



May 21, 2013

**Department of Economic and Community Development
Office of Brownfield Remediation and Development
505 Hudson Street
Hartford, Connecticut 06106**

Attn: Donald Friday

**RE: Hazardous Building Materials Survey Report
Former Mystic Oral School for the Deaf
240 Oral School Road, Groton, Connecticut
LEA Comm. No. 18HM3.01.003**

Dear Mr. Friday:

Loureiro Engineering Associates, Inc. (LEA) has conducted a Hazardous Building Materials Survey at the former Mystic Oral School for the Deaf located at 240 Oral School Road in Groton, Connecticut. The findings of this survey are documented in the attached Hazardous Building Materials Survey Report. Two bound, paper copies and two digital copies, provided in a portable document format (pdf) on compact disc, are enclosed.

Please feel free to call me at (860) 747-6181 should you have any questions regarding the attached report.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Jamie Roche
Director, Environmental Services

Attachment

Loureiro Engineering Associates, Inc.

100 Northwest Drive • Plainville, CT 06062 • 860.747.6181 • Fax 860.747.8822 • www.Loureiro.com

AN EMPLOYEE-OWNED COMPANY

HAZARDOUS BUILDING MATERIALS SURVEY REPORT

**Former Oral School for the Deaf
240 Oral School Road
Groton, Connecticut**

May 2013

Prepared for

**STATE OF CONNECTICUT
DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
OFFICE OF BROWNFIELD REMEDIATION AND DEVELOPMENT
505 Hudson Street
Hartford, Connecticut 06106-7106**

Prepared by

**LOUREIRO ENGINEERING ASSOCIATES, INC.
100 Northwest Drive
Plainville, Connecticut 06062**

An Employee Owned Company

Comm. No. 18HM3.01.003

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ACRONYMS

AAS	Atomic Absorption Spectrometry
ACM	Asbestos-Containing Material
ASHERA	Asbestos Hazard Emergency Response Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CLPPR	Childhood Lead Poisoning Prevention Regulations
DECD	Department of Economic and Community Development
DEHP	Di(2-ethylhexyl)phthalate
DPH	Department of Public Health
EPA	Environmental Protection Agency
HBM	Hazardous Building Material
HUD	Department of Housing and Urban Development
LEA	Loureiro Engineering Associates, Inc.
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOB	Non-Friable Organically Bound Material
OBRD	Office of Brownfield Remediation and Development
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PLM	Polarized Light Microscopy
RCRA	Resource Conservation and Recovery Act
RCSA	Regulations of Connecticut State Agencies
TCLP	Toxicity Characteristic Leaching Procedure
TSCA	Toxic Substance Control Act
TSI	Thermal Systems Insulation
VAT	Vinyl Asbestos Tile
XRF	X-ray fluorescence

UNITS

mg/cm ²	milligram per square centimeter
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
%	percent

1. INTRODUCTION

Loureiro Engineering Associates, Inc. (LEA) has prepared this report to document the Hazardous Building Materials (HBM) survey of the state-owned Mystic Oral School property located at 240 Oral School Road in Groton, Connecticut (herein after referred to as the “Site”). The HBM survey was authorized by the State of Connecticut Department of Economic and Community Development (DECD), Office of Brownfield Remediation and Development (OBRD) under Purchase Order No. ECDM1-0000007972. Funding for the HBM survey was made available through a state grant and *An Act Promoting Economic Growth and Job Creation in the State* (Public Act No. 11-1). The HBM survey was conducted at the Site between January 15 and February 7, 2013.

1.1 Site Description

The Site is the location of the former Mystic Oral School and Mystic Education Center. The Site encompasses approximately 47 acres and is improved with seven main buildings. The buildings are referred to as the: Administration (Boys Wing) Building; Girls Wing; Whipple Building; Crouter Building; Durant Building; Pratt Building (Gymnasium/Natatorium); and Rainbow House. In addition, there are two garage buildings, one shed, and ancillary driveways and parking lots that comprise the Site. The buildings located at the Site were constructed between approximately 1924 and 1976.

1.2 Scope of Work

Prior to conducting an HBM assessment of the site buildings, LEA reviewed historical HBM survey and abatement reports and other documentation provided by DECD or made available at the Site. These documents were reviewed to develop the scope of work for the HBM assessment. Based on this review, the scope of the HBM survey included an inspection of all accessible interior and exterior areas of each building for asbestos-containing material (ACM). Representative building materials were sampled and submitted for laboratory analysis for the presence of asbestos. The HBM survey also included analyses of a limited number of window and door frame caulking and glazing samples for the presence of polychlorinated biphenyls (PCBs).

An inventory of devices that may require offsite disposal or recycling as universal waste was also compiled during the course of the HBM assessment. This inventory was based on an inspection of portable air conditioning units, suspect mercury-based gymnasium flooring, lighting systems, pressure switches and thermostatic controls for the presence of PCBs and / or Di(2-ethylhexyl)phthalate (DEHP) ballasts or components containing mercury. Based on the

findings of HBM surveys completed previously by others, it was concluded that sampling painted surfaces of buildings for the presence of lead was not warranted.

1.3 **Purpose**

The purpose of conducting the HBM survey was to identify the type, location, and quantity of building materials that will require special handling and disposal due to the presence of asbestos, lead, mercury, PCBs, or DEHP. Data gathered during the HBM survey were used to develop preliminary estimates for abatement of ACM in each of the site buildings. This report was prepared to document the HBM survey conducted by LEA at the Site. Summaries of the HBM survey, sampling, and analytical information obtained for each building are presented separately in the appendices. Copies of the laboratory analytical reports and corresponding chain-of-custody documentation for the samples collected from each building are also included in the appendices.

1.4 **Limitations**

Inaccessible areas were identified above or behind documented asbestos-containing finish materials, such as ceilings and masonry walls. Concealed ACM could exist behind these fixed surfaces. Limited destructive sampling intended to identify concealed ACM was conducted at a representative number of accessible locations within the buildings. Where possible, suspect ACM including asbestos-containing pipe insulation was quantified based on visual observations. LEA did not conduct a survey of pipe runs below grade or within inaccessible pipe chases or tunnels.

Estimated quantities and approximate locations of ACM were based on visual observations at the time of the survey. While every attempt was made to locate all suspect ACM, it is possible that layered materials or other forms of ACM may exist above hard ceilings, below floors or slabs, and/or behind block walls that could not be readily identified through spot inspections alone. As such, any additional building materials identified through renovation or demolition activity should be managed as ACM pending laboratory analysis to identify the asbestos content.

Suspect wiring was not examined by LEA as most systems were assumed to be live or contained in conduits. Elevator pits and associated braking systems were not inspected.

1.5 **Report Reliance**

This report has been prepared for the DECD. This report may be distributed and relied upon by the DECD, its successors and assigns. Reliance on the information contained in this report by any other person or entity is not authorized without the written consent of LEA.

2. ASBESTOS-CONTAINING MATERIALS SURVEY

2.1 Overview

An asbestos survey was conducted to identify the location and quantity of ACM within the buildings at the Site. ACM is any material containing greater than one percent (1 %) asbestos as determined by polarized light microscopy (PLM). As required by the United States Occupational Safety and Health Administration (OSHA), the United States Environmental Protection Agency (EPA), and the State of Connecticut Department of Public Health (DPH), the identification and sampling of suspect ACM was conducted by a team of licensed Asbestos Inspectors. Copies of Asbestos Inspector licenses are provided in Appendix A.

2.2 Previous Asbestos Surveys, Abatement Plans, and Reports

Asbestos surveys were conducted previously by various consultants dating back to 2000. The survey results are summarized for each building in the summary spreadsheets provided in the appendices identified as Appendices B through K. Building areas that have undergone abatement are also identified in the summary spreadsheets. Building materials identified previously to contain asbestos, but were later abated, were not included in the total estimated quantities of ACM.

2.3 Sample Collection and Analytical Methodology

Asbestos bulk sampling information, including a brief description of each sample, the location of each sample, and the asbestos content, is summarized in the spreadsheets provided in Appendices B through K. Suspect ACM was separated into one of three EPA-defined categories and was sampled in accordance with protocols developed by EPA under the Asbestos Hazard Emergency Response Act (AHERA). The three categories of suspect ACM include thermal systems insulation (TSI), surfacing materials, and miscellaneous materials. TSI includes those materials that are typically used for the prevention of heat loss or gain or water condensation or mechanical systems. Surfacing material includes all ACM that is sprayed-on, troweled-on, or otherwise applied to an existing surface. Miscellaneous materials include all other ACM not considered to be TSI or surfacing materials.

Samples of interior and exterior building materials were obtained using a wet technique to prevent airborne fiber release. In general, suspect ACM was sampled using a clean sampling tool to cut through the entire thickness of the material to ensure that a complete cross-section of the material was obtained. Upon collection, the samples were placed in appropriately labeled containers that were sealed and submitted under proper chain-of-custody documentation to

EMSL Analytical, Inc. (EMSL) of Wallingford, Connecticut. A copy of the EMSL DPH license (Registration No. PH-0322) is included in Appendix A.

A total of 236 homogenous applications of suspect materials were sampled and EMSL was instructed to analyze 612 samples for asbestos using PLM in accordance with EPA Method 600/R-93/116.

2.4 Analytical Results

Based on the laboratory analytical results, ACM is present in the form of caulking, cork boards, putty, mud fittings, floor tile, floor tile mastic, glue daubs, foundation paper, pipe insulation, sink undercoating, tank insulation, shingles, roof flashing, parapet wall perimeter flashing, chimney flashing, joint compound, textured ceiling, stair treads, window caulking, window frame glazing, and other building materials. An inventory of identified ACM was compiled by LEA based on the results of bulk asbestos sampling and reports previously prepared by others. This inventory is presented in the summary spreadsheets provided in Appendices B through K. It is noted that the results of joint compound samples collected from the Durant Building indicate that the material does not contain asbestos. These results differ from those reported for samples collected and analyzed previously by others. All quantities presented in the summary spreadsheets are subject to field verification by a licensed asbestos abatement contractor.

3. PCB CAULKING AND WINDOW GLAZING SURVEY

3.1 Overview

Historically, PCBs were commonly used as an additive in insulation and cooling fluids of electrical equipment; transformers; ballasts; capacitors; and hydraulic fluids. The EPA has recently issued a number of advisories regarding the discovery of PCBs in glazing, caulking, industrial paints, and other specialty coatings. PCBs were added to these materials during the 1930s through 1970s for durability, resistance to degradation, low flammability, and as a plasticizer for application. Depending on the PCB content, the material and the substrate to which the material is attached may require special handling and disposal as a Toxic Substance Control Act (TSCA) waste. Building material containing PCBs at concentrations greater than 50 milligrams per kilogram (mg/kg) are subject to TSCA abatement and disposal requirements. Building materials manufactured to contain PCBs in a non-liquid state at PCB concentrations greater than 50 mg/kg are considered to be Bulk Product Waste. If PCB concentrations in building materials are less than 50 mg/kg, then the materials may be considered to be Excluded PCB Products. The handling of Excluded PCB Products is regulated by the State of Connecticut. PCB Remediation Waste is waste, such as soil, sediment, and concrete waste, containing PCBs as a result of a spill or release.

3.2 Sample Collection and Analytical Methodology

Representative samples of window caulking and glazing collected during the bulk sampling of suspect ACM were analyzed for the presence of PCBs. These samples were submitted under proper chain-of-custody documentation to either EMSL or Spectrum Analytical Laboratories, Inc. (Spectrum) of Agawam, Massachusetts. The laboratories were instructed to analyze the samples for PCBs by EPA Method 8082 with Soxhlet Extraction. A copy of the Spectrum DPH license (Registration No. PH-0777) is included in Appendix A.

3.3 Analytical Results

The laboratory analytical results of the window caulking and glazing samples are summarized in Table 1. As shown in Table 1, PCBs were reported to be present in the samples collected from door and window caulking of the Crouter Building, window glazing of the Maintenance Garage, and window glazing of the Whipple Building. Copies of the laboratory analytical reports for samples analyzed for PCBs are provided in Appendix L.

PCBs were reported to be present at a concentration of 3.497 mg/kg in the sample collected from door caulking of the Crouter Building, and at a concentration of 0.193 mg/kg in the sample

collected from window caulking of this building. In addition, PCBs were reported to be present at a concentration of 0.84 mg/kg in the sample collected from window glazing of the Maintenance Garage, and at a concentration of 120 mg/kg in the window glazing of the Whipple Building.

It is recommended that additional sampling of the substrates at the Crouter and Whipple Buildings be conducted to better understand the penetration depth of PCB impacts that are represented by PCB concentrations greater than 1 mg/kg within the underlying substrates, identified as adjacent brick or concrete. Should the surrounding substrates also contain concentrations of PCBs above 1 mg/kg, then the window/caulk/substrate should be removed for disposal.

Whole component removal and proper disposal of the window systems in the Whipple Building as a Bulk Product Waste is recommended. Removal as a whole component system including the impacted substrate without removing the window glazing from the underlying substrate allows the entire assembly and the surrounding substrate to be handled and disposed as a Bulk Product Waste. Should the window glazing be separated from the underlying substrate for disposal, any remaining substrate containing PCBs at concentrations above 1 mg/kg will need to be removed and disposed as a PCB Remediation Waste. Disposal costs for PCB Bulk Product Wastes are most always significantly less than disposal costs for PCB Remediation Wastes.

It is estimated that the costs for removal and disposal of the PCB impacted materials could be on the order of \$77,000 for the Crouter Building and \$180,000 for the Whipple Building, including the collection and analysis of verification samples.

4. LEAD-BASED PAINT SCREENING

LEA reviewed available lead-based paint survey reports and related documents prepared by others and made available through DECD or through a review of documents maintained at the Site. The reports that were reviewed included a report of a lead-based paint survey completed in 2001. As reported, this survey was conducted using an X-ray fluorescence (XRF) direct-reading instrument in accordance with the United States Department of Housing and Urban Development (HUD) testing guidelines. These guidelines were developed for residential or day care facilities and were adopted by the State of Connecticut Childhood Lead Poisoning Prevention Regulations (CLPPR). The XRF readings obtained during the 2001 survey were evaluated relative to the CLPPR threshold of 1.0 milligram per square centimeter (mg/cm^2). Although most surface paints were reported as *negative*, results of the XRF direct-reading instrument indicate that lead was present but below the CLPPR threshold of $1.0 \text{ mg}/\text{cm}^2$.

The State of Connecticut and HUD have developed technical guidelines for testing, abatement, cleanup, and disposal of lead-based paint in specific types of buildings such as public and Indian housing, and locations where children below the age of six years reside. These guidelines define the regulated level of lead paint (toxic level of lead) as paint containing greater than $1.0 \text{ mg}/\text{cm}^2$ of surface, as measured on-site by an XRF analyzer or more than 0.50 % lead by dry weight, as measured by laboratory analysis using Atomic Absorption Spectrometry (AAS).

The results of the 2001 survey are provided in Appendix M. As shown in this appendix, areas of lead-based paint were reported for the Administration Building, Girls Wing, the Crouter Building, the Pratt Building, and the Rainbow House. These results were reviewed to evaluate the potential for lead-contaminated construction debris to be generated during future renovation or demolition activities. In reviewing the results of the 2001 survey, all paints containing detectable amounts of lead were considered to be lead-based paints. This measure was appropriate because OSHA regulates lead in construction based on airborne exposures and it cannot be ensured that paint containing lead at concentrations less than $1.0 \text{ mg}/\text{cm}^2$ or 0.50 % mass will not result in exposures exceeding the OSHA standard. Based on the results of the 2001 survey, it was concluded that sampling painted surfaces of buildings for the presence of lead was not warranted.

Prior to the demolition of buildings, representative samples of the demolition waste stream, such as wood, brick, block, sheetrock, plaster door frames, and window frames, should be analyzed for lead following the toxicity characteristic leaching procedure (TCLP) to characterize the demolition waste. A TCLP result for lead above 5.0 milligrams per liter (mg/l) would require disposal of the demolition waste as a hazardous waste. As the lead paint portion of the entire

demolition waste stream is actually a very small percentage, we have not encountered a situation where a representative sample of the demolition waste stream has resulted in the management of the demolition waste as a hazardous waste. Should representative samples indicate that the demolition waste would be a hazardous waste, preliminary estimates could be prepared at that time.

5. MERCURY-BASED FLOOR MATERIAL SCREENING

The EPA has reported that certain polyurethane flooring materials installed since 1962 may contain mercury. Polyurethane flooring is manufactured by combining two liquid resins to form a durable, resilient surface. This material can be factory produced in sheets and rolls or installed *in situ* as a liquid to level and cure in place. Mercury was a catalyst for the chemical reaction between the two liquids that allowed the material to harden. Because this catalyst is not entirely bound within the flooring matrix, some of these floors emit mercury vapors.

Polyurethane floor systems were produced and marketed to schools, universities, and recreation and athletic centers, and are most often found in sports settings such as gymnasiums. Suspect floor materials at the Site include the gymnasium floor and the weight-lifting floor within the Pratt Building. Representative samples of these floor materials were collected and submitted under chain-of-custody documentation to EMSL for laboratory analyses for mercury. EMSL analyzed each sample for total mercury in accordance with EPA Method 7473.

Based on the laboratory analytical results, the Pratt gymnasium floor was reported to contain mercury at a concentration of 412 mg/kg. Also, based on the results, the weight-lifting floor was reported to contain mercury at a concentration of 340 mg/kg. A copy of the EMSL laboratory analytical report for the samples analyzed for mercury is provided in Appendix N. To assess these flooring materials, samples should be analyzed for mercury following TCLP extraction to assess whether these flooring materials would be considered to be a hazardous waste when removed for disposal.

6. LIGHTING, SWITCHES, AND THERMOSTATIC CONTROL SURVEY

Older fluorescent light ballasts have small capacitors that contain high concentrations of PCBs or DEHP. Nearly all ballasts manufactured before 1979 contain PCBs. DEHP is a substance that was used to replace PCBs in certain ballast capacitors beginning in 1979 and has been found in a variety of fluorescent fixtures manufactured between 1979 and 1991. Disposal of PCB and DEHP ballasts is regulated under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), respectively.

Liquid mercury and/or mercury vapor has historically been used in fluorescent lamps and thermostatic controls. Mercury use and disposal is regulated by the EPA under RCRA. A limited inspection of the facility was conducted to identify fluorescent lighting units that may require special handling and disposal as a RCRA, TSCA, or Universal Waste.

All lighting systems and light fixtures in all buildings were reported by the site building superintendent, Mr. Harold Monroe, to have been re-lamped. Based on visual inspection of a representative number of lighting fixtures, no oil-filled ballasts were observed in the buildings at the Site. However, all new fluorescent fixtures have tubes with low levels of mercury. When discarded, the fluorescent tubes will require packing and disposal in accordance with the universal waste regulations under Title 40 of the Code of Federal Regulations (CFR) 273.1 and Sections 22a-449(c)-113(a)(2)(B) of the Regulations of Connecticut State Agencies (RCSA).

7. FINDINGS

A HBM survey of the buildings located at 240 Oral School Road was conducted by LEA to identify the type, location, and quantity of building materials that will require special handling and disposal due to the presence of asbestos, lead, mercury, PCBs, or DEHP. Relevant findings of the HBM survey are summarized as follows:

- ACM is present in the form of caulking, cork boards, putty, mud fittings, floor tile, floor tile mastic, glue daubs, foundation paper, pipe insulation, sink undercoating, tank insulation, shingles, roof flashing, parapet wall perimeter flashing, chimney flashing, joint compound, textured ceiling, stair treads, window frame glazing, and other building materials. The results of joint compound samples collected from the Durant Building indicate that the material does not contain asbestos. These results differ from those reported for samples collected and analyzed previously by others.
- PCBs were reported to be present at a concentration of 3.497 mg/kg in the sample collected from door caulking of the Crouter Building, and at a concentration of 0.193 mg/kg in the sample collected from window caulking of this building. In addition, PCBs were reported to be present at a concentration of 0.84 mg/kg in the sample collected from window glazing of the Maintenance Garage. Also, PCBs were reported to be present at a concentration of 120 mg/kg in the window glazing of the Whipple Building.
- Areas of lead-based paint were reported previously for the Administration Building, Girls Wing, the Crouter Building, the Pratt Building, and the Rainbow House.
- Within the Pratt Building, the gymnasium floor was reported to contain mercury at a concentration of 412 mg/kg, and the weight-lifting floor was reported to contain mercury at a concentration of 340 mg/kg.
- All lighting systems and light fixtures in all buildings have been re-lamped. Based on visual inspection of a representative number of lighting fixtures, no oil-filled ballasts were observed in the buildings at the Site. However, all new fluorescent fixtures have tubes with low levels of mercury.

8. RECOMMENDATIONS

It is recommended that, in accordance with OSHA regulations (29 CFR Part 1926.1101 and 1910.1001), all potential contractors bidding on work to be performed on the site buildings be notified of the results of this survey. In addition, it is recommended that all employees and tenants who occupy areas of site buildings containing ACM be notified of the presence of asbestos. Further, based on the findings of the HBM survey conducted by LEA, it is recommended that:

- The DPH shall be consulted to obtain concurrence that the laboratory analytical results of the joint compound collected from the Durant Building can be relied upon, notwithstanding the finding that the material contains ACM as reported previously by others.
- Abatement of ACM be completed prior to the disturbance through demolition or renovation activity to comply with 40 CFR Part 61, M, National Emission Standards for Hazardous Air Pollutants (NESHAP). In the State of Connecticut, a licensed asbestos abatement contractor must perform all asbestos-related activities, including the renovation/demolition portion of the work that includes asbestos. Disturbance of ACM can only be performed by trained and licensed individuals. It should be noted that the State of Connecticut regulations governing asbestos abatement does not distinguish between friable and non-friable material. Therefore, full containment procedures are required for any interior abatement work including removal, encapsulation, or enclosure that involves both Category I and/or Category II non-friable ACM. All materials identified as *negative* for asbestos may be removed at will and disposed as standard construction debris as long as the work does not result in the disturbance of identified ACM.
- When discarded, the fluorescent tubes will require packing and disposal in accordance with the universal waste regulations (40 CFR 273.1 and Sections 22a-449(c)-113(a)(2)(B) of the RCSA).
- It is recommended that additional sampling of the substrates at the Crouter and Whipple Buildings be conducted to better understand the penetration depth of PCB impacts into the underlying substrates. Should the surrounding substrates also contain concentrations of PCBs above 1 mg/kg, then the window/caulk/substrate should be removed for disposal.

- Whole component removal and proper disposal of the window systems in the Whipple Building as a Bulk Product Waste is recommended. Removal as a whole component system including the impacted substrate without removing the window glazing from the underlying substrate allows the entire assembly and the surrounding substrate to be handled and disposed as a Bulk Product Waste.
- If PCB concentrations in building materials are less than 50 mg/kg, then the materials are considered to be Excluded PCB Products. The handling of Excluded PCB Products is regulated by the State of Connecticut. It is recommended that PCB caulking and any surrounding substrate containing concentrations of PCBs above 1 mg/kg be removed and properly disposed.
- Prior to the demolition of buildings, representative samples of the demolition waste stream, such as wood, brick, block, sheetrock, plaster door frames, and window frames, should be analyzed for lead following TCLP extraction to characterize the demolition waste. A TCLP result for lead above 5.0 mg/l would require disposal of the demolition waste as a hazardous waste. Should representative samples indicate that the demolition waste would be a hazardous waste, preliminary estimates could be prepared at that time.
- Samples of the mercury-containing gymnasium floor and weight-lifting floor within the Pratt Building should be analyzed for mercury following TCLP extraction to assess whether these flooring materials would be considered to be a hazardous waste when removed for disposal.

