Fibrous 100	None Detected
306491					
6	Interior Window Glaze	Hall Assembly near B-17	multi	Non-Fibrous 100	None Detected
306492					
7	Black Sink Coating	B5 Science	black	Non-Fibrous 95	Detected Chrysotile 5
306493					

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
8A	Interior Window Glaze	A-5 Adult ESL Wood Framed	multi	Non-Fibrous 98	Detected Chrysotile 2
306494					
8B	Interior Window Glaze	A-5 Adult ESL Wood Framed			Not Analyzed
306495					
9A	Interior Window Glaze	Chix Wire 4 X 4 Classrooms B5, B7, B10	multi	Non-Fibrous 98	Detected Chrysotile 2
306496					
9B	Interior Window Glaze	Chix Wire 4 X 4 Classrooms B5, B7, B10			Not Analyzed
306497					
9C	Interior Window Glaze	Chix Wire 4 X 4 Classrooms B5, B7, B10			Not Analyzed
306498					
10A	Interior Window Glaze	Chix Wire Wood Framed near A-12, A-13	multi	Non-Fibrous 97	Detected Chrysotile 3
306499					
10B	Interior Window Glaze	Chix Wire Wood Framed near A-12, A-13			Not Analyzed
306500					
10C	Interior Window Glaze	Chix Wire Wood Framed near A-12, A-13			Not Analyzed
306501					
11A	Interior Window Glaze	Fancy Wood Frame at Library	multi	Non-Fibrous 98	Detected Chrysotile 2
306502					
11B	Interior Window Glaze	Fancy Wood Frame at Library			Not Analyzed
306503					
11C	Interior Window Glaze	Fancy Wood Frame at Library			Not Analyzed
306504					
12A	Interior Gray/White Caulk	Between Steel Beam and CMU Classrooms	multi	Non-Fibrous 90	Detected Chrysotile 10
306505					
12B	Interior Gray/White Caulk	Between Steel Beam and CMU Classrooms			Not Analyzed
306506					
12C	Interior Gray/White Caulk	Between Steel Beam and CMU Classrooms			Not Analyzed
306507					
12D	Interior Gray/White Caulk	Between Steel Beam and CMU Classrooms			Not Analyzed
306508					
12E	Interior Gray/White Caulk	Between Steel Beam and CMU Classrooms			Not Analyzed
306509					
13A	Hard Yellow Interior Caulk	Between Steel Beams and CMU 1/2 Wall Int. Courtyard	multi	Non-Fibrous 95	Detected Chrysotile 5
306510					
13B	Hard Yellow Interior Caulk	Between Steel Beams and CMU 1/2 Wall Int. Courtyard			Not Analyzed
306511					

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
13C	Hard Yellow Interior Caulk	Between Steel Beams and CMU 1/2 Wall Int. Courtyard			Not Analyzed
306512					
13D	Hard Yellow Interior Caulk	Between Steel Beams and CMU 1/2 Wall Int. Courtyard			Not Analyzed
306513					
13E	Hard Yellow Interior Caulk	Between Steel Beams and CMU 1/2 Wall Int. Courtyard			Not Analyzed
306514					
14A	Interior White Caulk	Between Steel Beam and Brick near Door 9	multi	Other 2	<b>Detected</b>
306515				Non-Fibrous 95	
14B	Interior White Caulk	Between Steel Beam and Brick near Door 9			Not Analyzed
306516					
15A	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306517					
15B	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306518					
15C	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306519					
15D	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306520					
15E	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306521					
15F	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306522					
15G	White 2' X 2' Ceiling	Ceiling	white	Non-Fibrous 100	None Detected
306523					
16A	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306524				Non-Fibrous 2	
16B	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306525				Non-Fibrous 2	
16C	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306526				Non-Fibrous 2	
16D	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306527				Non-Fibrous 2	
16E	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306528				Non-Fibrous 2	
16F	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306529				Non-Fibrous 2	