9. ESTIMATED ABATEMENT COSTS

Data gathered during the HBM survey may be used to develop preliminary estimates for abatement, recycling, and/or offsite disposal of the various regulated or hazardous building components. Estimated fees associated with the abatement of ACM are included in each building summary provided in the appendices. The total asbestos abatement fees are estimated at \$703,000 for all buildings. This fee is dependant upon market conditions and seasonal factors. The estimate does not include consultant management or oversight fees.

The costs for removal and disposal of the PCB impacted materials could be on the order of \$77,000 for the Crouter Building and \$180,000 for the Whipple Building, including the collection and analysis of verification samples.

As the lead paint portion of the entire demolition waste stream would actually be a very small percentage, we have not encountered a situation where a representative sample of the demolition waste stream has resulted in the management of the demolition waste as a hazardous waste. Should representative samples indicate that the demolition waste would be a hazardous waste, preliminary estimates could be prepared at that time.

Should samples of the mercury-containing gymnasium and weight-lifting flooring systems within the Pratt Building indicate that material would be considered to be a hazardous waste when removed for disposal, we estimate that the resulting disposal cost could be \$45,000.

When discarded, the fluorescent tubes will require packing and disposal in accordance with the universal waste regulations. If discarded, the estimated costs for removal and disposal could be \$15,000 to \$20,000.

TABLES

Table 1
Summary of Window Caulking and Glazing Sample Analytical Information
240 Oral School Road, Groton, Connecticut



Building	Component Source	Analytical Result (mg/kg)
Admin/Boys	Caulking - Windows	ND - All Aroclors
Admin/Boys	Glazing - Windows	ND - All Aroclors
Crouter	Caulking - Doors	3.497
Crouter	Caulking - Windows	0.193
Durant	Caulking - Windows	ND - All Aroclors
Durant	Caulking - Windows	ND - All Aroclors
Girls	Caulking - Windows	ND - All Aroclors
Girls	Glazing - Windows	ND - All Aroclors
Maintenance Garage	Caulking - Windows	ND - All Aroclors
Maintenance Garage	Glazing - Windows	0.84
Pratt	Caulking - Windows and Doors	ND - All Aroclors
Rainbow House	Caulking - Windows	ND - All Aroclors
Rainbow House	Glazing - Windows	ND - All Aroclors
Whipple	Caulking - Windows and Doors	ND - All Aroclors
Whipple	Glazing - Windows	120

Notes:

mg/kg = milligrams per kilogram

ND = Not detected at a concentration above the laboratory reporting limit

APPENDIX A

Asbestos Inspector Licenses and Laboratory Certifications



State of Connecticut

Name
LOUREIRO ENGINEERING ASSOCIATES INC

License Type	License Number	Expiration Date	Granted Date	License Name	License Status	Licensure Actions or Pending Charges
Lead Consultant Contractor	2068	12/31/2013	12/22/2004	LOUREIRO ENGINEERING ASSOCIATES INC	ACTIVE	None

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.

to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS LICENSED
BY THIS DEPARTMENT AS A

ASBESTOS CONSULTANT-PROJECT MONITOR

WILLIAM P. APOSTOLIDIS

LICENSE NO.
000266
CURRENT THROUGH
02/28/14
VALIDATION NO.
03-535919

SIGNATURE

Jewel Muller
COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.

4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS LICENSED
BY THIS DEPARTMENT AS A

ASBESTOS CONSULTANT-PROJECT DESIGNER

WILLIAM P. APOSTOLIDIS

LICENSE NO.
000259
CURRENT THROUGH
02/28/14
VALIDATION NO.
03-535920

SIGNATURE

Jewel Muller
COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.

4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS LICENSED
BY THIS DEPARTMENT AS A

ASBESTOS CONSULTANT-INSP/MGMT PLANNER

WILLIAM P. APOSTOLIDIS

LICENSE NO.
000243
CURRENT THROUGH
02/28/14
VALIDATION NO.
03-550699

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
WILLIAM P. APOSTOLIDIS

VALIDATION NO.
03-535919

LICENSE NO.
000266

CURRENT THROUGH
02/28/14

PROFESSION
ASBESTOS CONSULTANT-PROJECT MONITOR

SIGNATURE

Jewel Muller
COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
WILLIAM P. APOSTOLIDIS

VALIDATION NO.
03-535920

LICENSE NO.
000259

CURRENT THROUGH
02/28/14

PROFESSION
ASBESTOS CONSULTANT-PROJECT DESIGNER

SIGNATURE

Jewel Muller
COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
WILLIAM P. APOSTOLIDIS

VALIDATION NO.
03-550699

LICENSE NO.
000243

CURRENT THROUGH
02/28/14

PROFESSION
ASBESTOS CONSULTANT-INSP/MGMT PLANNER

SIGNATURE

Jewel Muller
COMMISSIONER

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
WILLIAM P. APOSTOLIDIS

VALIDATION NO.

LICENSE NO.

CURRENT THROUGH



State of Connecticut

Lookup Detail View**Name****Name**

BRETT M NICHOLAS

License Information**lookup**

License Type	License Number	Expiration Date	Granted Date	License Name	License Status	Licensure Actions or Pending Charges
Asbestos Consultant-Inspector	685	07/31/2013	09/18/2007	Brett M. Nicholas	ACTIVE	None

Generated on: 3/7/2013 3:28:34 PM

State of Connecticut, Department of Public Health

Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

EMSL ANALYTICAL, INC. - CT

LOCATED AT 4 Fairfield Blvd. IN Wallingford, CT 06492

AND REGISTERED IN THE NAME OF Gloria Oriol

THIS CERTIFICATE IS ISSUED IN THE NAME OF Gloria Oriol WHO HAS BEEN DESIGNATED

BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

Drinking Water, Non-potable Water/Wastewater

Examination for:
Bacteria

ASBESTOS

Examination for:

Air - PCM, TEM Bulk Materials - PLM, TEM
Water - TEM

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

THIS CERTIFICATE EXPIRES September 30, 2014 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH

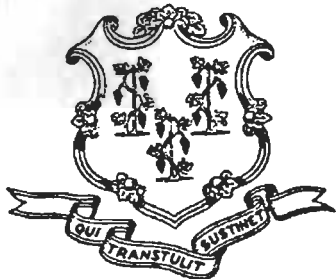
DATED AT HARTFORD, CONNECTICUT, THIS 28th DAY OF September 2012



Registration No.

PH-0322

SUZANNE BLANCAFLOR, MS
CHIEF, ENVIRONMENTAL HEALTH SECTION



STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION

ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM

CERTIFIED ANALYTES REPORT
FOR ALL MATRICES
EMSL Analytical, Inc. - CT

CT-APP-NUM PH-0322

LOCATION

4 Fairfield Blvd.

Wallingford CT 06492-

PHONE (203)-284-5948

REGISTERED OWNER/
AUTHORIZED AGENT Gloria Oriol
DIRECTOR Gloria Oriol
CO DIRECTOR(S)

APPROVED BY

A handwritten signature in black ink, appearing to read "Philip J. Schlossberg".
PHILIP J. SCHLOSSBERG

DATE 09/28/2012 9:05:38 AM

LABORATORY APPROVAL EXPIRATION DATE 09/30/2014

LABORATORY STATUS APPROVED

ANY QUESTIONS CONCERNING THIS DOCUMENT SHOULD BE ADDRESSED TO
THE ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM AT (860) 509-7389

DRINKING WATER (SDWA)

STATUS REPORTED ON 09/28/2012

SOC: REGULATED SYNTHETIC ORGANIC CHEMICAL
WITH MINIMUM MDL REQUIREMENTS

ANALYTE NAME

MICROBIOLOGY/BACTERIA

TOT. COLIFORM - MF mENDO (SM9222B)

TOT COLIFORM - COLILERT (SM9223 P/A)

E. COLI - COLILERT (SM9223 P/A)

HPC - POUR PLATE (SM9215B)

FECAL COLIFORM- EC Medium(SM9221E)

**NON-POTABLE WATER/
WASTEWATER**

STATUS REPORTED ON 09/28/2012

ANALYTE NAME

MICROBIOLOGY/BACTERIA

TOT. COLIFORM - MF mENDO (SM9222B)

FECAL COLIFORM - MF m-FC (SM9222D)

FECAL STREPT - MF mEnterococcus Agar (SM9230C)

AIR, BULK, & WATER

STATUS REPORTED ON 09/28/2012

ANALYTE NAME

ASBESTOS

ASBESTOS IN AIR (PCM & TEM)

ASBESTOS IN BULK (PLM & TEM)

ASBESTOS IN WATER (TEM)

REPORT PROFILE

Report Printed on:	09/28/2012 9:05:38 AM	lab code = ID1306P
Report Name:	APPROVED TESTS_ALT_NEW	test code = *
Printed by:	phil	matrix code = *
Report published from:	CERTIFICATION REPORTS screen #3	matrix selection = ALL OR SOME MATRICES SELECTED
		certifications approved or provisional on 09/28/2012

THIS IS THE LAST PAGE OF THE REPORT

State of Connecticut, Department of Public Health

Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

SPECTRUM ANALYTICAL, INC.

LOCATED AT 11 Almgren Drive IN Agawam, Massachusetts 01001
AND REGISTERED IN THE NAME OF Hanibal C. Tayeh
THIS CERTIFICATE IS ISSUED IN THE NAME OF Nicole Leja, Director (Chemistry) WHO HAS BEEN DESIGNATED
June O'Connor, Co-Director (Microbiology)

BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

DRINKING WATER, NON-POTABLE WATER/WASTEWATER, SOLID WASTE/SOIL

Examination For:

BACTERIA

INORGANIC CHEMICALS

ORGANIC CHEMICALS

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

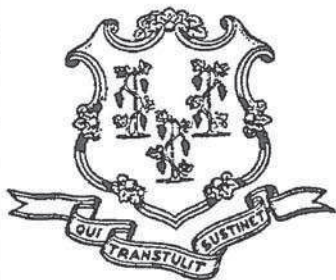
THIS CERTIFICATE EXPIRES September 30, 2013 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH

DATED AT HARTFORD, CONNECTICUT, THIS 14th DAY OF October, 2011



Registration No.
PH-0777

SUZANNE BLANCAFLOR, MS
CHIEF, ENVIRONMENTAL HEALTH SECTION



STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION

ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM

CERTIFIED ANALYTES REPORT
FOR ALL MATRICES
Spectrum Analytical, Inc.

CT-APP-NUM

PH-0777

LOCATION

11 ALMGREN DRIVE

Agawam

MA

01001-

PHONE

(800)-789-9115

REGISTERED OWNER/
AUTHORIZED AGENT

Hanibal C. Tayeh, Ph.D

DIRECTOR

Nicole Leja

CO DIRECTOR(S)

June O'Conner

APPROVED BY


DERMOT T. JONES

DATE 08/21/2012 8:47:06 AM

LABORATORY APPROVAL EXPIRATION DATE

09/30/2013

LABORATORY STATUS

APPROVED

ANY QUESTIONS CONCERNING THIS DOCUMENT SHOULD BE ADDRESSED TO
THE ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM AT (860) 509-7389

DRINKING WATER (SDWA)

STATUS REPORTED ON 08/21/2012

SOC: REGULATED SYNTHETIC ORGANIC CHEMICAL
WITH MINIMUM MDL REQUIREMENTS

ANALYTE NAME

MICROBIOLOGY/BACTERIA

TOT COLIFORM -MF MI Medium (EPA 1604)

E. COLI - MF MI Medium (EPA1604)

HPC - POUR PLATE (SM9215B)

FECAL COLIFORM - MF m-FC (SM9222D)

PHYSICALS

COLOR

pH

TURBIDITY

CONDUCTIVITY

MINERALS

ALKALINITY

CHLORIDE

CHLORINE, TOTAL & FREE RESIDUAL

CHLORINE, TOTAL RESIDUAL

FLUORIDE

HARDNESS, CALCIUM

SILICA

SULFATE

NUTRIENTS

NITRATE

NITRITE

O-PHOSPHATE

METALS

ALUMINUM

ANTIMONY

ARSENIC

BARIUM

BERYLLIUM

BORON

CADMIUM

CALCIUM

CHROMIUM

COPPER

IRON

LEAD

MAGNESIUM

MANGANESE

MERCURY

MOLYBDENUM

NICKEL

POTASSIUM

SELENIUM

SILVER

SODIUM

THALLIUM

VANADIUM

ZINC

RESIDUE

TOTAL DISSOLVED SOLIDS

DEMANDS

TOTAL ORGANIC CARBON

MISCELLANEOUS

CYANIDE (TOTAL)

CORROSIVITY

ORGANIC DISINFECTION BY-PRODUCTS

BROMOCHLOROACETIC ACID

DIBROMOACETIC ACID

DICHLOROACETIC ACID

BROMOACETIC ACID

CHLOROACETIC ACID

TRICHLOROACETIC ACID

VOLATILE ORGANICS

VOLATILE ORGANICS - 524.2 (SOC)

1,2-DIBROMO-3-CHLOROPROPANE 504.1 (DBCP) (SOC)

1,4-DIOXANE (Mod 8260)

TOTAL TRIHALOMETHANES 524.2 (SOC)

ETHYLENE DIBROMIDE 504.1 (EDB) (SOC)

NON-POTABLE WATER/ WASTEWATER

STATUS REPORTED ON 08/21/2012

ANALYTE NAME

MICROBIOLOGY/BACTERIA

E. COLI - MF MI Medium (EPA1604)

HPC - POUR PLATE (SM9215B)

FECAL COLIFORM - MF m-FC (SM9222D)

ENTEROCOCCUS - MF mEI Agar (EPA1600)

PHYSICALS

COLOR

pH

TURBIDITY

CONDUCTIVITY

MINERALS

ACIDITY

ALKALINITY

CHLORIDE

CHLORINE, TOTAL RESIDUAL

FLUORIDE

HARDNESS, TOTAL

HARDNESS, CALCIUM

SILICA

SULFATE

SULFIDE

NUTRIENTS

AMMONIA

KJELDAHL NITROGEN

NITRATE

NITRITE

O-PHOSPHATE

TOTAL PHOSPHOROUS

METALS

ALUMINUM

ANTIMONY

ARSENIC

BARIUM

BERYLLIUM

BORON

CADMIUM

CALCIUM

CHROMIUM

CHROMIUM - Hexavalent

COBALT

COPPER

IRON

LEAD

MAGNESIUM

MANGANESE

MERCURY

MOLYBDENUM

NICKEL

POTASSIUM

SELENIUM

SILVER

SODIUM

STRONTIUM

THALLIUM

TIN

TITANIUM

VANADIUM

ZINC

RESIDUE

TOTAL RESIDUE (SOLIDS)

TOTAL DISSOLVED SOLIDS

TOTAL SUSPENDED SOLIDS

DEMANDS

BOD

CARBONACEOUS BOD

COD

TOTAL ORGANIC CARBON

MISCELLANEOUS

CYANIDE (TOTAL)

INORGANIC DISINFECTION BY-PRODUCTS

BROMIDE

PESTICIDES/ PCB's

POLYCHLORINATED BIPHENYLS

PCB IN OIL

ORGANOCHLORINE PESTICIDES (Single Response)

CHLORDANE (TECHNICAL)

TOXAPHENE

SOLVENTS

OIL AND GREASE

CT Extractable Petroleum Hydrocarbons (ETPH)

MA Volatile Petroleum Hydrocarbons (VPH)

MA Extractable Petroleum Hydrocarbons (EPH)

HERBICIDES

DALAPON

DICAMBA

DINOSEB

2,4-D

2,4-DB

2,4,5-T

DICHLOROPROP

2,4,5-TP (SILVEX)

ORGANICS

ACID EXTRACTABLES (PHENOLS)

BENZIDINES

PHTHALATE ESTERS

NITROSAMINES

NITROAROMATICS & ISOPHORONE

POLYNUCLEAR AROMATIC HYDROCARBONS

HALOETHERS

CHLORINATED HYDROCARBONS

VOLATILE ORGANICS

SOLID WASTE/SOIL

STATUS REPORTED ON 08/21/2012

ANALYTE NAME

ENVIRONMENTAL HEALTH & HOUSING

LEAD IN DUST WIPES

LEAD IN PAINT

PHYSICALS

pH

METALS

ALUMINUM

ANTIMONY

ARSENIC

BARIUM

BERYLLIUM

BORON

CADMIUM

CALCIUM

CHROMIUM

CHROMIUM - Hexavalent

COBALT

COPPER

IRON

LEAD

MAGNESIUM

MANGANESE

MERCURY

MOLYBDENUM

NICKEL

POTASSIUM

SELENIUM

SILVER

SODIUM

STRONTIUM

THALLIUM

TIN

TITANIUM

VANADIUM

ZINC

MISCELLANEOUS

CYANIDE (TOTAL)

IGNITABILITY

CORROSIVITY

TCLP LEACH (1311)

SPLP LEACH (1312)

REACTIVITY

PESTICIDES/ PCB's

POLYCHLORINATED BIPHENYLS

PCB IN OIL

ORGANOCHLORINE PESTICIDES (Single Response)

CHLORDANE (TECHNICAL)

TOXAPHENE

SOLVENTS

CT Extractable Petroleum Hydrocarbons (ETPH)

MA Volatile Petroleum Hydrocarbons (VPH)

MA Extractable Petroleum Hydrocarbons (EPH)

HERBICIDES

DALAPON

DICAMBA

DINOSEB

2,4-D

2,4-DB

2,4,5-T

DICHLOROPROP

2,4,5-TP (SILVEX)

MCPA

MCPP

RCRA (SW-846) ORGANICS

VOLATILE ORGANICS (SW 8260)

ACID EXTRACTABLES (PHENOLS) (SW 8270)

BENZIDINES (SW 8270)

PHTHALATES (SW 8270)

NITROSOAMINES (SW 8270)

NITROAROMATICS & CYCLIC KETONES (SW 8270)

PAH's (SW 8270)

HALOETHERS (SW 8270)

CHLORINATED HYDROCARBONS (SW 8270)

REPORT PROFILE

Report Printed on:	08/21/2012 8:47:06 AM	lab code = ID1150P
Report Name:	APPROVED TESTS_ALT_NEW	test code = *
Printed by:	dermot	matrix code = *
Report published from:	CERTIFICATION REPORTS screen #3	matrix selection = ALL OR SOME MATRICES SELECTED
		certifications approved or provisional on 08/21/2012

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APPENDIX B

Summary of HBM Survey, Sampling, and Analytical Information Administration and Boys Wing

Appendix B
Summary of HBM Survey, Sampling, and Analytical Information
Administration Building and Boys Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Estimated Fees (confidential)
Linoleum - Wood Grain Pattern	-	Halls 145		Historical		
9 x 9 Green Floor Tile	+	Landings	See Below	Historical		
9 x 9 Green Floor Tile Mastic	+	Landings	See Below	Historical		
Plaster Top Coat	-	Throughout		Historical		
Plaster Base Coat	-	Throughout		Historical		
12 x 12 Brown Floor Tile	Tr	Floor 3 at Elevator	See Below	Historical		
12 x 12 Brown Floor Tile Mastic	+	Floor 3 at Elevator	See Below	Historical		
Cove Base Mastic	-	Floor 3		Historical		
1 x 1 Ceiling Tile Type 3, Grooved	-	Basement A8		Historical		
Glue daub - 1 x 1 Ceiling Tile Type 3, Grooved	+	Basement A8		Historical		
Joint Compound	-	Throughout		Historical		
Cove Base Mastic	-	Basement		Historical		
12 x 12 White Floor Tile	-	Basement A8		Historical		
12 x 12 White Floor Tile Mastic	-	Basement A8		Historical		
1 x 1 Ceiling Tile Type 5, Large Pinhole	-	A124		Historical		
Glue Daub 1 x 1 Ceiling Tile Type 5, Large Pinhole	-	A124		Historical		
Glue Daub 1 x 1 Ceiling Tile Type 2, Large Pinhole	Tr	A124		Historical		
Glue Daubs - Black boards	+	A124	1500 SF	Historical		\$9,000
Sheetrock	-	Throughout		Historical		
2 x 4 Ceiling Tile	-	A8		Historical		
Skim Coat on Ceiling	-	A238		Historical		
1 x 1 Ceiling Tile Type 1, Small Pinhole	+	Floor 2 West, A2352	500 SF	Historical		\$3,000
1 x 1 Ceiling Tile Type 2, Large Pinhole	-	Floor 2 East		Historical		
Glue daub 1 x 1 Ceiling Tile Type 2, Large Pinhole	-	Floor 2 East		Historical		
12 x 12 Lt Brown Floor Tile	Tr	Basement, Maint Shop	See Below	Historical		
Plaster Ceiling Top Coat	-	Throughout		Historical		
Plaster Ceiling Base Coat	-	Throughout		Historical		
Window caulk	-	Exterior wood Windows		Historical		

Appendix B
Summary of HBM Survey, Sampling, and Analytical Information
Administration Building and Boys Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Estimated Fees (confidential)
Window Glazing	+	Wood Windows	See Below	Historical		
9 x 9 Tan Floor Tile	-	Floor 1, A151		Historical		
9 x 9 Tan Floor Tile Mastic	-	Floor 1, A151		Historical		
12 x 12 Black Floor Tile	+	Floor 1 Dining	See Below	Historical	512SF	
12 x 12 Black Floor Tile Mastic	Tr	Floor 1 Dining		Historical		
Cement on FG Breeching Insulation	-	Boiler Rm		Historical		
1 x 1 Ceiling Tile Type 4, Grooved	-	Floor 1 Dining		Historical		
Glue daub 1 x 1 Ceiling Tile Type 4, Grooved	-	Floor 1 Dining		Historical		
Glue Daub, Black board	+	Anteon rental Area, Rm 5		Historical	abated	
Pipe Insulation	+	Anteon Chase Room		Historical	abated	
Glue daub 1 x 1 Ceiling Tile	+	Anteon rental Area, Rm 5 & 134		Historical	abated	
Textured Ceiling Above 1 x 1 Tiles	+	Floor 1 Dining	3700 SF	Historical		\$30,000
9 x 9 Brown Floor Tile	+	Basement Maint Area	See Below	Historical		
9 x 9 Brown Floor Tile Mastic	+	Basement Maint Area	See Below	Historical		
2 x 4 Ceiling Tile	-	A134		Historical		
12 x 12 Grey Floor Tile	-	Ground Floor Men's Room		Historical		
12 x 12 Grey Floor Tile Mastic	-	Ground Floor Men's Room		Historical		
2 x 2 Ceiling Tile	-	Ground Floor AHU Room		Historical		
ACM Floor Tile/mastic Total			6650			\$40,000
Kitchen Roof Grey Spray on Layer	-	Kitchen		1a,b,c		
Kitchen Roof Yellow Foam Layer	-	Kitchen		2a,b,c		
Kitchen Roof Black Ply Layer	-	Kitchen		3a,b,c		
Kitchen Roof Perimeter/Penetration Flashing	-	Kitchen		4a,b,c		
Refrigeration Building	+	Vent Caulk	6 LF	1a,b,c		\$50
Refrigeration Building Silver Paint on Flashings	+	Roof Flashing	208 SF	2a		Included
Refrigeration Building Penetration/Perimeter	+	Roof Flashing	208 SF	2a,b,c		\$2,000
Refrigeration Roof Black Caulk	-	Above Flashing		3a,b,c		
Refrigeration Roof Top Ply Layer	-	Roof		5a,6a,7a		
Refrigeration Roof FG Layer	-	Roof		5b,6b,7b		

Appendix B
Summary of HBM Survey, Sampling, and Analytical Information
Administration Building and Boys Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Estimated Fees (confidential)
Boys Roof Top Ply Layer	-	Roof		1a,2a,3a		
Boys Roof Fiberglass Layer	-	Roof		1b,2b,3b		
Boys Roof Tar Paper Layer	-	Roof		1c,2c,3c		
Boys Roof Foam Layer	-	Roof		1d,2d,3d		
Boys Roof Tar Paper Layer	-	Roof		1e,2e,3e		
Boys Roof Bottom Layer	-	Roof		1f,2f,3f		
Boys Perimeter Flashing	-	Roof Flashing		4a,b,c		
Boys Grey Penetration Flashing	+	Roof Flashing	4 LF	5a,b,c		Included
Boys Roof Pitch Pockets	-	Roof		6a,b,c		
Boys Roof Black Penetration Flashing	-	Roof		7a,b,c		
Boys Roof White Capstone Caulk	-	Roof		8a,b,c		
Boys Roof Black Tar Under Slate Shingle	-	Roof		11a,b,c		
Admin Upper Roof Adj to Café Top Ply Layer	-	Roof		12a,13a,14a		
Admin Upper Roof Wood Particle Board Layer	-	Roof		12b,13b,13b		
Admin Upper Roof Tar on Concrete Layer	-	Roof		12c,13c,14c		
Admin Upper Roof/Parapet Wall Adj to Café Flashing	+	Perimeter Flashing	160 SF	15a,b,c		\$1,600
Admin Cafeteria Roof Top Layer Silver	+	Roof	1700 SF	16a,17a,18a		\$7,000
Admin Cafeteria Roof Fiber Board Layer	-	Roof		16b,17b,18b		
Admin Cafeteria Craft Paper Layer	-	Roof		16c,17c,18c		
Admin Upper Roof Cementious Board on Wood	-	Roof		16d,17d,18d		
Admin Cafeteria Roof Flashings	+	Perimeter/Penetration Flashing	330 LF	19a,b,c		\$3,300
Type 2 Ext Window Glazing Steel Double Hung	-	Through Out		20a,b,c		
Type 2 Metal Window Ext WFC	+	Roof	216 LF	21a,b,c		\$1,500
Ceramic Tile Grout	-	Kitchen		1a,b,c		
Troweled on Skim on Cement Board	-	Kitchen Coolers		2a,b,c		
Cement Board	-	Kitchen Coolers		3a,b,c,d		
2'x4' SCT w/Random Holes	-	Kitchen		4a,b,c		
Mud Fitting	+	Kitchen Throughout	Included	5a		Included
3" Line Insulation	+	Kitchen Throughout	6000 LF	6a		\$28,000

Appendix B
Summary of HBM Survey, Sampling, and Analytical Information
Administration Building and Boys Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Estimated Fees (confidential)
Black Adhesive for Cement Board	-	Inside Cooler		7a,b,c		
Yellow Adhesive for Black Corner Protector	-	Kitchen		8a,b,c		
Black Corner Protector on Tile Wall	-	Kitchen		9a,b,c		
Tan Ceramic Wall Tile Adhesive	-	Kitchen Throughout		10a,b,c		
Black Putty Around Alarm Wire	+	Kitchen Cooler	1SF	11a,b,c		\$50
Fire Door	+	Kitchen/ Dorm	11ea	12a,b,c		\$1,100
Orange Stair Tread	+	Stairwells	Included	13a,b,c		Included
Black Mastic for Orange Stair Tread	-	Stairwells		14a,b,c		
Black Table Undercoating	+	Kitchen	6 SF	15a,b,c		\$100
Black Hood Caulk Painted Tan	+	Kitchen	10 LF	16a,b,c		\$100
White Pryoblock	-	Closets		17a,b,c		
Door Chime Wiring	-	Through Out		18a,b,c		
2'x4 SCT Fissures and Holes Type 1	-	Basement/ Outside Elevator		19a,b,c		
Tan Cove Base Adhesive for 4" Black Cove Base	-	Basement		20a,b,c		
4" Black Cove Base	-	Basement		21a,b,c		
Brown Cove Base Mastic	-	Boys Bottom of Stairs		22a,b,c		
Tar on Brick Under Plaster	-	Boys Bottom of Stairs		23a,b,c		
Sheetrock Tape	-	Boys Room A7		24a,b,c		
Sheetrock Joint Compound	TR	Boys Room A7		24a,b,c		
Sheetrock Joint Compound	TR	Boys Room A7	Pt Count	24a		
Beige Telephone Wire	-	A140		25a,b,c		
Red/Green Telephone Wire	-	A140		26a,b,c		
4" Tan Cove Base	-	Basement Outside Elevator		27a,b,c		
Carpet Seam Tape	-	Rm A149		28a,b,c		
Black Wire Insulation	-	Rm A6 Closet		29a,b,c		
4" Grey Cove Base	-	Boys Basement		30a,b,c		
4" Grey Cove Base Grey Adhesive	-	Boys Basement		31a,b,c		
Residual Brown Wall Mastic	+	Boys Basement	150 SF	32a,b,c		\$1,000
Red Fire Stop Caulk	-	Boys Basement		33a,b,c		

Appendix B
Summary of HBM Survey, Sampling, and Analytical Information
Administration Building and Boys Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Estimated Fees (confidential)
Residual Fiber Board Panel	-	Boys Basement		34a,b,c		
Residual Fiber Board Panel Mastic	-	Boys Basement		34a,b,c		
Brown Glue Daubs on Wood Boards	-	Boys Basement		35a,b,c		
Yellow Carpet Mastic	-	Boys Basement		36a,b,c		
White Sink Undercoating	-	Boys Main Floor		37a,b,c		
Black Flex Connector	-	Boys		38a,b,c		
2'x4' SCT Fissures and Holes Type 2	-	Boys 2nd Floor		39a,b,c		
16"x16" Floor Tile Brown and White	-	Boys 2nd Floor		40a,b,c		
Green Mastic for 16"x16" Floor Tile Brown and White	-	Boys 2nd Floor		41a,b,c		
6"x6" Opaque Window Block Grout	-	Boys		42a,b,c		
Red Cloth Wire Insulation	-	Boys 3rd Floor North		43a,b,c		
Beige Carpet Tile Adhesive	-	Boys		44a,b,c		
Grey Ext Expansion Joint Caulk	-	Kitchen Building		45a,b,c		
Black Sidewalk Tar	-	North Exterior		46a,b,c		
Pipe Insulation	+	Boys Basement No Access	800 LF			\$4,000
Brown Floor Tile In Threshold	+	Basement Rm A20	6 LF			\$100
Gaskets	Assumed	Boiler Room				
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				
Fluorescent Fixtures - ballasts		None Observed				
Mercury Switches		None Observed				
Window AC Unit			5			
						\$131,900
Notes:						
1. See attached laboratory analytical reports.						

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300300
CustomerID: LOUR62
CustomerPO: Batch # BA197
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/18/2013

Project: **Kitchen Building Roof (Oral School, Mystic, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300300-0001	Roof- spray-on roof layer (top)	Gray Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
1B 241300300-0002	Roof- spray-on roof layer (top)	Gray Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
1C 241300300-0003	Roof- spray-on roof layer (top)	Gray Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
2A 241300300-0004	Roof- yellow foam layer	Yellow Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
2B 241300300-0005	Roof- yellow foam layer	Yellow Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
2C 241300300-0006	Roof- yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3A 241300300-0007	Roof- (bottom) ply layer	Black Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
3B 241300300-0008	Roof- (bottom) ply layer	Black Non-Fibrous Heterogeneous	<1% Cellulose <1% Synthetic <1% Glass	100% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (4)

William Shedrawy (8)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 10:10:31

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300300
CustomerID: LOUR62
CustomerPO: Batch # BA197
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Kitchen Building Roof (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/18/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3C 241300300-0009	Roof- (bottom) ply layer	Black Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other) 3% Glass	97% Non-fibrous (other)	None Detected
4A 241300300-0010	Roof- perimeter/penetrati on ply flashing	Black Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
4B 241300300-0011	Roof- perimeter/penetrati on ply flashing	Black Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
4C 241300300-0012	Roof- perimeter/penetrati on ply flashing	Black Fibrous Heterogeneous	4% Glass <1% Cellulose	96% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (4)

William Shedrawy (8)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 10:10:31

241300300



Asbestos Lab Services Chain of Custody

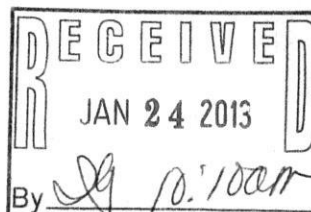
EMSL Order Number (Lab Use Only):

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5978

Company: Loureiro Engineering Associates, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to be Different note instructions in Comments**	
Address: 100 Northwest Dr		Third Party Billing requires written authorization from third party	
City/State/Zip: Plainville, CT 06062			
Report To (Name): Jamie Roche		Fax: 860-747-8822	
Telephone: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: KITCHEN BUILDING ROOF (Oral School, Mystic, CT) 18NM3.01			
Please Provide Results: Email		Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)		Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative)	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: W Apostolidis		Samplers Signature: <i>W Apostolidis</i>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Spray-on Roof Layer (Top)	Roof	1-18-13
2A, 2B, 2C	Yellow Foam Layer	"	↓
3A, 3B, 3C	(Bottom) Ply Layer	"	
4A, 4B, 4C	Perimeter/Penetration Ply Flashing	"	
Client Sample # (s): 1A - 4C		Total # of Samples: 12	
Relinquished (Client): <i>W Apostolidis</i>		Date: 1/23/13 Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions: if 1A, B or C is pos. do not analyze 2A-C - 3A-C			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 1 Pages



1/20/2012
1945 84589361

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

EMSL Order: 241300303
CustomerID: LOUR62
CustomerPO: Batch # BA193
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/17/2013

Project: **Oral School Mystic CT, Refrigeration Roof, 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A 241300303-0001	White Vent Caulk in Brick Wall	Tan/White Non-Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile
1B 241300303-0002	White Vent Caulk in Brick Wall				Stop Positive (Not Analyzed)
1C 241300303-0003	White Vent Caulk in Brick Wall				Stop Positive (Not Analyzed)
2A-Flashing 241300303-0004	Penetration/Perimeter Flashing Roof	Black Non-Fibrous Homogeneous		94% Non-fibrous (other)	6% Chrysotile
2A-Silver Paint 241300303-0004A	Penetration/Perimeter Flashing Roof	Silver Non-Fibrous Homogeneous		96% Non-fibrous (other)	4% Chrysotile
2B 241300303-0005	Penetration/Perimeter Flashing Roof				Stop Positive (Not Analyzed)
2C 241300303-0006	Penetration/Perimeter Flashing Roof				Stop Positive (Not Analyzed)
3A-Black Caulk 241300303-0007	Black Caulk above Copper Flashing	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Garret Vliet (4)

Jennifer Mattero (10)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 10:38:43

**EMSL Analytical, Inc.**

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

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

EMSL Order: 241300303
 CustomerID: LOUR62
 CustomerPO: Batch # BA193
 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic CT, Refrigeration Roof, 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/24/13 10:10 AM
 Analysis Date: 2/4/2013
 Collected: 1/17/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3A-Gray Caulk 241300303-0007A	Black Caulk above Copper Flashing	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
3B 241300303-0008	Black Caulk above Copper Flashing	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
3C-Black Caulk 241300303-0009	Black Caulk above Copper Flashing	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (other)	None Detected
		Suggest TEM.			
3C-Gray Caulk 241300303-0009A	Black Caulk above Copper Flashing	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
		Suggest TEM.			
5A 241300303-0010	Roof Field- ply layer	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
5B 241300303-0011	Roof Field- fg layer	Black/Yellow Fibrous Homogeneous	80% Min. Wool	20% Non-fibrous (other)	None Detected
6A 241300303-0012	Roof Field- ply layer	Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
6B 241300303-0013	Roof Field- fg layer	Black/Yellow Fibrous Homogeneous	75% Min. Wool	25% Non-fibrous (other)	None Detected

Analyst(s)

Garret Vliet (4)

Jennifer Mattero (10)

Gloria V. Oriol, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 10:38:43

**EMSL Analytical, Inc.**

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

EMSL Order: 241300303
CustomerID: LOUR62
CustomerPO: Batch # BA193
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/17/2013

Project: **Oral School Mystic CT, Refrigeration Roof, 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
7A 241300303-0014	Roof Field- ply layer	Black Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (other)	None Detected
7B 241300303-0015	Roof Field- fg layer	Yellow Fibrous Homogeneous	90% Min. Wool	10% Non-fibrous (other)	None Detected

Analyst(s)

Garret Vliet (4)

Jennifer Matterno (10)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 10:38:43



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LABORATORY PRODUCTS TRAINING

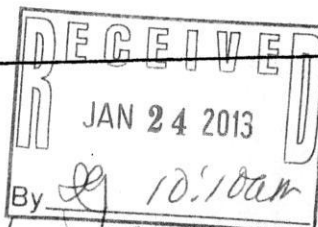
Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300303

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates # LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Mystic CT Refrigeration Roof 18HM3.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: <u>Batch # B1193</u> U.S. State Samples Taken: CT	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input checked="" type="checkbox"/> 10 Days			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>W Apostolides</u>		Samplers Signature: <u>Wur</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	White Vent Caulk in Brick Wall	Bulk	1/17/13
1B	↓		
1C	↓		
2A	Penetration/Perimeter Flashing Roof		
2B	↓		
2C	↓		
3A	Black Caulk above Copper Flashing		
3B	↓		
Client Sample # (s): <u>1A - 7B</u>		Total # of Samples: <u>13</u>	
Relinquished (Client): <u>Wur</u>		Date: <u>1/23/13</u> Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions: <u>See page 2 for Instructions</u>			



John 794584589361

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4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
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FAX: (203) 284-5948

Page 2 of 2 pages

**EMSL Analytical, Inc.**

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EMSL Order: 241300307
CustomerID: LOUR62
CustomerPO: Batch # BA189
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

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Received: 01/24/13 10:10 AM
Analysis Date: 1/31/2013
Collected: 1/17/2013

Project: **Oral School Mystic, CT, Boys Roof/Admin Roof, 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300307-0001	Roof Field - ply layer top	Black Fibrous Heterogeneous	40% Glass	60% Non-fibrous (other)	None Detected
1B 241300307-0002	Roof Field - fg layer	Yellow Fibrous Heterogeneous	80% Glass	20% Non-fibrous (other)	None Detected
1C 241300307-0003	Roof Field - tar paper layer	Black Non-Fibrous Heterogeneous	60% Cellulose 10% Glass	30% Non-fibrous (other)	None Detected
1D 241300307-0004	Roof Field - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1E 241300307-0005	Roof Field - tar paper layer	Black Fibrous Heterogeneous	50% Cellulose 10% Glass	40% Non-fibrous (other)	None Detected
1F 241300307-0006	Roof Field - tar layer	Black Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
2A 241300307-0007	Roof Field - ply layer	Black Fibrous Heterogeneous	40% Glass	60% Non-fibrous (other)	None Detected
2B 241300307-0008	Roof Field - fg layer	Yellow Fibrous Heterogeneous	80% Glass	20% Non-fibrous (other)	None Detected

Analyst(s)

Christina Walker (1)

Glenn Brennan (13)

Melissa Klinedinst (1)

Patrick Carr (35)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Initial report from 01/31/2013 09:14:33

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EMSL Order: 241300307
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
2C 241300307-0009	Roof Field - tar paper layer	Black Fibrous Heterogeneous	50% Cellulose 10% Glass	40% Non-fibrous (other)	None Detected
2D 241300307-0010	Roof Field - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
2E 241300307-0011	Roof Field - tar paper layer	Black Fibrous Heterogeneous	40% Cellulose 10% Glass	50% Non-fibrous (other)	None Detected
2F 241300307-0012	Roof Field - tar layer	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3A 241300307-0013	Upper Roof - ply layer	Black Non-Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
3B 241300307-0014	Upper Roof - fg layer	Yellow Fibrous Heterogeneous	85% Glass	15% Non-fibrous (other)	None Detected
3C 241300307-0015	Upper Roof - tar paper layer	Black Non-Fibrous Heterogeneous	50% Cellulose 10% Glass	40% Non-fibrous (other)	None Detected
3D 241300307-0016	Upper Roof - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3E 241300307-0017	Upper Roof - tar paper layer	Black/Yellow Fibrous Heterogeneous	10% Cellulose 5% Glass	85% Non-fibrous (other)	None Detected
3F 241300307-0018	Upper Roof - tar layer	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
4A 241300307-0019	Upper Roof - perimeter flashing	Black Fibrous Heterogeneous	30% Glass 15% Cellulose	55% Non-fibrous (other)	None Detected
4B 241300307-0020	Lower Roof - perimeter flashing	Black Fibrous Heterogeneous	30% Glass 10% Cellulose	60% Non-fibrous (other)	None Detected
4C 241300307-0021	Lower Roof - perimeter flashing	Black Fibrous Heterogeneous	25% Glass 10% Cellulose	65% Non-fibrous (other)	None Detected
5A 241300307-0022	Rolled Grey Shingle Penetration Flashing	Black Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile
5B 241300307-0023	Rolled Grey Shingle Penetration Flashing				Stop Positive (Not Analyzed)

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
5C 241300307-0024	Rolled Grey Shingle Penetration Flashing				Stop Positive (Not Analyzed)
6A 241300307-0025	Upper Roof - pitch pockets	Black Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
6B 241300307-0026	Lower Roof - pitch pockets	White/Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
6C 241300307-0027	Lower Roof - pitch pockets	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
7A 241300307-0028	Black Penetration Flashing	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
7B 241300307-0029	Black Penetration Flashing	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
7C 241300307-0030	Black Penetration Flashing	Black Non-Fibrous Heterogeneous	5% Glass	95% Non-fibrous (other)	None Detected
8A 241300307-0031	Roof - white capstone caulk	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
8B 241300307-0032	Roof - white capstone caulk	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8C 241300307-0033	Roof - white capstone caulk	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
11A 241300307-0034	Black Tar Paper under Slate Shingle	Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
11B 241300307-0035	Black Tar Paper under Slate Shingle	Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
11C 241300307-0036	Black Tar Paper under Slate Shingle	Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
12A 241300307-0037	Admin Roof adj to Café - ply layer top	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
12B 241300307-0038	Admin Roof adj to Café - particle board layer	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
12C 241300307-0039	Admin Roof adj to Café - tar layer	Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
13A 241300307-0040	Admin Roof adj to Café - ply layer top	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
13B 241300307-0041	Admin Roof adj to Café - particle board layer	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
13C 241300307-0042	Admin Roof adj to Café - tar	Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
14A 241300307-0043	Admin Roof adj to Café - ply layer top	Brown/Black Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
14B 241300307-0044	Admin Roof adj to Café - particle board layer	Brown Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
14C 241300307-0045	Admin Roof adj to Café - tar layer	Brown/Black Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	None Detected
15A 241300307-0046	Admin Roof adj to Café - perimeter flashing under copper	Black Fibrous Heterogeneous		92% Non-fibrous (other)	8% Chrysotile
15B 241300307-0047	Admin Roof adj to Café - perimeter flashing under copper				Stop Positive (Not Analyzed)

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
15C 241300307-0048	Admin Roof adj to Café - perimeter flashing under copper				Stop Positive (Not Analyzed)
16A 241300307-0049	Admin Café Roof - ply layer painted silver	Black/Silver Fibrous Heterogeneous	10% Cellulose	80% Non-fibrous (other)	10% Chrysotile
16B 241300307-0050	Admin Café Roof - fiber board layer				Stop Positive (Not Analyzed)
16C 241300307-0051	Admin Café Roof - craft paper layer				Stop Positive (Not Analyzed)
16D 241300307-0052	Admin Café Roof - cementitious board on wood				Stop Positive (Not Analyzed)
17A 241300307-0053	Admin Café Roof - ply layer painted silver				Stop Positive (Not Analyzed)
17B 241300307-0054	Admin Café Roof - fiber board layer				Stop Positive (Not Analyzed)
17C 241300307-0055	Admin Café Roof - craft paper layer				Stop Positive (Not Analyzed)

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
17D 241300307-0056	Admin Café Roof - cementitious board on wood				Stop Positive (Not Analyzed)
18A 241300307-0057	Admin Café Roof - ply layer painted silver				Stop Positive (Not Analyzed)
18B 241300307-0058	Admin Café Roof - fiber board layer				Stop Positive (Not Analyzed)
18C 241300307-0059	Admin Café Roof - craft paper layer				Stop Positive (Not Analyzed)
18D 241300307-0060	Admin Café Roof - cementitious board layer				Stop Positive (Not Analyzed)
19A 241300307-0061	Perimeter/Penetrati on Flashing	Black/Silver Fibrous Heterogeneous		92% Non-fibrous (other)	8% Chrysotile
19B 241300307-0062	Perimeter/Penetrati on Flashing				Stop Positive (Not Analyzed)
19C 241300307-0063	Perimeter/Penetrati on Flashing				Stop Positive (Not Analyzed)

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
20A 241300307-0064	Admin - ext wg white on steel windows	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
20B 241300307-0065	Admin - ext wg white on steel windows	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
20C 241300307-0066	Admin - ext wg white on steel windows	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
21A 241300307-0067	Admin - grey ext wfc on steel windows	Gray Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
21B 241300307-0068	Admin - grey ext wfc on steel windows				Stop Positive (Not Analyzed)
21C 241300307-0069	Admin - grey ext wfc on steel windows				Stop Positive (Not Analyzed)

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:14:33



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300307

EMSL ANALYTICAL INC
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates # LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Mystic, CT Boys Roof / Admin Roof</u> <u>18HM3.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: <u>Batch # BA 189</u> U.S. State Samples Taken: CT			

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☒ 5 Days ☒ 10 Days

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or ERA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
---	--	---

☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: <u>W Apostolidis</u>	Samplers Signature: <u>W Cec</u>
-------------------------------------	----------------------------------

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Ply Layer Top Roof Field	1171 Bulk	1/17/13
1B	FG Layer		
1C	Tar Paper Layer		
1d	Foam Layer		
1e	Tar Paper Layer		
1F	Tar Layer 1		
2A	Ply Layer		
2B	FG Layer		

Client Sample # (s): 1A - 21C Total # of Samples: 69

Relinquished (Client): W Cec Date: 1/23/13 Time:

Received (Lab): Date: Time:

Comments/Special Instructions:

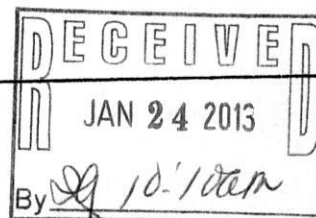
Any pos hit in group I stop analysis

Any pos hit in group II stop analysis

Controlled Document - Asbestos COC - R1 - 3/18/2009

Page 1 of 4 pages

Any pos hit in group III stop analysis



John 794584589361

241300307



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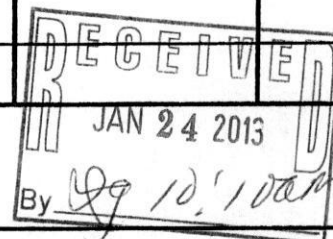
Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 0649
PHONE: (203) 284-594
FAX: (203) 284-594