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
16G	Yellow Layer	Under 2' X 2' White Ceiling Tile	yellow	Mineral Wool 98	None Detected
306530				Non-Fibrous 2	
17A	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 5	None Detected
306531				Non-Fibrous 95	
17B	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 5	None Detected
306532				Non-Fibrous 95	
17C	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 10	None Detected
306533				Non-Fibrous 90	
17D	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 5	None Detected
306534				Non-Fibrous 95	
17E	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 10	None Detected
306535				Non-Fibrous 90	
17F	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 10	None Detected
306536				Non-Fibrous 90	
17G	White 2' X 4' Ceiling	Ceiling	white	Fiberglass 5	None Detected
306537				Non-Fibrous 95	
18A	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 95	None Detected
306538				Non-Fibrous 5	
18B	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 98	None Detected
306539				Non-Fibrous 2	
18C	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 98	None Detected
306540				Non-Fibrous 2	
18D	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 98	None Detected
306541				Non-Fibrous 2	
18E	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 95	None Detected
306542				Non-Fibrous 5	
18F	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 98	None Detected
306543				Non-Fibrous 2	
18G	Yellow Layer	Under White 2' X 4' Ceiling	yellow	Fiberglass 95	None Detected
306544				Non-Fibrous 5	
19A	Exterior Gray Window Caulk	Exterior Windows	gray	Other 5	Detected Chrysotile 5
306545				Non-Fibrous 90	
19B	Exterior Gray Window Caulk	Exterior Windows			Not Analyzed
306546					
19C	Exterior Gray Window Caulk	Exterior Windows			Not Analyzed
306547					

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
19D	Exterior Gray Window Caulk	Exterior Windows			Not Analyzed
306548					
19E	Exterior Gray Window Caulk	Exterior Windows			Not Analyzed
306549					
19F	Exterior Gray Window Caulk	Exterior Windows			Not Analyzed
306550					
19G	Exterior Gray Window Caulk	Exterior Windows			Not Analyzed
306551					
20A	Exterior Thick Chunky Window Glaze	2 X 2 Window near Kitchen	white	Non-Fibrous 100	None Detected
306552					
20B	Exterior Thick Chunky Window Glaze	2 X 2 Window near Kitchen	white	Non-Fibrous 100	None Detected
306553					
21	Exterior Door Caulk	Door 16	gray	Non-Fibrous 98	Detected Chrysotile 2
306554					
22	Exterior Door Caulk	Door 11	gray	Non-Fibrous 98	Detected Chrysotile 2
306555					
23	Exterior Door Caulk	Door 9	gray	Non-Fibrous 98	Detected Chrysotile 2
306556					
24A	Exterior Brown Fibrous Expansion Joint	Foundation	brown	Cellulose 70	None Detected
306557				Non-Fibrous 30	
24B	Exterior Brown Fibrous Expansion Joint	Foundation	brown	Cellulose 70	None Detected
306558				Non-Fibrous 30	
25A	Exterior Gray Window Glaze	Window Banks, All Sides	gray	Non-Fibrous 98	Detected Chrysotile 2
306559					
25B	Exterior Gray Window Glaze	Window Banks, All Sides			Not Analyzed
306560					
25C	Exterior Gray Window Glaze	Window Banks, All Sides			Not Analyzed
306561					
25D	Exterior Gray Window Glaze	Window Banks, All Sides			Not Analyzed
306562					
25E	Exterior Gray Window Glaze	Window Banks, All Sides			Not Analyzed
306563					
25F	Exterior Gray Window Glaze	Window Banks, All Sides			Not Analyzed
306564					
25G	Exterior Gray Window Glaze	Window Banks, All Sides			Not Analyzed
306565					

Client: CDM Consultants

Address: Wagon Drive, Natick, MA 01760  
 Project Site & #: Filler Waste Road, Framingham, MA  
 Phone / email address:

Contact: Richard O'Sullivan Consultant, Inc.