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
2c	Tar Paper layer	Bulk	1/17/13
2d	Foam layer		
2e	Tar Paper layer		
2f	Tar layer		
3A	Ply layer Upper Roof		
3B	Fib layer		
3C	Tar Paper layer		
3d	Foam layer		
3e	Tar Paper layer		
3f	Tar layer		
4A	Perimeter Flashing Upper Roof		
4B	↓ Lower Roof		
4C	↓ ↓		
5A	Rolled Grey Shingle Penetration Flashing		
5B	↓		
5C	↓		
6A	Pitch Pockets Upper Roof		
6B	↓ Lower Roof		
6C	↓ ↓		
7A	Black Penetration Flashing		
7B	↓		
7C			
8A	White Capstone Caulk Roof		
8B	↓		
*Comments/Special Instructions:			



241300307



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

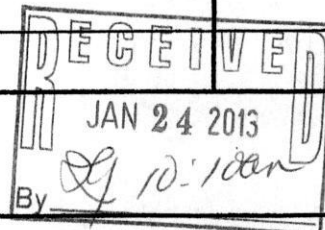
EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492

PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
8C	↓	1 Bulk	1/17/13
11A	Black Tar Paper Under Slate Shingles		
11B	↓		
11C	↓		
12A	Admin Roof Adj to Cafe Board Ply Layer Top		
12B	Particle Board Layer		
12C	Tar Layer		
13A	Ply Layer Top		
13B	Particle Board Layer		
13C	Tar		
14A	Ply Layer Top		
14B	Particle Board Layer		
14C	Tar Layer		
15A	Perimeter Flashing Under Copper		
15B	↓		
15C	↓		
16A	Admin Cafe Roof Ply Layer Painted Silver		
16B	Fiber Board Layer		
16C	Craft Paper Layer		
16d	Cementitious Board on Wood		
17A	Ply Layer Painted Silver		
17B	Fiber Board Layer		
17C	Craft Paper Layer		
17d	Cementitious Board on Wood		
*Comments/Special Instructions:			



241300307



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Asbestos Chain of Custody

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[illegible]

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

EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/29/13 12:50 PM
Analysis Date: 2/5/2013
Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300370-0001	Kitchen - Grout for All Ceramic Tile	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1B 241300370-0002	Kitchen - Grout for All Ceramic Tile	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1C 241300370-0003	Kitchen - Grout for All Ceramic Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
2A 241300370-0004	North Storage Cooler - White Ceiling Skim Troweled	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
2B 241300370-0005	North Storage Cooler - White Ceiling Skim Troweled	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
2C 241300370-0006	North Storage Cooler - White Ceiling Skim Troweled	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
3A 241300370-0007	North Storage Cooler - Cement Board @ Walk-in Cooler	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Adam Gart (34)

Anne Paul (8)

Garret Vliet (3)

Patrick Carr (69)

Samantha Rundstorm (18)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/05/2013 10:34:25

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/29/13 12:50 PM
 Analysis Date: 2/5/2013
 Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3B 241300370-0008	North Storage Cooler - Cement Board @ Walk-in Cooler	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3C 241300370-0009	Walk in Cooler - Cement Board	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3D 241300370-0010	Kitchen Cooler - Cement Board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
4A 241300370-0011	Kitchen - 2'x4' SCT Random Holes	Gray Fibrous Heterogeneous	80% Min. Wool	20% Non-fibrous (other)	None Detected
4B 241300370-0012	Kitchen - 2'x4' SCT Random Holes	Gray Fibrous Heterogeneous	80% Min. Wool	20% Non-fibrous (other)	None Detected
4C 241300370-0013	Kitchen - 2'x4' SCT Random Holes	Gray/White Fibrous Homogeneous	80% Min. Wool	20% Non-fibrous (other)	None Detected
5A 241300370-0014	3" Mudd Fitting	White Fibrous Heterogeneous	25% Min. Wool	65% Non-fibrous (other)	10% Chrysotile
6A 241300370-0015	3" Line TSI	White Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile

Analyst(s)

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or other approved signatory

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Initial report from 02/05/2013 10:34:25

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4 Fairfield Boulevard, Wallingford, CT 06492

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EMSL Order: 241300370

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100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/29/13 12:50 PM
Analysis Date: 2/5/2013
Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
7A 241300370-0016	Walk in Cooler - Black Cement Board Adhesive	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
7B 241300370-0017	Kitchen - Black Cement Board Adhesive	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
7C 241300370-0018	Kitchen - Black Cement Board Adhesive	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
8A 241300370-0019	Yellow adhesive for Corner Protector on Wall Tile	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8B 241300370-0020	Yellow adhesive for Corner Protector on Wall Tile	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8C 241300370-0021	Yellow adhesive for Corner Protector on Wall Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
9A 241300370-0022	Black Corner Protector on Tile	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Initial report from 02/05/2013 10:34:25

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EMSL Order: 241300370

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Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/29/13 12:50 PM
Analysis Date: 2/5/2013
Collected: 1/28/2013

Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
9B 241300370-0023	Black Corner Protector on Tile	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
9C 241300370-0024	Black Corner Protector on Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
10A 241300370-0025	Tan Ceramic Wall Tile Adhesive	Tan Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
10B 241300370-0026	Tan Ceramic Wall Tile Adhesive	Tan Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
10C 241300370-0027	Tan Ceramic Wall Tile Adhesive	Tan Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
11A 241300370-0028	Black Putty around Alarm Wire for Coolers	Black Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile
11B 241300370-0029	Kitchen Coolers - Black Putty Alarm Wire Caulk @ Coolers				Stop Positive (Not Analyzed)
11C 241300370-0030	Kitchen Coolers - Black Putty Alarm Wire Caulk @ Coolers				Stop Positive (Not Analyzed)

Analyst(s)

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Gloria V. Oriol, Laboratory Manager
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Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
12A 241300370-0031	Kitchen - Fire Door Insulation @ Kitchen Door	White Fibrous Heterogeneous		80% Non-fibrous (other)	20% Chrysotile
12B 241300370-0032	Kitchen - Fire Door Insulation @ Kitchen Door				Stop Positive (Not Analyzed)
12C 241300370-0033	Kitchen - Fire Door Insulation @ Kitchen Door				Stop Positive (Not Analyzed)
13A 241300370-0034	All Stairwells - Orange Stair Tread	Black/Orange Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
13B 241300370-0035	All Stairwells - Orange Stair Tread				Stop Positive (Not Analyzed)
13C 241300370-0036	All Stairwells - Orange Stair Tread				Stop Positive (Not Analyzed)
14A 241300370-0037	All Stairwells - Black Mastic for Orange Stair Tread	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
14B 241300370-0038	All Stairwells - Black Mastic for Orange Stair Tread	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
14C 241300370-0039	All Stairwells - Black Mastic for Orange Stair Tread	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
15A 241300370-0040	Food Prep Tables - Black Table Undercoating	Black Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
15B 241300370-0041	Food Prep Tables - Black Table Undercoating				Stop Positive (Not Analyzed)
15C 241300370-0042	Food Prep Tables - Black Table Undercoating				Stop Positive (Not Analyzed)
16A 241300370-0043	Kitchen Exhausts - Black Exhaust Hood Caulk	Black Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
16B 241300370-0044	Kitchen Exhausts - Black Exhaust Hood Caulk				Stop Positive (Not Analyzed)
16C 241300370-0045	Kitchen Exhausts - Black Exhaust Hood Caulk				Stop Positive (Not Analyzed)
17A 241300370-0046	Elec. Closets - White Pyrobar Block	White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected

Analyst(s)

Adam Gart (34)

Anne Paul (8)

Garret Vliet (3)

Patrick Carr (69)

Samantha Rundstorm (18)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/05/2013 10:34:25

**EMSL Analytical, Inc.**

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EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/29/13 12:50 PM
Analysis Date: 2/5/2013
Collected: 1/28/2013

Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
17B 241300370-0047	Elec. Closets - White Pyrobar Block	White Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
17C 241300370-0048	Elec. Closets - White Pyrobar Block	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
18A 241300370-0049	Kitchen - Door Chime Wiring	Brown/Black Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
18B 241300370-0050	Kitchen - Door Chime Wiring	Brown/Black Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
18C 241300370-0051	Kitchen - Door Chime Wiring	Brown Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
19A 241300370-0052	Shops Type I - 2x4 Suspended Ceiling Tile (Fissure + Hole)	Gray Fibrous Heterogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (other)	None Detected
19B 241300370-0053	Shops Type I - 2x4 Suspended Ceiling Tile (Fissure + Hole)	Gray Fibrous Heterogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (other)	None Detected

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Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
19C 241300370-0054	Shops Type I - 2x4 Suspended Ceiling Tile (Fissure + Hole)	Gray/White Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (other)	None Detected
20A 241300370-0055	4" Tan Cove Base Adhesive	Brown/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
20B 241300370-0056	4" Tan Cove Base Adhesive	Brown/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
20C 241300370-0057	4" Tan Cove Base Adhesive	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
21A 241300370-0058	4" Black Cove Base	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
21B 241300370-0059	4" Black Cove Base	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
21C 241300370-0060	4" Black Cove Base	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
22A 241300370-0061	Bsmt + 1st Flr O/S Elev. - Brown Cove Base Mastic	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
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 Received: 01/29/13 12:50 PM
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
22B 241300370-0062	Bsmt + 1st Flr O/S Elev. - Brown Cove Base Mastic	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
22C 241300370-0063	Bsmt + 1st Flr O/S Elev. - Brown Cove Base Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
23A 241300370-0064	Underside of Stairs - Black Tar on Bricks	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
23B 241300370-0065	Bsment - Black Tar on Bricks	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
23C 241300370-0066	Bsment - Black Tar on Bricks	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
24A-Tape 241300370-0067	Sheetrock Tape	Cream Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
24A-Joint Compound 241300370-0067A	Sheetrock Tape	White Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
24B-Tape 241300370-0068	Sheetrock Tape	Cream Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected

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Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
24B-Joint Compound 241300370-0068A	Sheetrock Tape	White Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
24C-Tape 241300370-0069	Sheetrock Tape	Cream Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
24C-Joint Compound 241300370-0069A	Sheetrock Tape	Tan/White Fibrous Homogeneous		100% Non-fibrous (other)	<1% Chrysotile
25A 241300370-0070	Beige Telephone Wire	Black/Beige Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
25B 241300370-0071	Beige Telephone Wire	Black/Beige Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
25C 241300370-0072	Beige Telephone Wire	Black/Beige Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
26A-Red Wire 241300370-0073	Red/Green Telephone Wire	Red Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
26A-Green Wire 241300370-0073A	Red/Green Telephone Wire	Green Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected

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100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
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 Received: 01/29/13 12:50 PM
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
26B-Red Wire 241300370-0074	Red/Green Telephone Wire	Red Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
26B-Green Wire 241300370-0074A	Red/Green Telephone Wire	Green Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
26C-Red Wire 241300370-0075	Red/Green Telephone Wire	Red Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
26C-Green Wire 241300370-0075A	Red/Green Telephone Wire	Green Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
27A 241300370-0076	O/S Elev - 4" Tan Cove Base	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
27B 241300370-0077	O/S Elev - 4" Tan Cove Base	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
27C 241300370-0078	O/S Elev - 4" Tan Cove Base	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
28A 241300370-0079	Rm A149 - Carpet Seam Tape	Yellow Fibrous Heterogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
28B 241300370-0080	Rm A149 - Carpet Seam Tape	Yellow Fibrous Heterogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected
28C 241300370-0081	Rm A149 - Carpet Seam Tape	Yellow Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected
29A 241300370-0082	Rm. A6 - Elec. Closet Black Wire Insulation	Black Fibrous Heterogeneous	40% Synthetic	60% Non-fibrous (other)	None Detected
29B 241300370-0083	Rm. A6 - Elec. Closet Black Wire Insulation	Black Fibrous Heterogeneous	40% Synthetic	60% Non-fibrous (other)	None Detected
29C 241300370-0084	Rm. A6 - Elec. Closet Black Wire Insulation	Black Fibrous Heterogeneous	50% Synthetic	50% Non-fibrous (other)	None Detected
30A 241300370-0085	T.O. Boy's - 4" Grey Cove Base	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
30B 241300370-0086	T.O. Boy's - 4" Grey Cove Base	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
30C 241300370-0087	T.O. Boy's - 4" Grey Cove Base	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
31A 241300370-0088	T.O. Boy's - Adhesive for 4" Grey Cove Base	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
31B 241300370-0089	T.O. Boy's - Adhesive for 4" Grey Cove Base	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
31C 241300370-0090	T.O. Boy's - Adhesive for 4" Grey Cove Base	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
32A 241300370-0091	Boy's Basement - Residual Brown Wall Mastic	Brown Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
32B 241300370-0092	Boy's Basement - Residual Brown Wall Mastic				Stop Positive (Not Analyzed)
32C 241300370-0093	Boy's Basement - Residual Brown Wall Mastic				Stop Positive (Not Analyzed)
33A 241300370-0094	Boy's Basement - Red Fire Stop Sealant	Red Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
33B 241300370-0095	Boy's Basement - Red Fire Stop Sealant	Red Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
33C 241300370-0096	Boy's Basement - Red Fire Stop Sealant	Red Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
34A-Fiberboard 241300370-0097	Boy's Basement Hallway - Residual Fiberboard on Wall	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
34A-Mastic 241300370-0097A	Boy's Basement Hallway - Residual Fiberboard on Wall	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
34B-Fiberboard 241300370-0098	Boy's Basement Hallway - Residual Fiberboard on Wall	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
34B-Mastic 241300370-0098A	Boy's Basement Hallway - Residual Fiberboard on Wall	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
34C-Fiberboard 241300370-0099	Boy's Basement Hallway - Residual Fiberboard on Wall	Brown Non-Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
34C-Mastic 241300370-0099A	Boy's Basement Hallway - Residual Fiberboard on Wall	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
35A 241300370-0100	Boy's Basement Storage - Brown Glue Daubs on Wood Boards	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Adam Gart (34)

Anne Paul (8)

Garret Vliet (3)

Patrick Carr (69)

Samantha Rundstorm (18)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/05/2013 10:34:25

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/29/13 12:50 PM
 Analysis Date: 2/5/2013
 Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
35B 241300370-0101	Bsmt Storage - Brown Glue Daubs on Wood Panel	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
35C 241300370-0102	Bsmt Storage - Brown Glue Daubs on Wood Panel	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
36A 241300370-0103	Boys - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
36B 241300370-0104	Boys - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
36C 241300370-0105	Boys - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
37A 241300370-0106	Boy's Main Flr - White Sink Undercoating	White Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
37B 241300370-0107	Boy's Main Flr - White Sink Undercoating	White Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
37C 241300370-0108	Boy's Main Flr - White Sink Undercoating	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/05/2013 10:34:25

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

EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/29/13 12:50 PM
 Analysis Date: 2/5/2013
 Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>	
			% Fibrous	% Non-Fibrous	% Type	
38A 241300370-0109	Boys - Black Flex Connector	White/Black Fibrous Heterogeneous	25% Synthetic	75% Non-fibrous (other)	None Detected	
38B 241300370-0110	Boys - Black Flex Connector	White/Black Fibrous Heterogeneous	25% Synthetic	75% Non-fibrous (other)	None Detected	
38C 241300370-0111	Boys - Black Flex Connector	White/Black Non-Fibrous Heterogeneous	30% Synthetic	70% Non-fibrous (other)	None Detected	
39A 241300370-0112	2'x4' SCT Fissures + Holes Type II	Gray/White Fibrous Homogeneous	35% Min. Wool 40% Cellulose	25% Non-fibrous (other)	None Detected	
39B 241300370-0113	2'x4' SCT Fissures + Holes Type II	Gray/White Fibrous Homogeneous	35% Min. Wool 40% Cellulose	25% Non-fibrous (other)	None Detected	
39C 241300370-0114	2'x4' SCT Fissures + Holes Type II	Gray/White Fibrous Homogeneous	30% Cellulose 30% Min. Wool	40% Non-fibrous (other)	None Detected	
40A 241300370-0115	16"x16" Brown + White Flr Tile Boys	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected	
40B 241300370-0116	16"x16" Brown + White Flr Tile Boys	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected	

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/05/2013 10:34:25

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EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/29/13 12:50 PM
 Analysis Date: 2/5/2013
 Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
40C 241300370-0117	16"x16" Brown + White Flr Tile Boys	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
41A 241300370-0118	Green Adhesive for #40	Green Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
41B 241300370-0119	Green Adhesive for #40	Green Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
41C 241300370-0120	Green Adhesive for #40	Green Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
42A 241300370-0121	Boys - 6"x6" Opaque Window Grout	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
42B 241300370-0122	Boys - 6"x6" Opaque Window Grout	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
42C 241300370-0123	Boys - 6"x6" Opaque Window Grout	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
43A 241300370-0124	Red Cloth Wire Insulation	Brown/Gray Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected

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Initial report from 02/05/2013 10:34:25

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EMSL Order: 241300370

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CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/29/13 12:50 PM
 Analysis Date: 2/5/2013
 Collected: 1/28/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
43B 241300370-0125	Red Cloth Wire Insulation	Brown Fibrous Heterogeneous	45% Cellulose	55% Non-fibrous (other)	None Detected
43C 241300370-0126	Red Cloth Wire Insulation	Brown/Red Non-Fibrous Heterogeneous	35% Cellulose	65% Non-fibrous (other)	None Detected
44A 241300370-0127	Beige Carpet Tile Adhesive	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
44B 241300370-0128	Beige Carpet Tile Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
44C 241300370-0129	Beige Carpet Tile Adhesive	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
45A 241300370-0130	Grey Ext Expansion Joint @ Kitchen/Bldg	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
45B 241300370-0131	Grey Ext Expansion Joint @ Kitchen/Bldg	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
45C 241300370-0132	Grey Ext Expansion Joint @ Kitchen/Bldg	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Initial report from 02/05/2013 10:34:25

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EMSL Order: 241300370

CustomerID: LOUR62

CustomerPO: BA#205

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/29/13 12:50 PM
Analysis Date: 2/5/2013
Collected: 1/28/2013

Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
46A 241300370-0133	Black Tar Sidewalk Joint Exterior	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
46B 241300370-0134	Black Tar Sidewalk Joint Exterior	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
46C 241300370-0135	Black Tar Sidewalk Joint Exterior	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Initial report from 02/05/2013 10:34:25

241300370

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

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5978



Company: Loureiro Engineering Associates, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Address: 100 Northwest Dr		Third Party Billing requires written authorization from third party	
City/State/Zip: Plainville, CT 06062		Fax: 860-747-8822	
Report To (Name): Jamie Roche		Email Address: jaroche@loureiro.com	
Telephone: 860-747-6181		Project Name/Number: ADMIN. *Boys BUILDING (Coral School, MYSTIC, CT) 18AM3.01	
Please Provide Results: Email		Purchase Order: 8A205 State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)		Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative)	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: Brett Nicholas		Samplers Signature: [Signature]	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Grout for ALL ceramic tile	Kitchen	1-28-13
1B	"	"	"
1C	"	"	"
2A	White Ceiling Skim Troweled	North Storage Cooler	"
2B	"	"	"
2C	"	"	"
3A	Cement Board @ Walk-in Cooler	North Storage Cooler	"
3B	"	"	"
Client Sample # (s): 1A — 46C		Total # of Samples: 135	
Relinquished (Client): [Signature]		Date: 1-28-13 Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions:			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 5 Pages



FedEx
12:50 PM

1/20/2012



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

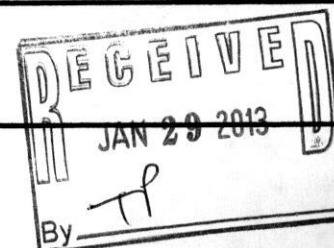
EMSL Order Number (Lab Use Only):

241300370

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3C	Cement Board for Walk In Cooler	Bulk	1/28/13
3d	↓ Kitchen Cooler		
4A	2'x 4' SCT Random Holes in Floor in Kitchen		
4B	↓ Kitchen	TYPE I	
4C	↓		
5A	3" Mudd Fitting in Fitting		
5B	4		
5C	4		
6A	3" line TST		
6B	12		
6C			
7A	Black Cement Board Adhesive Walk in Cooler		
7B	in kitchen		
7C			
8A	Yellow Adhesive for Corner Protector on Wall Tile		
8B	↓		
8C	↓		
9A	Black Corner Protector on tile		
9B	↓		
9C	↓		
10A	Tan Ceramic ^{wall} tile on Adhesive		
10B	↓		
10C	↓		
11A	Black Putty Caution ground wire Alarm for Coolers		
*Comments/Special Instructions: 11A Black Putty around Alarm wire for coolers			





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Asbestos Chain of Custody

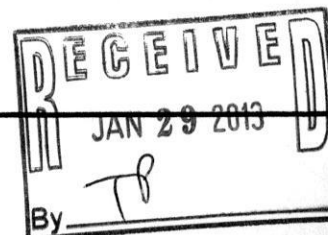
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Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
11B	Black Putty around wire caulk @ coolers	Kitchen coolers	1-28-13
11C	" "	↓	
12A	Fire Door insulation @ kitchen door	Kitchen	
12B	" "	↓	
12C	" "	↓	
13A	Orange Stair Tread	ALL Stairwells	
13B	" "	↓	
13C	" "	↓	
14A	Black Mastic for Orange Stair Tread	ALL Stairwells	
14B	" "	↓	
14C	" "	↓	
15A	Black Table Undercoating	Food Prep Tables	
15B	" "	↓	
15C	" "	↓	
16A	Black Exhaust hood caulk	Kitchen exhausts	
16B	" "	↓	
16C	" "	↓	
17A	White Pyrobar Block	Elec. Closets	
17B	" "	↓	
17C	" "	↓	
18A	Door Chime Wiring	Kitchen	
18B	" "	↓	
18C	" "	↓	
19A	2x4 suspended ceiling tile (fissure + hole)	Shops Type I	
*Comments/Special Instructions:			





EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

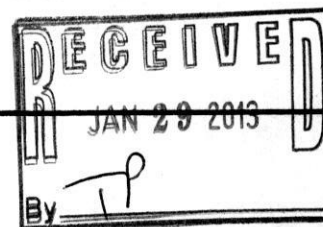
241300370

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5946

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
19B	Type I	Bulk	1/28/13
19C	↓		
20A	4" Tan Cove Base Adhesive		
20B			
20C	↓		
21A	4" Black Cove Base		
21B	↓		
21C			
22A	Brown Cove Base Mastic Bsmt + 1 st Flr o/s Elev.		
22B	↓		
22C			
23A	Black Tar on Bricks, Underside of Stairs		
23B	Bsment		
23C	↓		
24A	Sheetrock tape		
24B	↓		
24C			
25A	Beige telephone wire		
25B	↓		
25C			
26A	Red/Green Telephone Wire		
26B	↓		
26C			
27A	4" Tan Cove Base o/s Elev		

*Comments/Special Instructions:





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Asbestos Chain of Custody

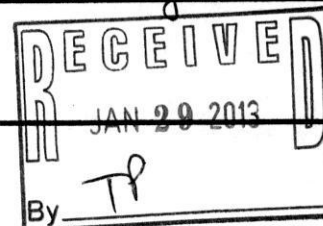
EMSL Order Number (Lab Use Only):

241300370

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
27B	↓	Bulk	
27C			
28A			
28B	↓		
28C			
29A	Elec. Closet Black Wire Insulation Rm. AG		
29B	" "	↓	
29C	" "	↓	
30A	4" Grey Covebase	T.O. Boy's	
30B	" "	↓	
30C	" "	↓	
31A	Adhesive for 4" Grey Covebase		
31B	" "		
31C	" "	↓	
32A	Residual Brown wall Mastic	Boy's Basement	
32B	" "		
32C	" "		
33A	Red Fire Stop Sealant		
33B	" "		
33C	" "	↓	
34A	Residual Fiberboard on wall	Boy's Basement Hallway	
34B	" "	↓	
34C	" "	↓	
35A	Brown Glue Dabs on Wood Boards	Boy's Basement Storage.	
*Comments/Special Instructions:			





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Asbestos Chain of Custody

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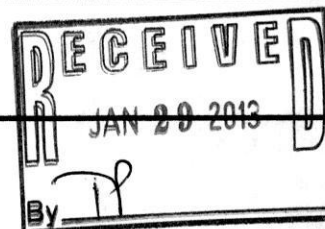
241300370

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
35B	Brown Glue Nails on Wood Panel	Bsmt Storage	1/28/13
35C	↓		
36A	Yellow Carpet Mastic Boys		
36B	↓		
36C			
37A	White Sink UnderCoating Boys Main Flr		
37B	↓		
37C			
38A	Black Flex Connector Boys		
38B	↓		
38C			
39A	2'x4' SCT Fissures + holes Type #		
39B	↓		
39C			
40A	16" x 16" Brown + white Flr Tile Boys		
40B	↓		
40C			
41A	Green Adhesive for # 40		
41B	↓		
41C			
42A	6" x 6" Opaque Window grout Boys		
42B	↓		
42C			
43A	Red Cloth Wire Insulation		

*Comments/Special Instructions:





EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*): _____

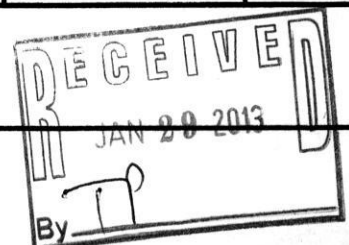
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EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

[illegible]

***Comments/Special Instructions:**



**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300591

CustomerID: LOUR62

CustomerPO:

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 02/14/13 5:10 PM
Analysis Date: 2/15/2013
Collected:

Project: **ADMIN. + BOY'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

**Test Report: Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116
and/or EPA 600/M4-82-020. Quantitation using 400 Point Count Procedure**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
24A-Joint Compound 241300591-0001	Sheetrock Tape	White Fibrous Homogeneous		99.75% Non-fibrous (other)	0.25% Chrysotile

Original EMSL Order ID: 241300370.

Analyst(s)

Garret Vliet (1)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0, CT PH-0322, MA AA000191, RI AAL-108T3, VT AL357101

Initial report from 02/15/2013 10:44:35

241300591

241300370



Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5978

Company: Loureiro Engineering Associates, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note Instructions in Comments**	
Address: 108 Northwest Dr		Third Party Billing requires written authorization from third party	
City/State/Zip: Plainville, CT 06062		Fax: 860-747-8822	
Report To (Name): Jamie Roche		Email Address: jaroche@loureiro.com	
Telephone: 860-747-6181		Project Name/Number: ADMIN. *Boys BUILDING (Com) School, MYSHE, CT 18HM3.01	
Please Provide Results: Email		Purchase Order: 8A*205 State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>			
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: Brett Nicholes		Samplers Signature: [Signature]	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Grout for ALL ceramic tile	Kitchen	1-28-13
1B	"	"	"
1C	"	"	"
2A	White Ceiling Stem Traveled	North Storage Cooler	"
2B	"	"	"
2C	"	"	"
3A	Cement Board @ Walkin Cooler	North Storage Cooler	"
3B	"	"	"
Client Sample # (s): 1A - 46C		Total # of Samples: 135	
Relinquished (Client): [Signature]		Date: 1-28-13 Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions:			



FedEx
12:50 PM



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

241300591
Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

241300370

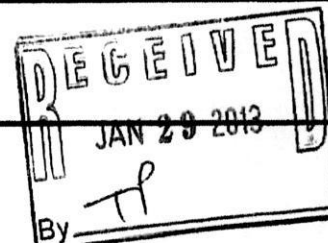
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3C	Cement Board for Walk In cooler	Bulk	1/28/13
3d	↓ Kitchen Cooler		
4A	2'x 4' SCT Random Holes to Floor to Floor to Floor		
4B	↓ Kitchen	to Floor	
4C			
5A	3" Mudd Fittings to Floor Fittings		
5B	to Floor		
5C			
6A	3" line 1ST		
6B	to Floor		
6C			
7A	Black Cement Board Adhesive Walk in Cooler		
7B	in kitchen		
7C			
8A	Yellow Adhesive for Corner Protector on wall Tile		
8B			
8C	↓		
9A	Black corner Protector on tile		
9B			
9C	↓		
10A	Tan Ceramic ^{wall} tile to Floor Adhesive		
10B			
10C	↓		
11A	Black Putty Caulk around wire Alarm for Coolers		

***Comments/Special Instructions:**

11A Black Putty around Alarm wire for Coolers





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Asbestos Chain of Custody
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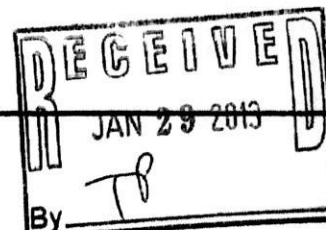
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EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
11B	Black Putty around wire caulk @ coolers	Kitchen coolers	1-28-13
11C	" "	↓	
12A	Fire Door insulation @ kitchen door	Kitchen	
12B	" "	↓	
12C	" "	↓	
13A	Orange Stair Tread	ALL Stairwells	
13B	" "	↓	
13C	" "	↓	
14A	Black Mastic for Orange Stair Tread	ALL Stairwells	
14B	" "	↓	
14C	" "	↓	
15A	Black Table Undercoating	Food Prep Tables	
15B	" "	↓	
15C	" "	↓	
16A	Black Exhaust hood caulk	Kitchen exhausts	
16B	" "	↓	
16C	" "	↓	
17A	White Pyrobar Block	Elec. Closets	
17B	" "	↓	
17C	" "	↓	
18A	Door Chime Wiring	Kitchen	
18B	" "	↓	
18C	" "	↓	
19A	2x4 suspended ceiling tile (frissure + hole)	Shops Type I	←

*Comments/Special Instructions:





EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

241300591
Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

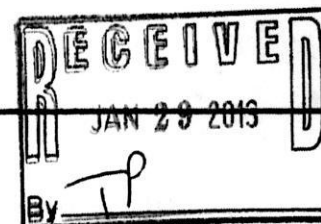
241300370

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5940

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
19B	Type I	Bulk	1/28/13
19C	↓		
20A	4" Tan Cove Base Adhesive		
20B	↓		
20C	↓		
21A	4" Black Cove Base		
21B	↓		
21C	↓		
22A	Brown Cove Base Mastic Bsm't + 1 st Flr o/s Elev.		
22B	↓		
22C	↓		
23A	Black Tar on Bricks, Underside of Stairs		
23B	↓ Bsm't		
23C	↓		
24A	Sheetrock tape		
24B	↓		
24C	↓		
25A	Beige telephone wire		
25B	↓		
25C	↓		
26A	Red/Green Telephone Wire		
26B	↓		
26C	↓		
27A	4" Tan Cove Base o/s Elev		

*Comments/Special Instructions:





EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

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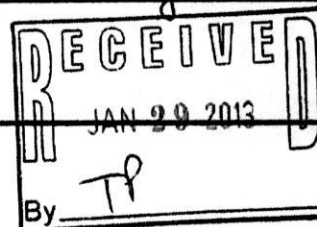
~~241300370~~

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
27B	↓	B4/K	
27C			
28A	Carpet Seam Tape Rm A149		
28B	↓		
28C			
29A	Elec. Closet Black Wire Insulation	Rm. AG	
29B	" "	↓	
29C	" "	↓	
30A	4" Grey Covebase	T.O. Boy's	
30B	" "	↓	
30C	" "	↓	
31A	Adhesive for 4" Grey Covebase		
31B	" "		
31C	" "	↓	
32A	Residual Brown wall Mastic	Boy's Basement	
32B	" "		
32C	" "		
33A	Red Fire Stop Sealant		
33B	" "		
33C	" "	↓	
34A	Residual Fiberboard on wall	Boy's Basement Hallway	
34B	" "	↓	
34C	" "	↓	
35A	Brown Glue Dabs on Wood Boards	Boy's Basement Storage.	

*Comments/Special Instructions:





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Asbestos Chain of Custody
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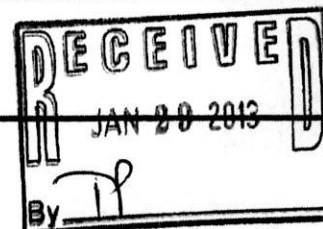
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
35B	Brown Glue Pegs on Wood Panel	Bsmt Storage	1/28/13
35C	↓		
36A	Yellow Carpet Master Boys		
36B	↓		
36C			
37A	White Sink UnderCoating Boys Main Flr		
37B	↓		
37C			
38A	Black Flex Connector Boys		
38B	↓		
38C			
39A	2'x4' SCT Fissures + holes Type #		
39B	↓		
39C			
40A	16"x16" Brown & white Flr Tile Boys		
40B	↓		
40C			
41A	Green Adhesive for # 40		
41B	↓		
41C			
42A	6"x6" Opague Window grout Boys		
42B	↓		
42C			
43A	Red Cloth Wire Insulation		

Composite

*Comments/Special Instructions:



241300591

Gonzalez, Ivanilly

From: Jamie Roche [jaroche@loureiro.com]
Sent: Thursday, February 14, 2013 5:06 PM
To: EMSL Lab - Wallingford
Subject: Re EMSL No. 241300370

Sample 24A Joint Compound
Please do 400 Pt Count - Grav red
6hr TAT

Thanks

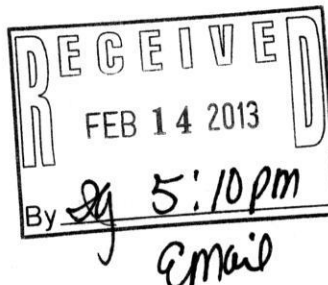
Jamie Roche
Director, Environmental Services
Loureiro Engineering Associates, Inc
An Employee Owned Company
100 Northwest Drive
Plainville, CT 06062
Direct: 860-410-2945
Cell: 860-384-9688
jaroche@Loureiro.com

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2/14/2013

Gonzalez, Ivanilly

241300591

From: Jamie Roche [jaroche@loureiro.com]
Sent: Thursday, February 14, 2013 5:06 PM
To: EMSL Lab - Wallingford
Subject: Re EMSL No. 241300370

Sample 24A Joint Compound
Please do 400 Pt Count - Grav red
6hr TAT

Thanks

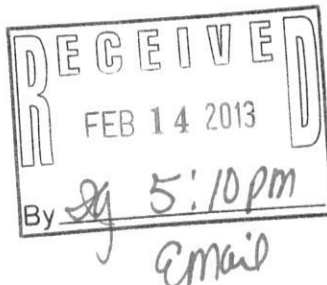
Jamie Roche
Director, Environmental Services
Loureiro Engineering Associates, Inc
An Employee Owned Company
100 Northwest Drive
Plainville, CT 06062
Direct: 860-410-2945
Cell: 860-384-9688
jaroche@Loureiro.com

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2/14/2013

241300591

Gonzalez, Ivanilly

From: Jamie Roche [jaroche@loureiro.com]
Sent: Friday, February 15, 2013 8:36 AM
To: EMSL Lab - Wallingford
Subject: RE: Re EMSL No. 241300370

OK, Please forward Pt count request, eliminate grav red.
Same day is fine.
Thanks

Jamie Roche
Director, Environmental Services
Loureiro Engineering Associates, Inc
An Employee Owned Company
100 Northwest Drive
Plainville, CT 06062
Direct: 860-410-2945
Cell: 860-384-9688
jaroche@Loureiro.com
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-----Original Message-----

From: Leary, Edward [mailto:eleary@EMSL.com] **On Behalf Of** EMSL Lab - Wallingford
Sent: Thursday, February 14, 2013 5:38 PM
To: Jamie Roche
Subject: RE: Re EMSL No. 241300370

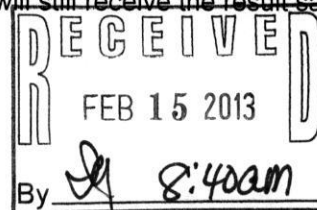
Hi Jamie,

I will forward this request to Cinnaminson since they performed the analysis. Since the material is friable it is not necessary to perform gravimetric reduction but we can go ahead with that analysis if you would like (provided there is enough material). The sample will need to be ashed in the furnace for at least 6 hours so the result would not be ready within the 6hr TAT however you will still receive the result same day. Please let me know how you would like to proceed. Thanks.

EJ



Edward Leary | Laboratory Supervisor
EMSL Analytical, Inc. | 4 Fairfield Boulevard | Wallingford, CT 06492
Phone: 203-284-5948 | Fax: 203-284-5978 | Toll Free: 800-220-3675



Email

2/15/2013

241300591

Lab Hours: Monday - Friday 8AM - 5:30PM, Saturday-Sunday On-Call

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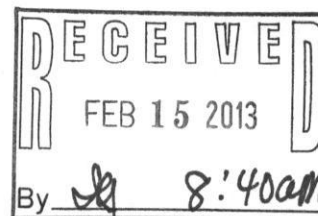
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From: Jamie Roche [mailto:jaroche@loureiro.com]**Sent:** Thursday, February 14, 2013 5:06 PM**To:** EMSL Lab - Wallingford**Subject:** Re EMSL No. 241300370

Sample 24A Joint Compound
Please do 400 Pt Count - Grav red
6hr TAT

Thanks

Jamie Roche
Director, Environmental Services
Loureiro Engineering Associates, Inc
An Employee Owned Company
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Plainville, CT 06062
Direct: 860-410-2945
Cell: 860-384-9688
jaroche@Loureiro.com

Visit us on the web: www.loureiro.comVisit us on the web: www.loureiroengineering.com

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Please consider the environment before printing this email.

APPENDIX C

Summary of HBM Survey, Sampling, and Analytical Information Girls Wing

Appendix C
Summary of HBM Survey, Sampling, and Analytical Information
Girls Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Baseboard Mastic - Brown	-	Floor 2		Historical		
Baseboard Mastic - Yellow	-	Floor 2		Historical		
12" x 12" Light Brown Tile	+	Floor 2	See Total Below	Historical		\$3,000
12" x 12" Light Brown Tile Mastic	-	Floor 2		Historical		
Sheetrock	-	Floor 2		Historical		
Joint Compound	+	Floor 2	3000SF	Historical		\$18,000
Skim coat on Sheetrock	-	Floor 3		Historical		
Sheetrock	-	G302, G107		Historical		
Joint Compound	-	G302, G107		Historical		
Brown Linoleum	-	G106		Historical		
12' x 12' Tan Floor Tile	Tr	G106, Floor 2		Historical		
12' x 12' Tan Floor Tile mastic	-	G106, Floor 2		Historical		
Plaster Top Coat	-	Throughout Walls		Historical		
Plaster Base Coat	-	Throughout Walls		Historical		
Plaster Top Coat	-	Throughout Ceilings		Historical		
Plaster Base Coat	-	Throughout Ceilings		Historical		
Pipe Insulation, Mud Fittings	+	Kitchen...	1200LF	Historical		\$8,700
2 x 4 Ceiling Tile, Type1 Dot	-	Kitchen		Historical		
Cork/Tar Ceiling	+	G9, G10	250SF	Historical		\$3,000
Concrete Wall	+??	Cooler Room G9-G10		Historical		
Mud Fittings	-	Heat Exchanger-Boiler Rm		Historical		
Tank Insulation	+	Hot Water Boiler Rm	215SF	Historical		\$1,800
Tank Insulation	+	Heat Exchanger-Boiler Rm		Historical		Included
12" x 12" Beige Floor Tile	Tr	G304, G215		Historical		
12' x 12' Beige Floor Tile mastic	-	G304, G215		Historical		
12" x 12" Ceiling Tile	+	Copy Center	1000SF	Historical		\$5,000
2 x 4 Ceiling Tile, Type 2 Dot	+	G7, 8, 13,	2600SF	Historical	2600 SF	\$0
Exterior Window Glazing	-			Historical		
Exterior Window/Door Caulk	+	Throughout, various sizes	2500+ LF 158ea	Historical		\$22,000
9 x 9 Red Floor Tile	+	G7	See Total Below	Historical	945SF, 3000SF	

Appendix C
Summary of HBM Survey, Sampling, and Analytical Information
Girls Wing
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
9 x 9 Red Floor Tile Mastic	+	G7	See Total Below	Historical	3000SF	
9 x 9 Green Floor Tile	+	G8	See Total Below	Historical		
9 x 9 Green Floor Tile Mastic	+	G8	See Total Below	Historical		Included
ACM Tiles & Mastic Total Remaining	+		1600 SF	Historical		\$9,000
Capstone Flashing	+	Flat Roofs	600 SF	1a,b,c		\$6,000
Cove Base Mastic	-	Basement		Historical		Included
Perimeter Flashing	Tr	Flat Roofs	Included	2a,b,c		
Flat Roof Ply Layers	-	Flat Roofs		3a,b,c		
Grey/Green Asphalt Shingle	+	Pitched Roof	18,750 SF	4a,b,c		\$75,000
Tar Paper Under Green/Grey Shingle	-	Pitched Roof		5a,b,c		
Chimney Flashing	+	Center Chimney	15 SF	6a,b,c		\$100
Fire Doors Type 1	-	Through Out		1a,b,c		
Brown Glue Under Cork Boards	-	Through Out		2a,b,c		
Wall Mortar	-	Cooler Rm North Wall		3a,b,c		
Wall Mortar	-	Cooler Rm West Wall		4a,b,c		
Fire Door Type 2	-	Through Out		5a,b,c		
Pink Sink Undercoating	+	Basement	2 each	6a,b		\$100
Grey Linoleum Floor and Adhesive	-	Rm G216		7a,b,c		
Grout for 1x1 Ceramic Tile	-	Through Out		8a,b,c		
Insulation Straight Runs	+	Through Out	Included	9a,b,c		
Gaskets	Assumed	Boiler				
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				
Fluorescent Fixtures - ballasts		None Observed				
Mercury Switches		None Observed				
Window AC Units		None Observed				\$151,700
Notes:						
1. See attached laboratory analytical reports.						

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300328
CustomerID: LOUR62
CustomerPO: Batch # BN 20
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Girl's Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 2/1/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300328-0001	Basement - fire door (type 1, 2x2 wired glass) core	Gray Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
1B 241300328-0002	Basement - fire door (type 1, 2x2 wired glass) core	Gray Fibrous Heterogeneous	98% Cellulose	2% Non-fibrous (other)	None Detected
1C 241300328-0003	Basement - fire door (type 1, 2x2 wired glass) core	Gray Fibrous Heterogeneous	98% Cellulose	2% Non-fibrous (other)	None Detected
2A 241300328-0004	Basement Kitchen - brown glue under cork boards	Brown Non-Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (other)	None Detected
2B 241300328-0005	Basement Kitchen - brown glue under cork boards	Brown Non-Fibrous Heterogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
2C 241300328-0006	Basement Kitchen - brown glue under cork boards	Brown Non-Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (other)	None Detected
3A 241300328-0007	Cooler Room - wall mortar (north)	Tan/White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (10)

Todd Patrick (15)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/01/2013 10:57:30

**EMSL Analytical, Inc.**

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Attn: **Jamie Roche**
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Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3B 241300328-0008	Cooler Room - wall mortar (north)	Tan/White Non-Fibrous Heterogeneous	2% Fibrous (other) <1% Cellulose	98% Non-fibrous (other)	None Detected
3C 241300328-0009	Cooler Room - wall mortar (north)	Tan/White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
4A 241300328-0010	Cooler Room - wall mortar (west)	Gray/Tan Non-Fibrous Heterogeneous	2% Fibrous (other) <1% Cellulose <1% Synthetic	98% Non-fibrous (other)	None Detected
4B 241300328-0011	Cooler Room - wall mortar (west)	Gray/Tan/White Non-Fibrous Heterogeneous	2% Fibrous (other) <1% Cellulose <1% Synthetic	98% Non-fibrous (other)	None Detected
4C 241300328-0012	Cooler Room - wall mortar (west)	Gray/Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
5A 241300328-0013	Basement - fire door (type 2, 1x1 wired glass) cardboard core	Brown Fibrous Heterogeneous	100% Cellulose	0% Non-fibrous (other)	None Detected
5B 241300328-0014	Basement - fire door (type 2, 1x1 wired glass) cardboard core	Brown Fibrous Heterogeneous	100% Cellulose	0% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (10)

Todd Patrick (15)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/01/2013 10:57:30

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100 Northwest Drive

Plainville, CT 06062Project: **Girl's Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 2/1/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
5C 241300328-0015	Basement - fire door (type 2, 1x1 wired glass) cardboard core	Brown Fibrous Heterogeneous	100% Cellulose	0% Non-fibrous (other)	None Detected
6A 241300328-0016	Basement Kitchen - sink undercoat (pink)	Pink Non-Fibrous Heterogeneous	2% Cellulose	93% Non-fibrous (other)	5% Chrysotile
6B 241300328-0017	Basement Kitchen - sink undercoat (pink)				Stop Positive (Not Analyzed)
7A 241300328-0018	Rm G216 - grey linoleum flooring	Gray Non-Fibrous Heterogeneous	18% Cellulose 6% Synthetic 2% Glass	74% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.					
7B-Linoleum 241300328-0019	Rm G216 - grey linoleum flooring	Gray Non-Fibrous Heterogeneous	20% Cellulose 8% Synthetic 3% Glass <1% Fibrous (other)	69% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.					
7B-Adhesive 241300328-0019A	Rm G216 - grey linoleum flooring	Yellow/Clear Non-Fibrous Heterogeneous	2% Cellulose <1% Synthetic <1% Fibrous (other)	98% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (10)

Todd Patrick (15)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/01/2013 10:57:30

**EMSL Analytical, Inc.**

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

EMSL Order: 241300328
CustomerID: LOUR62
CustomerPO: Batch # BN 20
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Girl's Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
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Analysis Date: 2/1/2013
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
7C-Linoleum 241300328-0020	Rm G216 - grey linoleum flooring	Gray Non-Fibrous Heterogeneous	15% Cellulose 5% Synthetic <1% Glass	80% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.					
7C-Adhesive 241300328-0020A	Rm G216 - grey linoleum flooring	Beige Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
8A 241300328-0021	G 214 - grout for 1x1 ceramic tile	Gray Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
8B 241300328-0022	G 204 - grout for 1x1 ceramic tile	Gray Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
8C 241300328-0023	3rd Floor Bathroom - grout for 1x1 ceramic tile	Gray Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
9A 241300328-0024	2nd Floor Hall - TSI (straight runs in chase)	Gray Fibrous Heterogeneous	45% Cellulose	5% Non-fibrous (other)	50% Chrysotile
9B 241300328-0025	2nd Floor Hall - TSI (straight runs in chase)				Stop Positive (Not Analyzed)
9C 241300328-0026	2nd Floor Hall - TSI (straight runs in chase)				Stop Positive (Not Analyzed)