Relinquish by date: 10/30/17

Received by date: Quinn 10/31/17

# of Samples Received: 20

**CHAIN OF CUSTODY**  
 EPA/600/R-93/116

**Asbestos Identification Lab**  
 165 New Boston St.  
 Suite 227  
 Woburn, MA 01801  
 (781)932-9600  
 www.asbestosidentificationlab.com



Date Sampled: 10/31/17

BATCH# 27227

Rev 12/15

Page 1 of 10

Turnaround Time  Less 3 Hrs  Bulk  Sample Method

Same Day  Soil

Next Day  Wipe

Two Day 11/3/17  Point Count

Stop on 1st Positive?  YES  NO

Notify Method:  Mail/E-Mail/Verbal

Analyzed By: Richard O'Sullivan

Date: 11/3/17

*DUE Friday*

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Material / Location	Stereo Scope				Optical Properties						RI	Non-Asbestos Percentage (%)									
			Temp in Celsius = <u>24</u>	% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction		Sign of Elongation	Birefringence	Pleochroism	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
<u>08590</u>	<u>1A</u>	<u>Material: Interior window pane Location: 4'x4' Chix wire classroom To Hall C wing Area</u>																					
<u>08</u>	<u>1B</u>	<u>Material: " Location: "</u>																					
<u>08</u>	<u>1C</u>	<u>Material: " Location: "</u>																					

*DUJ*

*DUJ*

*8*





























Files

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celsius = _____	Stereo Scope					Asbestos Minerals	Optical Properties						Non-Asbestos Percentage (%)							
			% of Asbestos	Color	Homogeneity	Texture	Friable		Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
19F	19BF	''	07	Y	FY		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														2	
19G	19BS	''	07	Y	FY		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite															5
19H	19A	Material: Exterior Windows Location: ''	06	Y	AN		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite															550
19I	19B	Material: '' Location: ''					Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite															
19J	19C	Material: '' Location: ''					Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite															

DNA

DNA











## **APPENDIX B**



# 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:	201711162
CustomerID:	CDWC26
CustomerPO:	
ProjectID:	

Attn: **Susan Cahalan**  
**CDW Consultants**  
**6 Huron Drive**  
**Natick, MA 01760**

Phone: (508) 875-2657  
 Fax:  
 Received: 10/31/17 10:30 AM  
 Collected: 10/27/2017

Project: **Fuller School**

## 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>Lead Concentration</i>
LP-1A Site: Blue Over Yellow Paint on Steel Beams	201711162-0001	10/27/2017	11/1/2017	0.69 % wt
LP-1B Site: Blue Over Yellow Paint on Steel Beams	201711162-0002	10/27/2017	11/1/2017	0.15 % wt
LP-1C Site: Blue Over Yellow Paint on Steel Beams	201711162-0003	10/27/2017	11/1/2017	0.14 % wt
LP-1D Site: Blue Over Yellow Paint on Steel Beams	201711162-0004	10/27/2017	11/1/2017	0.079 % wt
LP-1E Site: Blue Over Yellow Paint on Steel Beams	201711162-0005	10/27/2017	11/1/2017	0.27 % wt
LP-2A Site: Dark Blue Over Light Blue Paint on Steel Beams	201711162-0006	10/27/2017	11/1/2017	0.056 % wt
LP-2B Site: Dark Blue Over Light Blue Paint on Steel Beams	201711162-0007	10/27/2017	11/1/2017	0.11 % wt
LP-2C Site: Dark Blue Over Light Blue Paint on Steel Beams	201711162-0008	10/27/2017	11/1/2017	0.062 % wt
LP-2D Site: Dark Blue Over Light Blue Paint on Steel Beams	201711162-0009	10/27/2017	11/1/2017	0.49 % wt
LP-2E Site: Dark Blue Over Light Blue Paint on Steel Beams	201711162-0010	10/27/2017	11/1/2017	0.51 % wt
LP-3A Site: Light Blue Paint on Steel Beams	201711162-0011	10/27/2017	11/1/2017	<0.0080 % wt
LP-3B Site: Light Blue Paint on Steel Beams	201711162-0012	10/27/2017	11/1/2017	0.036 % wt
LP-3C Site: Light Blue Paint on Steel Beams	201711162-0013	10/27/2017	11/1/2017	0.019 % wt
LP-3D Site: Light Blue Paint on Steel Beams	201711162-0014	10/27/2017	11/1/2017	<0.011 % wt
LP-3E Site: Light Blue Paint on Steel Beams	201711162-0015	10/27/2017	11/1/2017	<0.0080 % wt