Analyst(s)

Edward Leary (10)

Todd Patrick (15)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/01/2013 10:57:30



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300328

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates # : LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: GIRLS BUILDING (Oral School, Mystic, CT) 18H43.01			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: BULKY BN 20 U.S. State Samples Taken: CT			

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☒ 5 Days ☐ 10 Days

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
---	--	---

☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: Brett Nicholas Samplers Signature: [Signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Firedoor (Type 1, 2x2 wired glass) core	Basement	1-24-13
1B	"	"	
1C	"	"	
2A	Brown Glue under Cork boards	Basement Kitchen	
2B	"	"	
2C	"	"	
3A	Wall Mortar (North)	cooler room	
3B	"	"	

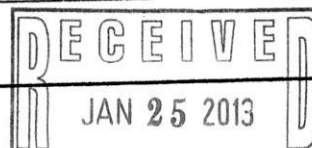
Client Sample # (s): 1A → 9C Total # of Samples: 26

Relinquished (Client): [Signature] Date: 1-24-13 Time:

Received (Lab): Date: Time:

Comments/Special Instructions:

POSITIVE STOPS



By: [Signature] 9:40am
Jed 801417221123

241300328

Page 2 of 2 pages

**EMSL Analytical, Inc.**

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EMSL Order: 241300415

CustomerID: LOUR62

CustomerPO: BN#21

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **GIRL'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/31/13 11:40 AM
Analysis Date: 2/7/2013
Collected: 1/30/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300415-0001	Lower Roof - black paper @ cap stone flashing	Gray/Black Fibrous Heterogeneous	5% Cellulose	65% Non-fibrous (other)	30% Chrysotile
1B 241300415-0002	Upper North Roof - black paper @ cap stone flashing				Stop Positive (Not Analyzed)
1C 241300415-0003	Upper Middle Roof - black paper @ cap stone flashing				Stop Positive (Not Analyzed)
2A 241300415-0004	Lower Roof - perimeter flashing	Black Non-Fibrous Heterogeneous	40% Cellulose 2% Synthetic	58% Non-fibrous (other)	<1% Chrysotile
2B 241300415-0005	Upper North Roof - perimeter flashing	Black Non-Fibrous Heterogeneous	35% Cellulose 3% Synthetic <1% Glass	62% Non-fibrous (other)	<1% Chrysotile
2C 241300415-0006	Upper Middle Roof - perimeter flashing	Black Fibrous Heterogeneous	25% Cellulose <1% Synthetic	75% Non-fibrous (other)	<1% Chrysotile
3A 241300415-0007	Lower Roof - ply layer on concrete	Black Non-Fibrous Heterogeneous	20% Cellulose <1% Synthetic <1% Glass <1% Fibrous (other)	80% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (5)

Todd Patrick (7)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Initial report from 02/07/2013 11:06:22

**EMSL Analytical, Inc.**

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EMSL Order: 241300415

CustomerID: LOUR62

CustomerPO: BN#21

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **GIRL'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos			Asbestos
			%	Fibrous	% Non-Fibrous	% Type
3B 241300415-0008	Upper North Roof - ply layer on concrete	Black Non-Fibrous Heterogeneous	15% 2% <1%	Cellulose Synthetic Fibrous (other)	83% Non-fibrous (other)	None Detected
3C 241300415-0009	Upper Middle Roof - ply layer on concrete	Black Fibrous Heterogeneous	10% <1%	Cellulose Glass	90% Non-fibrous (other)	None Detected
4A 241300415-0010	Pitched Roof - grey/green asphalt shingle	Gray/Black/Green Non-Fibrous Heterogeneous	18% <1% <1%	Cellulose Synthetic Glass	79% Non-fibrous (other)	3% Chrysotile
4B 241300415-0011	Pitched Roof - grey/green asphalt shingle					Stop Positive (Not Analyzed)
4C 241300415-0012	Pitched Roof - grey/green asphalt shingle					Stop Positive (Not Analyzed)
5A 241300415-0013	Pitched Roof - tar paper under roof shingles	Black Fibrous Heterogeneous	70% <1%	Cellulose Glass	30% Non-fibrous (other)	None Detected
5B 241300415-0014	Pitched Roof - tar paper under roof shingles	Black Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected
5C 241300415-0015	Pitched Roof - tar paper under roof shingles	Black Fibrous Heterogeneous	60% 2%	Cellulose Synthetic	38% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (5)

Todd Patrick (7)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/07/2013 11:06:22

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300415

CustomerID: LOUR62

CustomerPO: BN#21

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **GIRL'S BUILDING (ORAL SCHOOL, MYSTIC, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/31/13 11:40 AM
Analysis Date: 2/7/2013
Collected: 1/30/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
6A 241300415-0016	Center Chimney - cement @ chimney flashing	Black Non-Fibrous Heterogeneous	<1% Cellulose	85% Non-fibrous (other)	15% Chrysotile
6B 241300415-0017	Center Chimney - cement @ chimney flashing				Stop Positive (Not Analyzed)
6C 241300415-0018	Center Chimney - cement @ chimney flashing				Stop Positive (Not Analyzed)

Analyst(s)

Edward Leary (5)

Todd Patrick (7)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/07/2013 11:06:22

241300415

Page 1 of 1



Asbestos Lab Services Chain of Custody

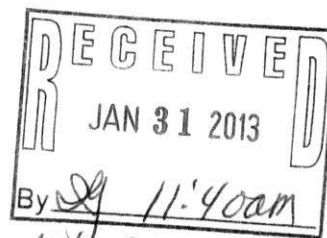
EMSL Order Number (Lab Use Only):

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5976

Company: Loureiro Engineering Associates, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party	
Address: 100 Northwest Dr			
City/State/Zip: Plainville, CT 06062			
Report To (Name): Jamie Roche		Fax: 860-747-8822	
Telephone: 860-747-8181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>GIRL'S BUILDING (Oral School, Mystic, CT) 18HM3.01</u>			
Please Provide Results: Email		Purchase Order: <u>BN21</u> State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input checked="" type="checkbox"/> 2 Weeks			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: <u>Brett Nicholas</u>		Samplers Signature: <u>[Signature]</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Black Paper @ cap stone flashing	lower roof	1-30-13
1B	"	upper north roof	
1C	"	upper middle roof	
2A	Perimeter Flashing	lower roof	
2B	"	upper north roof	
2C	"	upper middle roof	
3A	ply layer on concrete	lower roof	
3B	"	upper north roof	
Client Sample # (s): <u>1A, 6C</u>		Total # of Samples: <u>18</u>	
Relinquished (Client): <u>[Signature]</u>		Date: <u>1-30-13</u> Time: <u>FedEx</u>	
Received (Lab):		Date: Time:	
Comments/Special Instructions: <u>POSITIVE STOPS</u>			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 2 Pages



800 1 1712 45 46
1/20/2012



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*):

241300415

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492

PHONE: (203) 284-5948

FAX: (203) 284-5948

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

[illegible]

***Comments/Special Instructions:**

POSITIVE STOPS

APPENDIX D

Summary of HBM Survey, Sampling, and Analytical Information Durant Building

Appendix D
Summary of HBM Survey, Sampling, and Analytical Information
Durant Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
1 x 2 Ceiling Tile	-	Lower Level, 138		Historical		
Joint Compound	+	Lower Level, 115, 136, Mid Level, Dorms, Gym, Stairs	Excluded	Historical	25SF, 2010	Excluded Pending DPH Approval
12" x 12" Brown Floor Tile	+	Lower Level, Landings & Fan Rms	See Below	Historical		
12" x 12" Brown Floor Tile Mastic	+	Lower Level, Landings & Fan Rms	See Below	Historical		
Sheetrock	-	Throughout		Historical		
Carpet Mastic	-	Lower Level, 148		Historical		
Wood Tile Mastic	-	Lower Level, Media Center		Historical		
Mud Fittings	+	Lower Level, Fan Room	See Below	Historical		
Cove Base Mastic	-	Lower Level		Historical		
1 x 1 Ceiling Tile	-	Mid Level		Historical		
Linoleum	-	Mid Level		Historical		
Linoleum Mastic	-	Mid Level		Historical		
Wallpaper	-	Mid Level		Historical		
12" x 12" Beige Floor Tile	+	Mid Level, Closet	See Below	Historical		
12" x 12" Beige Floor Tile Mastic	+	Mid Level, Closet	See Below	Historical		
12" x 12" White Floor Tile	-	Mid Level, Dorm Area		Historical		
12" x 12" White Floor Tile Mastic	-	Mid Level, Dorm Area		Historical		
12" x 12" Purple Floor Tile	-	Mid Level, Dorm Area		Historical		
12" x 12" Blue/Green Floor Tile	-	Mid Level, Dorm Area		Historical		
12" x 12" Red/Maroon Floor Tile	-	Mid Level, Dorm Area		Historical		
12" x 12" Pink Floor Tile	-	Mid Level, Dorm Area		Historical		
Floor Tile Mastic	-	Mid Level, Dorm Area		Historical		
Linoleum	-	Mid Level, Dining		Historical		
Valve Cement	-	Lower level, Mech Rm		Historical		
Heat Exchanger Insulation	+	Lower level, Mech Rm	150SF	Historical		\$2,000
SAF	-	Lower level, Mech& Fan Rm		Historical		
Mud Fittings	-	Lower Level, Rm 101		Historical		
White Linoleum	-	Upper Level Kitchen		Historical		

Appendix D
Summary of HBM Survey, Sampling, and Analytical Information
Durant Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
White Linoleum Mastic	-	Upper Level Kitchen		Historical		
Red Floor	-	Mid Level Kitchen		Historical		
Carpet Mastic	-	Mid Level		Historical		
Window Caulk	-	Mid Level		Historical		
Plaster	-	Exterior Canopy		Historical		
Joint compound	-	Floor 2, 225		Historical		
Interior Wind Glaze	-	Utility Room/Shed		Historical		
Ceramic Wall Tile Glue	-	Floor 2, 225		Historical		
Ceramic Floor Tile Glue	-	Floor 2, 225		Historical		
Cove Base Mastic	-	Floor 2, 225		Historical		
Plaster Ceiling	-	Utility Room/Shed		Historical		
Mud Fitting	+	Utility Room/Shed/Throughout	240ea	Historical		\$6,500
ACM Floor Tile/Mastic Total	+		3500 SF			\$21,000
Grey Wood Tile Adhesive	-	Gym / Teacher's Lounge		1a,b,c		
Red Leveling Compound	-	Gym		2a,b,c		
Grout for Ceramic Bathroom Tile	-	Bathrooms		3a,b,c		
Radiator Cover Mastic	-	All Levels		4a,b,c		
4"x4" Ceramic Tile Adhesive	-	Lower and Mid Level		5a,b,c		
Grey Window and Door Glazing	+	Lower and Mid Level	2,970 SF	6a,b,c		\$25,000
Counter Backsplash Adhesive	-	Lower Level		7a,b,c		
White Textured Paint at Domed Skylight	-	Teacher's Lounge		8a,b,c		
Pink Sink Undercoating	+	Teacher's Lounge	12 SF	9a,b,c		\$100
Joint Compound	Tr	Mid Level and Dorm Level		10a,b,c,d,e		
Joint Compound	Tr	Mid Level Level	Pt. Count	10a		
Joint Compound	Tr	Dorm Level	Pt. Count	10e		
12x12 Blue Floor Tile	-	Room 222		11a,b,c		
Paper under 12x12 Blue Floor Tile	-	Room 222		12a,b,c		
White Board-Style Room Divider (Core)	-	Room 232		13a,b,c		
Tan Adhesive for Corner Bumpers	-	Mid Level Hallways		14a,b,c		
Yellow Adhesive for Plastic Wallboard	-	Mid Level Hallways		15a,b,c		

Appendix D
Summary of HBM Survey, Sampling, and Analytical Information
Durant Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Stair Tread Adhesive at Access Ramp	-	Mid Level (North)		16a,b,c		
Sheetrock Tape	-	Mid Level		17a,b,c		
Display Case Brown Panel Mastic	-	Mid Level (South)		18a,b,c		
2'x3' Suspended Ceiling Tiles (Fissure)	-	Dorm Level		19a,b,c		
Black Flex-Duct Connectors	-	Upper Level Mechanical Room		20a,b,c		
Tan Linoleum	-	Mid Level (North)		21a,b,c		
End-Cap Sealant on Fiberglass TSI	-	Lower Level Northwest Mech. Room		22a,b,c		
Top Ply Layer	+	Main Roofs	24,400 SF	1a,2a,3a,4a,5a		\$96,000
Perlite Layer	-	Main Roofs		1b,2b,3b,4b,5b		
Bottom Tar Layer	-	Main Roofs		1c,2c,3c,4c,5c		
Black Perimeter / Penetration Flashing	+	Main Roofs	Included	6a,b,c		Included
Rolled Asphalt (Top Layer)	-	South Classrooms Roofs		7a,8a,9a		
Felt Paper Layer	-	South Classrooms Roofs		7b,8b,9b		
Foam Layer	-	South Classrooms Roofs		7c,8c,9c		
Original Ply Layer	+	South Classrooms Roofs	6,300 SF	7d,8d,9d		\$30,000
Perlite Layer	-	South Classrooms Roofs		7e,8e,9e		
Tar Oil Layer (Bottom Layer)	-	South Classrooms Roofs		7f,8f,9f		
Black Seam Sealant for Rolled Asphalt	-	South Classrooms Roofs		10a,b,c		
Waterproofing Tar on Foundation (Exterior)	+	South Classrooms Foundations	Unknown	11a,b,c		+++
						\$180,600
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				
Fluorescent Fixtures - ballasts		None Observed				
In-Window A/C units		North	1			
Mercury Switches		None Observed				
Notes:						
1. See attached laboratory analytical reports.						

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300309
CustomerID: LOUR62
CustomerPO: Batch # BA199
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Project: **Durant Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/22/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300309-0001	Main Roofs - top ply layer	Black Fibrous Homogeneous	20% Cellulose	65% Non-fibrous (other)	15% Chrysotile
2A 241300309-0002	Main Roofs - top ply layer				Stop Positive (Not Analyzed)
3A 241300309-0003	Main Roofs - top ply layer				Stop Positive (Not Analyzed)
4A 241300309-0004	Main Roofs - top ply layer				Stop Positive (Not Analyzed)
5A 241300309-0005	Main Roofs - top ply layer				Stop Positive (Not Analyzed)
1B 241300309-0006	Main Roofs - pearlite layer				Stop Positive (Not Analyzed)
2B 241300309-0007	Main Roofs - pearlite layer				Stop Positive (Not Analyzed)
3B 241300309-0008	Main Roofs - pearlite layer				Stop Positive (Not Analyzed)

Analyst(s)

Erica Valent (4)

Jennifer Mattern (12)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 09:17:18

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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EMSL Order: 241300309
CustomerID: LOUR62
CustomerPO: Batch # BA199
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Project: **Durant Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/22/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4B 241300309-0009	Main Roofs - pearlite layer				Stop Positive (Not Analyzed)
5B 241300309-0010	Main Roofs - pearlite layer				Stop Positive (Not Analyzed)
1C 241300309-0011	Main Roofs - tar layer (bottom)				Stop Positive (Not Analyzed)
2C 241300309-0012	Main Roofs - tar layer (bottom)				Stop Positive (Not Analyzed)
3C 241300309-0013	Main Roofs - tar layer (bottom)				Stop Positive (Not Analyzed)
4C 241300309-0014	Main Roofs - tar layer (bottom)				Stop Positive (Not Analyzed)
5C 241300309-0015	Main Roofs - tar layer (bottom)				Stop Positive (Not Analyzed)
6A 241300309-0016	Main Roofs - black perimeter/penetrati on flashing	Gray/Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	10% Chrysotile

Analyst(s)

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Gloria V. Oriol, Laboratory Manager
or other approved signatory

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EMSL Order: 241300309
 CustomerID: LOUR62
 CustomerPO: Batch # BA199
 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

 Project: **Durant Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/24/13 10:10 AM
 Analysis Date: 2/4/2013
 Collected: 1/22/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
6B 241300309-0017	Main Roofs - black perimeter/penetrati on flashing				Stop Positive (Not Analyzed)
6C 241300309-0018	Main Roofs - black perimeter/penetrati on flashing				Stop Positive (Not Analyzed)
7A 241300309-0019	South Classrooms Roofs - rolled asphalt (top layer)	Tan/Black Fibrous Homogeneous	10% Synthetic	90% Non-fibrous (other)	None Detected
8A 241300309-0020	South Classrooms Roofs - rolled asphalt (top layer)	Tan/Black Fibrous Homogeneous	12% Synthetic	88% Non-fibrous (other)	None Detected
9A 241300309-0021	South Classrooms Roofs - rolled asphalt (top layer)	Tan/Black Non-Fibrous Heterogeneous	20% Synthetic	80% Non-fibrous (other)	None Detected
7B 241300309-0022	South Classrooms Roofs - felt paper layer	Black Fibrous Homogeneous	75% Glass	25% Non-fibrous (other)	None Detected
8B 241300309-0023	South Classrooms Roofs - felt paper layer	Black Fibrous Homogeneous	75% Glass	25% Non-fibrous (other)	None Detected
9B 241300309-0024	South Classrooms Roofs - felt paper layer	Black Fibrous Heterogeneous	70% Glass	30% Non-fibrous (other)	None Detected

Analyst(s)

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Jennifer Mattern (12)

Gloria V. Oriol, Laboratory Manager
 or other approved signatory

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EMSL Order: 241300309
CustomerID: LOUR62
CustomerPO: Batch # BA199
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Project: **Durant Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/22/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
7C 241300309-0025	South Classrooms Roofs - foam layer	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
8C 241300309-0026	South Classrooms Roofs - foam layer	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
9C 241300309-0027	South Classrooms Roofs - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
7D 241300309-0028	South Classrooms Roofs - ply layer (original roof)	Black Fibrous Homogeneous	20% Cellulose	60% Non-fibrous (other)	20% Chrysotile
8D 241300309-0029	South Classrooms Roofs - ply layer (original roof)				Stop Positive (Not Analyzed)
9D 241300309-0030	South Classrooms Roofs - ply layer (original roof)				Stop Positive (Not Analyzed)
7E 241300309-0031	South Classrooms Roofs - perlite layer				Stop Positive (Not Analyzed)
8E 241300309-0032	South Classrooms Roofs - perlite layer				Stop Positive (Not Analyzed)

Analyst(s)

Erica Valent (4)

Jennifer Mattern (12)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 09:17:18

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300309
CustomerID: LOUR62
CustomerPO: Batch # BA199
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Durant Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/22/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
9E 241300309-0033	South Classrooms Roofs - pearlite layer				Stop Positive (Not Analyzed)
7F 241300309-0034	South Classrooms Roofs - tar oil layer (bottom)				Stop Positive (Not Analyzed)
8F 241300309-0035	South Classrooms Roofs - tar oil layer (bottom)				Stop Positive (Not Analyzed)
9F 241300309-0036	South Classrooms Roofs - tar oil layer (bottom)				Stop Positive (Not Analyzed)
10A 241300309-0037	South Classrooms Roofs - black seam caulk for rolled asphalt	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
10B 241300309-0038	South Classrooms Roofs - black seam caulk for rolled asphalt	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
10C 241300309-0039	South Classrooms Roofs - black seam caulk for rolled asphalt	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
11A 241300309-0040	Foundation - foundation water proofing tar (exterior)	Gray/Black Fibrous Homogeneous		90% Non-fibrous (other)	10% Chrysotile
11B 241300309-0041	Foundation - foundation water proofing tar (exterior)				Stop Positive (Not Analyzed)
11C 241300309-0042	Foundation - foundation water proofing tar (exterior)				Stop Positive (Not Analyzed)

Analyst(s)

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 09:17:18

241300309

Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5976

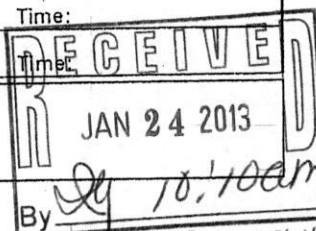


Company: Loureiro Engineering Associates, Inc		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Address: 100 Northwest Dr		Third Party Billing requires written authorization from third party	
City/State/Zip: Plainville, CT 06062		Fax: 860-747-8822	
Report To (Name): Jamie Roche		Email Address: jaroche@loureiro.com	
Telephone: 860-747-6181		Project Name/Number: DURANT BUILDING (Coral School), MYSTIC, CT 18HM3.01	
Please Provide Results: Email		Purchase Order: State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	
PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)		Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: W Apostolides		Samplers Signature: W C	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Top Ply Layer	Main Roofs	1-22-13
2A	"	"	"
3A	"	"	"
4A	"	"	"
5A	"	"	"
1B	Pearlite Layer	"	"
2B	"	"	"
3B	"	"	"
Client Sample # (s): 1A - 11C		Total # of Samples: 42	
Relinquished (Client): W C		Date: 1/23/13	
Received (Lab):		Date:	
Comments/Special Instructions: POSITIVE STOPS			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/22/2008

Page 1 of 3 Pages

1A-5A to 1C-5C Any pos Hit Stop Analysis (group 1)
7A, 9A - 7E, 9F Any pos Hit Stop " group #



79458458
9361



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

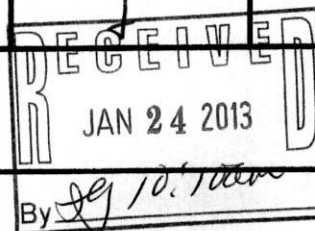
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4B	Pearlite Layer	Main Roofs	1-22-13
5B	" "		
101C	Tar Layer (Bottom)		
102C	" "		
103C	" "		
4C	" "		
5C	" "		
6A	Black Perimeter / Penetration Flashing		
6B	" "		
6C	" "		
7A	Roller Asphalt (Top Layer)	South Classroom Roofs	1-22-13
8A	" "		
9A	" "		
7B	Felt Paper Layer		
8B	" "		
9B	" "		
7C	Foam Layer		
8C	" "		
9C	" "		
7D	Ply Layer (original roof)		
8D	" "		
9D	" "		
7E	Pearlite Layer		
8E	" "		

*Comments/Special Instructions:

POSITIVE STOPS





EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

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

ENTIRE COST PAID BY:

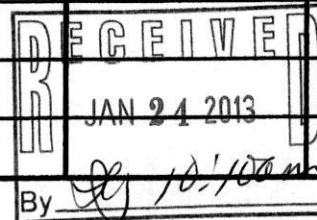
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

[illegible]

***Comments/Special Instructions:**

POSITIVE STOPS



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

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

EMSL Order: 241300347
CustomerID: LOUR62
CustomerPO: Batch # BA203
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic (Durant Bldg) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/28/13 9:20 AM
Analysis Date: 2/5/2013
Collected: 1/25/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300347-0001	Gym/Teachers - grey wood tile adhesive	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
1B 241300347-0002	Gym/Teachers - grey wood tile adhesive	Gray Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
1C 241300347-0003	Gym/Teachers - grey wood tile adhesive	Gray Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
2A 241300347-0004	Gym - red leveling compound	Red Non-Fibrous Heterogeneous	<1% Cellulose <1% Glass <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
2B 241300347-0005	Gym - red leveling compound	Red Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other) <1% Glass	100% Non-fibrous (other)	None Detected
2C 241300347-0006	Gym - red leveling compound	Red Non-Fibrous Heterogeneous	<1% Fibrous (other) <1% Cellulose	100% Non-fibrous (other)	None Detected
3A 241300347-0007	Lower Level - grout for bathroom tile ceramic	White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
3B 241300347-0008	Mid Level - grout for bathroom tile ceramic	White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (28)

William Shedrawy (25)

Todd Patrick (11)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/05/2013 13:22:47

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

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

EMSL Order: 241300347
 CustomerID: LOUR62
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 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
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Plainville, CT 06062Project: **Oral School Mystic (Durant Bldg) 18HM3.01**

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 Received: 01/28/13 9:20 AM
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3C 241300347-0009	Upper Level - 1x1 bathroom grout	White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
4A 241300347-0010	Lower Level - radiator cover mastic	Black Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
4B 241300347-0011	Mid Level - radiator cover mastic	Black Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
4C 241300347-0012	Upper Level - radiator cover mastic	Black Non-Fibrous Heterogeneous	<1% Fibrous (other) <1% Cellulose <1% Glass	100% Non-fibrous (other)	None Detected
5A 241300347-0013	Lower Level - 4"x4" ceramic tile adhesive	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other) <1% Glass	100% Non-fibrous (other)	None Detected
5B 241300347-0014	Lower Level - 4"x4" ceramic tile adhesive	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
5C 241300347-0015	Mid Level - 4"x4" ceramic tile adhesive	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
6A 241300347-0016	Lower Level - grey window glazing (doors + windows)	Gray Non-Fibrous Heterogeneous	<1% Cellulose	92% Non-fibrous (other)	8% Chrysotile

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
6B 241300347-0017	Lower Level - grey window glazing (doors + windows)				Stop Positive (Not Analyzed)
6C 241300347-0018	Mid Level - grey window glazing (doors + windows)				Stop Positive (Not Analyzed)
7A 241300347-0019	Lower Level - counter backsplash adhesive (tan)	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other) <1% Glass	100% Non-fibrous (other)	None Detected
7B 241300347-0020	Lower Level - counter backsplash adhesive (tan)	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
7C 241300347-0021	Lower Level - counter backsplash adhesive (tan)	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
8A 241300347-0022	Teacher's Lounge - white textured paint @ skylight (domed)	Gray/White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
8B 241300347-0023	Teacher's Lounge - white textured paint @ skylight (domed)	Gray/White Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
8C 241300347-0024	Teacher's Lounge - white textured paint @ skylight (domed)	Gray/White Non-Fibrous Heterogeneous	<1% Fibrous (other)	100% Non-fibrous (other)	None Detected
9A 241300347-0025	Teacher's Lounge - pink sink undercoating	Purple Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	94% Non-fibrous (other)	6% Chrysotile
9B 241300347-0026	Teacher's Lounge - pink sink undercoating				Stop Positive (Not Analyzed)
9C 241300347-0027	Teacher's Lounge - pink sink undercoating				Stop Positive (Not Analyzed)
10A 241300347-0028	Mid Level - joint compound	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	<1% Chrysotile
10B 241300347-0029	Mid Level - joint compound	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	<1% Chrysotile
10C 241300347-0030	Mid Level - joint compound	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	<1% Chrysotile
10D 241300347-0031	Upper Level (Dorms) - joint compound	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	<1% Chrysotile

Analyst(s)

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Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/05/2013 13:22:47

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300347
 CustomerID: LOUR62
 CustomerPO: Batch # BA203
 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic (Durant Bldg) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/28/13 9:20 AM
 Analysis Date: 2/5/2013
 Collected: 1/25/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
10E 241300347-0032	Upper Level (Dorms) - joint compound	Tan Non-Fibrous Heterogeneous	<1% Fibrous (other) <1% Cellulose	100% Non-fibrous (other)	<1% Chrysotile
11A 241300347-0033	Rm. 222-6 - 12x12 blue floor tile	Blue Non-Fibrous Heterogeneous	<1% Fibrous (other)	100% Non-fibrous (other)	None Detected
11B 241300347-0034	Rm. 222-6 - 12x12 blue floor tile	Blue Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
11C 241300347-0035	Rm. 222-6 - 12x12 blue floor tile	Blue Non-Fibrous Heterogeneous	<1% Fibrous (other)	100% Non-fibrous (other)	None Detected
12A 241300347-0036	Rm. 222-6 - paper underlayment (under 12x12 blue)	Tan Fibrous Heterogeneous	20% Cellulose 8% Synthetic <1% Fibrous (other)	72% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.					
12B 241300347-0037	Rm. 222-6 - paper underlayment (under 12x12 blue)	Tan Fibrous Heterogeneous	25% Cellulose 10% Synthetic <1% Fibrous (other)	65% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.					
12C 241300347-0038	Rm. 222-6 - paper underlayment (under 12x12 blue)	Tan Fibrous Heterogeneous	15% Cellulose 6% Synthetic <1% Glass	79% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.					

Analyst(s)

Edward Leary (28)

William Shedrawy (25)

Todd Patrick (11)

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 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
13A 241300347-0039	Rm. 232 - white board room divider (core)	White Non-Fibrous Heterogeneous	7% Cellulose <1% Glass	93% Non-fibrous (other)	None Detected
13B 241300347-0040	Rm. 232 - white board room divider (core)	White Non-Fibrous Heterogeneous	6% Cellulose <1% Glass	94% Non-fibrous (other)	None Detected
13C 241300347-0041	Rm. 232 - white board room divider (core)	White Non-Fibrous Heterogeneous	7% Cellulose <1% Glass	93% Non-fibrous (other)	None Detected
14A 241300347-0042	Mid Level (Hall) - tan adhesive for corner bumpers	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
14B 241300347-0043	Mid Level (Hall) - tan adhesive for corner bumpers	Tan Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
14C 241300347-0044	Mid Level (Hall) - tan adhesive for corner bumpers	Tan Non-Fibrous Heterogeneous	<1% Fibrous (other) <1% Glass	100% Non-fibrous (other)	None Detected
15A 241300347-0045	Mid Level (Hall) - yellow adhesive @ plastic wall board	Yellow Non-Fibrous Homogeneous	<1% Fibrous (other) <1% Cellulose	100% Non-fibrous (other)	None Detected
15B 241300347-0046	Mid Level (Hall) - yellow adhesive @ plastic wall board	Yellow Non-Fibrous Homogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
15C 241300347-0047	Mid Level (Hall) - yellow adhesive @ plastic wall board	Yellow Non-Fibrous Heterogeneous	<1% Synthetic <1% Cellulose	100% Non-fibrous (other)	None Detected
16A 241300347-0048	Mid Level (North) - stair tread adhesive @ access ramp	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (other)	None Detected
16B 241300347-0049	Mid Level (North) - stair tread adhesive @ access ramp	Black Non-Fibrous Homogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
16C 241300347-0050	Mid Level (North) - stair tread adhesive @ access ramp	Black Non-Fibrous Heterogeneous	<1% Cellulose <1% Fibrous (other)	100% Non-fibrous (other)	None Detected
17A 241300347-0051	Mid Level - sheetrock tape	Tan/Black Fibrous Heterogeneous	100% Cellulose	0% Non-fibrous (other)	None Detected
17B 241300347-0052	Mid Level - sheetrock tape	Tan Fibrous Heterogeneous	99% Cellulose	1% Non-fibrous (other)	None Detected
17C 241300347-0053	Mid Level - sheetrock tape	Tan Fibrous Heterogeneous	100% Cellulose	0% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
18A 241300347-0054	Mid Level (South) - display case brown panel mastic	Brown Non-Fibrous Homogeneous	2% Cellulose <1% Fibrous (other)	98% Non-fibrous (other)	None Detected
18B 241300347-0055	Mid Level (South) - display case brown panel mastic	Brown Non-Fibrous Heterogeneous	3% Cellulose <1% Fibrous (other)	97% Non-fibrous (other)	None Detected
18C 241300347-0056	Mid Level (South) - display case brown panel mastic	Brown Non-Fibrous Heterogeneous	4% Cellulose	96% Non-fibrous (other)	None Detected
19A 241300347-0057	Upper Level Dorms - 2x3 suspended ceiling tiles (fissure)	Gray/White Fibrous Heterogeneous	50% Min. Wool 30% Cellulose	20% Non-fibrous (other)	None Detected
19B 241300347-0058	Upper Level Dorms - 2x3 suspended ceiling tiles (fissure)	Gray/White Fibrous Heterogeneous	60% Min. Wool 25% Cellulose	15% Non-fibrous (other)	None Detected
19C 241300347-0059	Upper Level Dorms - 2x3 suspended ceiling tiles (fissure)	Gray Fibrous Heterogeneous	55% Min. Wool 35% Cellulose	10% Non-fibrous (other)	None Detected
20A 241300347-0060	Upper Level Mech. Rm. - flex-connectors (black)	Black Fibrous Heterogeneous	50% Glass	50% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>			<u>Asbestos</u>
			%	Fibrous	% Non-Fibrous	% Type
20B 241300347-0061	Upper Level Mech. Rm. - flex-connectors (black)	Black Fibrous Heterogeneous	40%	Glass	60% Non-fibrous (other)	None Detected
20C 241300347-0062	Upper Level Mech. Rm. - flex-connectors (black)	Black Non-Fibrous Heterogeneous	45% <1% <1%	Glass Cellulose Synthetic	55% Non-fibrous (other)	None Detected
21A 241300347-0063	Mid Level (North) - tan linoleum	Gray/Tan Fibrous Heterogeneous	20% 8% 2%	Cellulose Synthetic Glass	70% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.						
21B 241300347-0064	Mid Level (North) - tan linoleum	Gray/Tan Non-Fibrous Heterogeneous	15% 7% <1%	Cellulose Synthetic Glass	78% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.						
21C 241300347-0065	Mid Level (North) - tan linoleum	Gray/Tan Non-Fibrous Heterogeneous	20% 12%	Cellulose Synthetic	68% Non-fibrous (other)	None Detected
This is a composite result of vinyl and backing layers.						
22A 241300347-0066	Lower Level N.W. Mech. - end cap sealant on F.G. TSI	Gray/White Fibrous Heterogeneous	20% <1%	Min. Wool Cellulose	80% Non-fibrous (other)	None Detected
22B 241300347-0067	Lower Level N.W. Mech. - end cap sealant on F.G. TSI	Gray/White Fibrous Heterogeneous	10% <1%	Min. Wool Cellulose	90% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
22C	Lower Level N.W.	Gray/White	20% Min. Wool	80% Non-fibrous (other)	<1% Chrysotile
241300347-0068	Mech. - end cap sealant on F.G. TSI	Non-Fibrous Heterogeneous	<1% Cellulose		

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EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300347

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077

PHONE: (856) 858-4800

FAX: (856) 858-4960

Company : Loureiro Engineering Associates # : LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: Oral School Mystic (Durant Bldg) 18HM3.01			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: Batch # 84203 U.S. State Samples Taken: CT			

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☒ 5 Days ☐ 10 Days

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
---	--	--

☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: W Apostolidis	Samplers Signature: W [Signature]
------------------------------	-----------------------------------

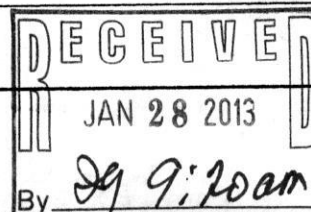
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Grey Wood tile Adhesive Gym/Teachers	Bulk	1/25/13
1B	↓		
1C			
2A	Gym Red Leveling Compound		
2B	↓		
2C			
3A	Grout for Batram Tile Ceramic Lower Level		
3B	↓ Mid Hall Level		

Client Sample # (s): 1A - 22C Total # of Samples: 68

Relinquished (Client): W [Signature] Date: 1/25/13 Time:

Received (Lab): Date: Time:

Comments/Special Instructions:



241300347



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

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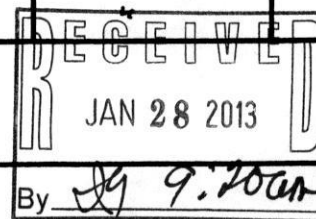
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3C	1x1 Bathroom Grout	upper Level	1-25-13
4A	Radiator Cover Mastic	lower Level	
4B	"	mid Level	
4C	"	upper Level	
5A	4"x4" Ceramic Tile Adhesive	Lower Level	
5B	"	Lower Level	
5C	"	Mid Level	
6A	Grey Window Glazing (Doors + windows)	Lower Level	
6B	"	Lower Level	
6C	"	mid Level	
7A	Counter Backsplash Adhesive (Tan)	Lower Level	
7B	"		
7C	"		
8A	White Textured Paint @ Skylight (Domed)	teacher's lounge	
8B	"		
8C	"		
9A	Pink Sink Undercoating		
9B	"		
9C	"		
10A	Joint Compound	Mid Level	
10B	"	"	
10C	"	"	
10D	"	upper Level (Dorms)	
10E	"		

*Comments/Special Instructions:

POSITIVE STOPS



Page 2 of 4 pages



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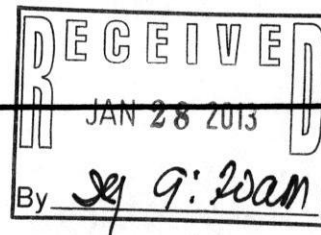
Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
11A	12x12 Blue Floor Tile	Rm. 222-6	1-25-13
11B	" "	↓	↓
11C	" "	↓	↓
12A	Paper Underlayment (under 12x12 Blue)	Rm. 222-6	
12B	" "	↓	↓
12C	" "	↓	↓
13A	White Board Room Divider (core)	Rm. 232	
13B	" "	↓	↓
13C	" "	↓	↓
14A	Tan Adhesive for corner bumpers	Mid Level (Hall)	
14B	" "	↓	↓
14C	" "	↓	↓
15A	Yellow Adhesive @ Plastic wall board		
15B	" "	↓	↓
15C	" "	↓	↓
16A	Stair Tread Adhesive @ access ramp	Mid Level (north)	
16B	" "	↓	↓
16C	" "	↓	↓
17A	Sheetrock TAPE	Mid Level	
17B	" "	↓	↓
17C	" "	↓	↓
18A	Display Case Brown Panel Mastic	Mid Level (south)	
18B	" "	↓	↓
18C	" "	↓	↓

*Comments/Special Instructions:

POSITIVE STOPS

Page 3 of 4 pages



24130034

Controlled Document - Asbestos COC - R5 - 1/11/2011

APPENDIX E

Summary of HBM Survey, Sampling, and Analytical Information Whipple Building

Appendix E
Summary of HBM Survey, Sampling, and Analytical Information
Whipple Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
9 x 9 Lt Brown Floor Tile	+	Throughout	See Below	Historical		
9 x 9 Lt Brown Floor Tile Mastic	+	Throughout	See Below	Historical		
9 x 9 Grey Floor Tile	+	Throughout	See Below	Historical		
9 x 9 Grey Floor Tile Mastic	+	Throughout	See Below	Historical		
9 x 9 Tan dot Floor Tile	+	Throughout	See Below	Historical		
9 x 9 Tan dot Floor Tile Mastic	-	Throughout		Historical		
9 x 9 Brown Floor Tile	+	Throughout	See Below	Historical		
9 x 9 White dot Floor Tile	+	Throughout	See Below	Historical		
9 x 9 White w/Brown Specs Floor Tile	+	Throughout	See Below	Historical		
9 x 9 White w/Brown Specs Floor Tile Mastic	+	Throughout	See Below	Historical		
Mud Fitting	-	156, 24		Historical		
9 x 9 Green Floor Tile	+	Throughout	See Below	Historical		
9 x 9 Green Floor Tile Mastic	+	Throughout	See Below	Historical		
9 x 9 Beige Floor Tile	+	Throughout	See Below	Historical		
9 x 9 Beige Floor Tile Mastic	+	Throughout	See Below	Historical		
2 x 2 Ceiling Tile, type 3(Brown texture, grooved)	-	Floor 1 Hall, 247, 233		Historical		
12 x 12 Beige Floor Tile	-*			Historical		
12 x 12 Beige Floor Tile Mastic	+	Throughout	See Below	Historical		
Glue Daubs, Cork boards	+	Classrooms	26 x 6SF	Historical		\$2,600
2 x 4 Ceiling Tile	-	Rm 22, 155		Historical		
2 x 2 Ceiling Tile, type 5(grey Granular grooved)	-	Basement 24, 229		Historical		
Ceiling/Deck Insulation	-	234, 241		Historical		
2 x 2 Ceiling Tile, type 1(Tan texture, grooved)	-	230, 240, 247		Historical		
2 x 2 Ceiling Tile, type 2(Lt Brown texture, grooved)	-	240		Historical		
2 x 2 Ceiling Tile, type 3(Brown texture, grooved)	-	Throughout		Historical		
2 x 2 Ceiling Tile, type 4(Dk Brown texture, grooved)	-	230		Historical		
2 x 2 Ceiling Tile, type 6(Dk Brown texture, Smooth)	-	Floor 2 Hall		Historical		
Exterior Window and Door Frame Caulk	+	Throughout	2350 LF	Historical		\$12,000
Exterior Window Frame Glazing	+	Throughout	2150 SF	Historical		Included
Grey Asphalt Shingle	-	Roof		1a,b,c		

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Tar Paper under Shingles	-	Roof		2a,b,c		
Black Flex-Duct Connectors	-	2nd Floor		3a,b,c		
Tectum Roof Decking	-	Roof		4a,b,c		
Grout for 1x1 Ceramic Tile	-	ALL Bathrooms		5a,b,c		
Mud-Set for 1x1 Ceramic Tile	-	ALL Bathrooms		6a,b,c		
ACM Floor Tiles & Mastic Total	+	Throughout	19500		480SF Rm 234, 241	\$96,000
Sheetrock Wall	-	Workshops 1 & 2		7a,b,c		
Joint Compound	+	Workshops 1 & 2	500 SF	8a,b,c		\$3,000
White Accordion-Style Room Divider	-	Workshop 1		9a,b,c		
Cardboard in White Accordion-Style Room Divider	-	Workshop 1		10a,b,c		
Sheetrock Tape	-	Workshop 1 & 2		11a,b,c		
12x12 White w/ Blue Speck Floor Tile	-	North Basement		12a,b,c		
Yellow Adhesive for 12x12 White w/ Blue F.T. (over Black Mastic)	-	North Basement		13a,b,c		
12x12 Blue w/ Grey Speck Floor Tile	-	North Basement		14a,b		
Yellow Mastic for 12x12 Blue w/ Grey Speck Floor Tile	-	North Basement		14a,b		
Cork Board Frame Glue	+	Throughout Basements	80 LF	15a,b,c		\$400
White Sink Undercoat	-	Basement Room 8		16a,b,c		
Grey Accordion-Style Room Divider	-	Basement Room 8		17a,b,c		
Black Sink Undercoat	+	Basement Rooms 120,130,121,128	10 SF	18a,b,c		\$100
Mudded Pipe Fitting on 1" water pipes	-	Basement Room 118		19a,b,c		
Brown Glue Residue on Block Walls	+	Basement Rooms 113,127,128,122	96 LF	20a,b,c		\$500
Tan Adhesive for Shower Insert	-	1st Floor near Respite Room		21a,b,c		
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				

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Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Fluorescent Fixtures - ballasts		None Observed				
Mercury Switches		None Observed				
Window AC Unit			1			
						\$114,600
Notes:						
1. See attached laboratory analytical reports.						

**EMSL Analytical, Inc.**

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CustomerID: LOUR62
CustomerPO: Batch # BA194
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/3/2013
Collected: 1/21/2013

Project: **Whipple Building (Oral School, Mystic, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos	
			% Fibrous	% Non-Fibrous	% Type	
1A 241300306-0001	Main Roofs - grey asphalt shingle (top layer)	Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (other)		None Detected
1B 241300306-0002	Main Roofs - grey asphalt shingle (top layer)	Gray/Black Fibrous Heterogeneous	5% Glass	95% Non-fibrous (other)		None Detected
1C 241300306-0003	Main Roofs - grey asphalt shingle (top layer)	Gray/Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)		None Detected
2A 241300306-0004	Main Roofs - tar paper (under shingle)	Black Fibrous Heterogeneous	3% Glass 2% Cellulose	95% Non-fibrous (other)		None Detected
2B 241300306-0005	Main Roofs - tar paper (under shingle)	Black Fibrous Heterogeneous	4% Glass 3% Cellulose	93% Non-fibrous (other)		None Detected
2C 241300306-0006	Main Roofs - tar paper (under shingle)	Black Fibrous Heterogeneous	5% Glass 2% Cellulose	93% Non-fibrous (other)		None Detected
4A 241300306-0007	Main Roofs - tectum roof decking (bottom layer)	Gray/White Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)		None Detected
4B 241300306-0008	Main Roofs - tectum roof decking (bottom layer)	Gray/White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (other)		None Detected

Analyst(s)

Brittany Brown (41)

Christopher Mercer (19)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
4C 241300306-0009	Main Roofs - tectum roof decking (bottom layer)	Gray/White Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (other)	None Detected
3A 241300306-0010	2nd Floor - black flex-connectors @ HVAC	Black Fibrous Homogeneous	15% Glass 3% Cellulose	82% Non-fibrous (other)	None Detected
3B 241300306-0011	2nd Floor - black flex-connectors @ HVAC	Black Fibrous Homogeneous	5% Glass 3% Cellulose	92% Non-fibrous (other)	None Detected
3C 241300306-0012	2nd Floor - black flex-connectors @ HVAC	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (other)	None Detected
5A 241300306-0013	Health Center Bathroom - grout for 1"x1" ceramic tile (1st floor)	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
5B 241300306-0014	Girl's Room - grout for 1"x1" ceramic tile (1st floor)	Gray Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
5C 241300306-0015	Boy's Room - grout for 1"x1" ceramic tile (1st floor)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
6A 241300306-0016	Health Center Bathroom - mud set for 1"x1" ceramic tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
6B 241300306-0017	Girl's Room - mud set for 1"x1" ceramic tile	Gray Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
6C 241300306-0018	Boy's Room - mud set for 1"x1" ceramic tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
7A 241300306-0019	1st Floor Workshop #1 - sheetrock wall	White Fibrous Homogeneous	15% Cellulose 2% Glass	83% Non-fibrous (other)	None Detected
7B 241300306-0020	1st Floor Workshop #1 - sheetrock wall	White Fibrous Homogeneous	15% Cellulose 3% Glass	82% Non-fibrous (other)	None Detected
7C 241300306-0021	1st Floor Workshop #2 - sheetrock wall	White Fibrous Homogeneous	15% Cellulose 3% Glass	82% Non-fibrous (other)	None Detected
8A 241300306-0022	1st Floor Workshop #1 - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
8B 241300306-0023	1st Floor Workshop #1 - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
8C 241300306-0024	1st Floor Workshop #2 - joint compound	Tan Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
The sample group is not homogeneous					
9A 241300306-0025	1st Floor Workshop #1 - white accordion-style room divider	Tan/White Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (other)	None Detected
9B 241300306-0026	1st Floor Workshop #1 - white accordion-style room divider	Tan/White Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (other)	None Detected
9C 241300306-0027	1st Floor Workshop #1 - white accordion-style room divider	Tan/White Fibrous Homogeneous	25% Synthetic	75% Non-fibrous (other)	None Detected
10A 241300306-0028	1st Floor Workshop #1 - cardboard inside accordion divider	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
10B 241300306-0029	1st Floor Workshop #1 - cardboard inside accordion divider	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
10C 241300306-0030	1st Floor Workshop #1 - cardboard inside accordion divider	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
11A 241300306-0031	1st Floor Workshop #1 - sheetrock tape	Tan Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
11B-Sheetrock Tape 241300306-0032	1st Floor Workshop #1 - sheetrock tape	Tan Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
11B-Joint Compound 241300306-0032A	1st Floor Workshop #1 - sheetrock tape	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	<1% Chrysotile
11C 241300306-0033	1st Floor Workshop #2 - sheetrock tape	White Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
12A 241300306-0034	Basement North - 12x12 white w/blue speck floor tile	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
12B 241300306-0035	Basement North - 12x12 white w/blue speck floor tile	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
12C 241300306-0036	Basement North - 12x12 white w/blue speck floor tile	White/Blue Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
13A 241300306-0037	Basement North - yellow adhesive for 12x12 f.t. (over black mastic)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
13B 241300306-0038	Basement North - yellow adhesive for 12x12 f.t. (over black mastic)	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
13C 241300306-0039	Basement North - yellow adhesive for 12x12 f.t. (over black mastic)	Black/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
14A-Floor Tile 241300306-0040	Basement North - 12x12 blue w/grey speck floor tile	Gray/Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
14A-Mastic 241300306-0040A	Basement North - 12x12 blue w/grey speck floor tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
14B-Floor Tile 241300306-0041	Basement North - 12x12 blue w/grey speck floor tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
14B-Mastic 241300306-0041A	Basement North - 12x12 blue w/grey speck floor tile	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
15A 241300306-0042	Throughout Basement - cork board frame glue (brown)	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected