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 11/03/2017 09:54:34

**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:	201711162
CustomerID:	CDWC26
CustomerPO:	
ProjectID:	

Attn: **Susan Cahalan**  
**CDW Consultants**  
**6 Huron Drive**  
**Natick, MA 01760**

Phone: (508) 875-2657  
 Fax:  
 Received: 10/31/17 10:30 AM  
 Collected: 10/27/2017

Project: **Fuller School****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>Lead Concentration</i>
LP-4	201711162-0016	10/27/2017	11/1/2017	<0.0080 % wt
Site: Gray / White Paint EXT CMU Near Kitchen				
LP-5	201711162-0017	10/27/2017	11/1/2017	<0.0080 % wt
Site: Gray / White Paint on EXT. Window Panels				

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 11/03/2017 09:54:34



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING  
LABORATORY PRODUCTS TRAINING

### Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

201711162

Cinnaminson, NJ 08077  
PHONE: 1-800-220-3675  
FAX: (856) 786-5974

Company : CDW Consultants		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: 6 Huron Drive		<i>Third Party Billing requires written authorization from third party</i>	
City: Natick	State/Province: MA	Zip/Postal Code: 01760	Country: US
Report To (Name): susan cahalan		Telephone #: 5088752657	
Email Address: scahalan@cdwconsultants.com		Fax #: 5088752657	Purchase Order:
Project Name/Number: Fuller School		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: MA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

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

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

\*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide

Matrix	Method	Instrument	Reporting Limit	Check
Chips <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm <sup>2</sup> <input type="checkbox"/> ppm (mg/kg)	SW846-7000B	Flame Atomic Absorption	0.01%	<input checked="" type="checkbox"/>
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300M/NIOSH 7303	ICP-OES	0.5 µg/filter	<input type="checkbox"/>
Wipe* <span style="float: right;">ASTM <input type="checkbox"/> non ASTM <input type="checkbox"/></span> <small>*if no box checked, non-ASTM Wipe assumed</small>	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
	SW846-6010B or C	ICP-OES	1.0 µg/wipe	<input type="checkbox"/>
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1311/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW846-1312/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1312/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	<input type="checkbox"/>
Wastewater <span style="float: right;">Unpreserved <input type="checkbox"/> Preserved with HNO<sub>3</sub> pH &lt; 2 <input type="checkbox"/></span>	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water <span style="float: right;">Unpreserved <input type="checkbox"/> Preserved with HNO<sub>3</sub> pH &lt; 2 <input type="checkbox"/></span>	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	<input type="checkbox"/>
Other:				<input type="checkbox"/>

Name of Sampler:	Signature of Sampler:
------------------	-----------------------

Sample #	Location	Volume/Area	Date/Time Sampled
1 LP-1A	Blue over yellow paint on steel beams	—	10/27/17
2 LP-1B	" "	—	"

Client Sample #s	Total # of Samples:
Relinquished (Client): <i>[Signature]</i>	Date: 10/30/17
Received (Lab): <i>[Signature]</i>	Date: 10/31/17
Comments: 5088752657	Time: 1030 FedEx



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

Fuller School.

**LEAD (Pb) CHAIN OF CUSTODY**  
EMSL ORDER ID (Lab Use Only):

201711162

EMSL Analytical, Inc.  
200 Route 130 North  
Cinnaminson, NJ 08077

PHONE: 1-800-220-3675  
FAX: (856) 786-5974

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
3 LP-1C	" "	-	10/27/17
4 LP-1D	" "	-	}
5 LP-1E	" "	-	
6 LP-2A	Dark blue over light blue paint on steel beams	-	
7 LP-2B	" "	-	
8 LP-2C	" "	-	
9 LP-2D	" "	-	
10 LP-2E	" "	-	
11 LP-3A	light blue paint on steel beams	-	
12 LP-3B	" "	-	
13 LP-3C	" "	-	
14 LP-3D	" "	-	
15 LP-3E	" "	-	
16 LP-4	Gray/white paint ext near CMU kitchen	-	
17 LP-5	White/gray paint on ext. window panels	-	

Comments/Special Instructions:

5088752657