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Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Whipple Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/3/2013
Collected: 1/21/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
15B 241300306-0043	Throughout Basement - cork board frame glue (brown)	Brown Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
The sample group is not homogeneous					
15C 241300306-0044	Throughout Basement - cork board frame glue (brown)				Stop Positive (Not Analyzed)
16A 241300306-0045	Basement Room 8 - white sink undercoat	White Fibrous Homogeneous	7% Cellulose	93% Non-fibrous (other)	None Detected
16B 241300306-0046	Basement Room 8 - white sink undercoat	White Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
16C 241300306-0047	Basement Room 8 - white sink undercoat	White Fibrous Homogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected
17A 241300306-0048	Basement Room 8 - grey accordion- style room divider	Brown/Gray Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
17B 241300306-0049	Basement Room 8 - grey accordion- style room divider	Gray/Tan Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (other)	None Detected

Analyst(s)

Brittany Brown (41)

Christopher Mercer (19)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 09:00:40

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300306
 CustomerID: LOUR62
 CustomerPO: Batch # BA194
 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>	
			% Fibrous	% Non-Fibrous	% Type	
17C 241300306-0050	Basement Room 8 - grey accordion- style room divider	Brown/Gray Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected	
18A 241300306-0051	Basement Room 121 - black sink undercoat	Black Fibrous Homogeneous	3% Cellulose	94% Non-fibrous (other)	3% Chrysotile	
18B 241300306-0052	Basement Room 120 - black sink undercoat				Stop Positive (Not Analyzed)	
18C 241300306-0053	Basement Room 130 - black sink undercoat				Stop Positive (Not Analyzed)	
19A 241300306-0054	Room 118 - mudded fitting for 1" water pipes	Gray Fibrous Homogeneous	20% Min. Wool	80% Non-fibrous (other)	None Detected	
19B 241300306-0055	Room 118 - mudded fitting for 1" water pipes	White Fibrous Homogeneous	20% Min. Wool	80% Non-fibrous (other)	None Detected	
19C 241300306-0056	Room 118 - mudded fitting for 1" water pipes	Gray/White Fibrous Homogeneous	30% Min. Wool	70% Non-fibrous (other)	None Detected	
20A 241300306-0057	Basement Room 113 - residual wall glue (brown) on block	Brown/Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	10% Chrysotile	

Analyst(s)

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 or other approved signatory

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Initial report from 02/04/2013 09:00:40

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
20B 241300306-0058	Basement Room 127 - residual wall glue (brown) on block				Stop Positive (Not Analyzed)
20C 241300306-0059	Basement Room 128 - residual wall glue (brown) on block				Stop Positive (Not Analyzed)
21A 241300306-0060	1st Floor near Respite Room - tan adhesive for shower insert	Tan Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
21B 241300306-0061	1st Floor near Respite Room - tan adhesive for shower insert	Tan Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
21C 241300306-0062	1st Floor near Respite Room - tan adhesive for shower insert	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

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Initial report from 02/04/2013 09:00:40

24130030

Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5976



Company: Loureiro Engineering Associates, Inc

Address: 100 Northwest Dr

City/State/Zip: Plainville, CT 06062

Report To (Name): Jamie Roche

Fax: 860-747-8822

Telephone: 860-747-6181

Email Address: jaroche@loureiro.com

Project Name/Number: WHIPPLE BUILDING (Oral School, Mystic, CT) 18HM3-01

Please Provide Results: Email Purchase Order: State Samples Taken: CT Connecticut Samples: ☒ Commercial ☐ Residential

Turnaround Time (TAT) Options* - Please Check
☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☒ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air ☐ Check if samples are from NY☐ NIOSH 7400☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)

☒ PLM EPA 600/R-93/116 (<1%)☐ PLM EPA NOB (<1%)

Point Count

☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric

☐ 400 (<0.25%) ☐ 1000 (<0.1%)☐ NYS 198.1 (friable in NY)☐ NYS 198.6 NOB (non-friable-NY)☐ NIOSH 9002 (<1%)TEM - Air ☐ 4-4.5hr TAT (AHERA only)☐ AHERA 40 CFR, Part 763☐ NIOSH 7402☐ EPA Level II☐ ISO 10312

TEM - Bulk

☐ TEM EPA NOB☐ NYS NOB 198.4 (non-friable-NY)☐ Chatfield SOP☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM - Water: EPA 100.2

Fibers >10µm ☐ Waste ☐ DrinkingAll Fiber Sizes ☐ Waste ☐ Drinking

TEM - Dust

☐ Microvac - ASTM D 5755☐ Wipe - ASTM D6480☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite

☐ PLM CARB 435 - A (0.25% sensitivity)☐ PLM CARB 435 - B (0.1% sensitivity)☐ TEM CARB 435 - B (0.1% sensitivity)☐ TEM CARB 435 - C (0.01% sensitivity)☐ EPA Protocol (Semi-Quantitative)☐ EPA Protocol (Quantitative)

Other:

☐☒ Check For Positive Stop - Clearly Identify Homogenous GroupFilter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Samplers Name: W Apostolidis

Samplers Signature: W Apostolidis

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Grey Asphalt Shingle (Top Layer)	Main Roofs	1-21-13
1B	"		
1C	"		
2A	Tar Paper (under shingle)		
2B	"		
2C	"		
4A	Tectum Roof Decking (Bottom Layer)		
4B	"		

Client Sample # (s): 1A - 21C Total # of Samples: 62

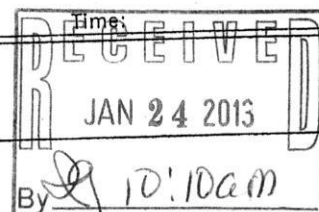
Relinquished (Client): W Apostolidis Date: 1/23/13

Time:

Received (Lab): Date:

Comments/Special Instructions:

POSITIVE STOPS



Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 4 Pages

Any pos hit in #1A-C don't analyze 2A-4C

Any pos hit in #'s 2A-C don't analyze 3A-4C etc

9047945 84589361



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

241300306
Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

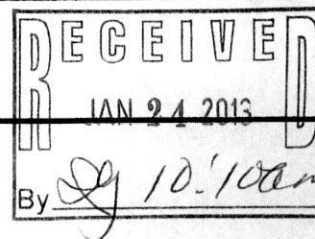
EMSL ANALYTICAL, INC
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4C	Tectum Roof Decking (Bottom Layer)	Main Roofs	1-21-13
3A	Black Flex-Connectors @ HVAC	2nd Floor	
3B	" "		
3C	" "		
5A	Grout for 1"x1" Ceramic Tile (1st Floor)	Health Center Bathroom	
5B	" "	Girls Room	
5C	" "	Boys Room	
6A	Mud Set for 1"x1" Ceramic Tile	Health Center Bathroom	
6B	" "	Girls Room	
6C	" "	Boys Room	
7A	Sheetrock wall	1st Floor Workshop #1	
7B	" "	" "	
7C	" "	1st Floor Workshop #2	
8A	Joint Compound	1st Floor Workshop #1	
8B	" "	" "	
8C	" "	1st Floor Workshop #2	
9A	White Accordion-Style Room Divider	1st Floor Workshop #1	
9B	" "	" "	
9C	" "	" "	
10A	Cardboard inside Accordion Divider	" "	
10B	" "	" "	
10C	" "	" "	
11A	Sheetrock Tape	1st Floor Workshop #1	
11B	" "	" "	

*Comments/Special Instructions:

POSITIVE STOPS





EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

241300306
Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

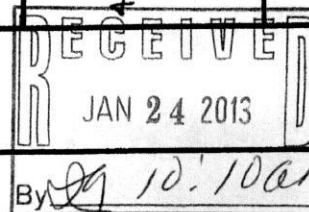
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Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
11C	Sheetrock Tape	1st Floor Workshop #2	1-21-13
12A	12x12 white w/Blue speck Floor Tile	Basement North	
12B	" "		
12C	" "		
13A	Yellow Adhesive for 12x12 F.T. (over black mastic)		
13B	" "		
13C	" "		
14A	12x12 Blue w/Grey Speck Floor Tile.	Basement North	
14B	" "	" "	
15A	Cork Board Frame Glue (Brown)	Throughout Basement	
15B	" "		
15C	" "		
16A	White Sink Undercoat	Basement Room 8	
16B	" "		
16C	" "		
17A	Grey Accordion-Style Room Divider	Basement Room 8	
17B	" "		
17C	" "		
18A	Black Sink Undercoat	Basement Room 121	
18B	" "	Basement Room 120	
18C	" "	Basement Room 130	
19A	Mudded Fitting for 1" water pipes	Room 118	
19B	" "		
19C	" "		

*Comments/Special Instructions:

POSITIVE STOPS



241300306



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

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

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4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
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FAX: (203) 284-5948

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

[illegible]

APPENDIX F

Summary of HBM Survey, Sampling, and Analytical Information Pratt Building

Appendix F
Summary of HBM Survey, Sampling, and Analytical Information
Pratt Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
SAF	-	Boiler Room, Filter Room		Historical		
Cement on FG	-	Valves, Ht Exchanger		Historical		
Mud Fittings	-	Boiler Room, Filter Room		Historical		
Duct Insulation Adhesive	-	Filter Room		Historical		
12" x 12" White Floor Tile	+	Laundry Room		Historical	2005	
12" x 12" Floor Tile Mastic	-	Laundry Room		Historical		
2 x 4 Ceiling Tile, Type 1	-	Boys Locker Rm		Historical		
Cove Base Mastic	-	Main Hall		Historical		
Red Leveling Compound	-	Atrium Near Auditorium		Historical		
Carpet Mastic	-	Atrium Near Auditorium		Historical		
1 x 1 Ceiling Tile	-	Auditorium		Historical		
Paper/Insulation	-	Behind Wainscoting in Aud.		Historical		
Glue Daubs, 1x1 Ceiling Tiles	-	Auditorium		Historical		
Mud Fittings	-	Roof Drain, Auditorium		Historical		
Stage Curtain, Yellow	-	Auditorium		Historical		
Stage Curtain, Tan	-	Auditorium		Historical		
Plaster, Ceiling	-	Men's Room		Historical		
Textured Ceiling	-	Atrium		Historical		
2 x 4 Ceiling Tile, Type 2	-	Near Gym		Historical		
Mud Fittings	-	Main Hall		Historical		
12" x 12" White w/Brown Floor Tile	+	Bowling Alley		Historical	2005	
12" x 12" White w/Brown Floor Tile mastic	-	Bowling Alley		Historical		
Cement on FG	-	Roof Drain		Historical		
Carpet Mastic	-	Auditorium		Historical		
Carpet Mastic	-	Girls locker room Office		Historical		
Cove Base Mastic	-	Girls locker room Office		Historical		
Glue Daubs	+	On Access panels		Historical	2005	
Gravel Roof Top Ply Layer	-	Roof		1a,2a,3a		
Gravel Roof Fiberboard Layer	-	Roof		1b,2b,3b		

Appendix F
Summary of HBM Survey, Sampling, and Analytical Information
Pratt Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Gravel Roof Craft Paper Layer	-	Roof		1c,2c,3c		
Gravel Roof Foam Layer	-	Roof		1d,2d,3d		
Gravel Roof Craft Paper Layer	-	Roof		1e,2e,3e		
Gravel Roof Tar Ply Layer (Bottom)	-	Roof		1f,2f,3f		
Perimeter Flashing Gravel Roof	-	Roof		4a,b,c		
Penetration Flashing Gravel Roof	-	Roof		5a,b,c		
Pitch Pockets	-	Roof		6a,b,c		
Gray Asphalt Roof Gray Ply Layer	-	Roof		7a-11a		
Gray Asphalt Roof Perlite Felt Layer	-	Roof		7b-11b		
Gray Asphalt Roof Craft Paper Layer	-	Roof		7c-11c		
Gray Asphalt Roof Yellow Foam Layer	-	Roof		7d-11d		
Gray Asphalt Roof Craft Paper Layer	-	Roof		7e-11e		
Gray Asphalt Roof Yellow Foam Layer	-	Roof		7f-11f		
Gray Asphalt Roof Craft Paper Layer on Deck	-	Roof		7g-11g		
Penetration/Perimeter Flashing	-	Roof		12a,b,c		
Black/Expansion Joint Patch	-	Roof		13a,b,c		
Exterior Building/Door Frame Caulk	-	Exterior		1a,b,c		
Grey Foundation Cement	+	Exterior	Unknown	2a,b,c		50000++
Black Foundation Paper	+	Exterior	Unknown	3a,b,c		Included
Brown Mastic Gym Floor	-	Gym		4a,b,c		
Sound Proofing Behind Panels	-	Auditorium		5a,b,c		
Ceramic Tile Grout	-	Bathroom/Lockers		6a,b,c		
Dark Grey Interior Door/Window Frame Caulk	-	Interior		7a,b,c		
12"x12" Light Blue Mottled Floor Tile	-	Laundry Room		8a,b,c		
Yellow Mastic for 12" Dark Blue Mottled Tile	-	Laundry Room		9a,b,c		
12'x12' Beige Mottled Floor Tile	-	Lobby		10a,b,c		
Yellow Mastic for Lobby Floor Tile	-	Lobby		11a,b,c		
12"x12" Dark Blue Mottled Floor Tile	-	Lobby		12a,b,c		
Expansion Joint in Floor	-	Sprinkler Room		13a,b,c		

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Summary of HBM Survey, Sampling, and Analytical Information
Pratt Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Flex Connector	-	Boiler Room		14a,b,c		
Fiber Layer Under Wood Floor	-	Hand Ball Court		15a,b,c		
Tan Adhesive Under Rubber Floor	-	Weight Room		16a,b,c		
Gaskets	Assumed	Boiler Room				
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				
Fluorescent Fixtures - ballasts		None Observed				
Mercury Switches		None Observed				
						\$50,000
Notes:						
1. See attached laboratory analytical reports.						

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			%	Fibrous	% Type
1A 241300308-0001	Gravel Roof - top ply layer	Black Fibrous Heterogeneous	6% 2%	Glass Cellulose	92% Non-fibrous (other) None Detected
2A 241300308-0002	Gravel Roof - top ply layer	Black Fibrous Heterogeneous	6% 2%	Glass Cellulose	92% Non-fibrous (other) None Detected
3A 241300308-0003	Gravel Roof - top ply layer	Black Fibrous Heterogeneous	2% 8%	Cellulose Glass	90% Non-fibrous (other) None Detected
1B 241300308-0004	Gravel Roof - fiberboard	Gray Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other) None Detected
2B 241300308-0005	Gravel Roof - fiberboard	Gray Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other) None Detected
3B 241300308-0006	Gravel Roof - fiberboard	Gray Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other) None Detected
1C 241300308-0007	Gravel Roof - craft paper	Brown/Tan Fibrous Heterogeneous	75% 2%	Cellulose Glass	23% Non-fibrous (other) None Detected
2C 241300308-0008	Gravel Roof - craft paper	Brown/Tan Fibrous Heterogeneous	75% 2%	Cellulose Glass	23% Non-fibrous (other) None Detected

Analyst(s)

Nancy Stalter (23)

Thomas Schwab (45)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Initial report from 01/30/2013 09:24:43

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3C 241300308-0009	Gravel Roof - craft paper	Brown/Black Fibrous Heterogeneous	75% Cellulose 3% Glass	22% Non-fibrous (other)	None Detected
1D 241300308-0010	Gravel Roof - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
2D 241300308-0011	Gravel Roof - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3D 241300308-0012	Gravel Roof - foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1E 241300308-0013	Gravel Roof - craft paper	Brown/Tan Non-Fibrous Heterogeneous	75% Cellulose 3% Glass	22% Non-fibrous (other)	None Detected
2E 241300308-0014	Gravel Roof - craft paper	Brown/Tan Fibrous Heterogeneous	75% Cellulose 3% Glass	22% Non-fibrous (other)	None Detected
3E 241300308-0015	Gravel Roof - craft paper	Brown/Tan Fibrous Heterogeneous	75% Cellulose 3% Glass	22% Non-fibrous (other)	None Detected
1F 241300308-0016	Gravel Roof - tar ply on metal deck (bottom layer)	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected

Analyst(s)

Nancy Stalter (23)

Thomas Schwab (45)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Initial report from 01/30/2013 09:24:43

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300308
CustomerID: LOUR62
CustomerPO: Batch # BA198
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Pratt Building (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 1/30/2013
Collected: 1/18/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
2F 241300308-0017	Gravel Roof - tar ply on metal deck (bottom layer)	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
3F 241300308-0018	Gravel Roof - tar ply on metal deck (bottom layer)	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
4A 241300308-0019	Gravel Roof - tar ply @ perimeter flashing	Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
4B 241300308-0020	Gravel Roof - tar ply @ perimeter flashing	Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
4C 241300308-0021	Gravel Roof - tar ply @ perimeter flashing	Black Fibrous Heterogeneous	10% Glass	90% Non-fibrous (other)	None Detected
5A 241300308-0022	Gravel Roof - tar ply @ penetration flashing	Black Fibrous Heterogeneous	5% Glass 2% Cellulose	93% Non-fibrous (other)	None Detected
5B 241300308-0023	Gravel Roof - tar ply @ penetration flashing	Black Fibrous Heterogeneous	5% Glass 3% Cellulose	92% Non-fibrous (other)	None Detected
5C 241300308-0024	Gravel Roof - tar ply @ penetration flashing	Black Fibrous Heterogeneous	3% Cellulose 2% Glass	95% Non-fibrous (other)	None Detected

Analyst(s)

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
6A 241300308-0025	Upper Rolled Asphalt Roof - pitch pockets	Black Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
6B 241300308-0026	Upper Rolled Asphalt Roof - pitch pockets	Black Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
6C 241300308-0027	Upper Rolled Asphalt Roof - pitch pockets	Black Non-Fibrous Heterogeneous	2% Cellulose	98% Non-fibrous (other)	None Detected
7A 241300308-0028	Upper Rolled Asphalt Roof - grey asphalt ply (top layer)	Black Fibrous Heterogeneous	4% Glass 3% Cellulose	93% Non-fibrous (other)	None Detected
8A 241300308-0029	Upper Rolled Asphalt Roof - grey asphalt ply (top layer)	Black Fibrous Heterogeneous	3% Glass 2% Cellulose	95% Non-fibrous (other)	None Detected
9A 241300308-0030	Upper Rolled Asphalt Roof - grey asphalt ply (top layer)	Black Fibrous Heterogeneous	3% Glass 2% Cellulose	95% Non-fibrous (other)	None Detected
10A 241300308-0031	Lower Rolled Asphalt Roof - grey asphalt ply (top layer)	White/Black Fibrous Heterogeneous	5% Synthetic 3% Glass	92% Non-fibrous (other)	None Detected

Analyst(s)

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Thomas Schwab (45)

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 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
11A 241300308-0032	Lower Rolled Asphalt Roof - grey asphalt ply (top layer)	Black Fibrous Heterogeneous	5% Synthetic 5% Cellulose	90% Non-fibrous (other)	None Detected
7B 241300308-0033	Upper Rolled Asphalt Roof - perlite layer	Gray Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	None Detected
8B 241300308-0034	Upper Rolled Asphalt Roof - perlite layer	Gray Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	None Detected
9B 241300308-0035	Upper Rolled Asphalt Roof - perlite layer	Gray Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	None Detected
10B 241300308-0036	Lower Rolled Asphalt Roof - perlite layer	Gray Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	None Detected
11B 241300308-0037	Lower Rolled Asphalt Roof - perlite layer	Gray Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	None Detected
7C 241300308-0038	Upper Rolled Asphalt Roof - craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected
8C 241300308-0039	Upper Rolled Asphalt Roof - craft paper layer	Gray Non-Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected

Analyst(s)

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Thomas Schwab (45)

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 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
9C 241300308-0040	Upper Rolled Asphalt Roof - craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected
10C 241300308-0041	Lower Rolled Asphalt Roof - craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected
11C 241300308-0042	Lower Rolled Asphalt Roof - craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected
7D 241300308-0043	Upper Rolled Asphalt Roof - yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8D 241300308-0044	Upper Rolled Asphalt Roof - yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
9D 241300308-0045	Upper Rolled Asphalt Roof - yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
10D 241300308-0046	Lower Rolled Asphalt Roof - yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
11D 241300308-0047	Lower Rolled Asphalt Roof - yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Thomas Schwab (45)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Plainville, CT 06062Project: **Pratt Building (Oral School, Mystic, CT) 18HM3.01**

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Fax: (860) 747-8822
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			%	Type	% Type
7E 241300308-0048	Upper Rolled Asphalt Roof - secondary craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected
8E 241300308-0049	Upper Rolled Asphalt Roof - secondary craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected
9E 241300308-0050	Upper Rolled Asphalt Roof - secondary craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected
10E 241300308-0051	Lower Rolled Asphalt Roof - secondary craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected
11E 241300308-0052	Lower Rolled Asphalt Roof - secondary craft paper layer	Gray Fibrous Heterogeneous	85% Cellulose 5% Glass	10% Non-fibrous (other)	None Detected
7F 241300308-0053	Upper Rolled Asphalt Roof - secondary yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
8F 241300308-0054	Upper Rolled Asphalt Roof - secondary yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
9F 241300308-0055	Upper Rolled Asphalt Roof - secondary yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
10F 241300308-0056	Lower Rolled Asphalt Roof - secondary yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
11F 241300308-0057	Lower Rolled Asphalt Roof - secondary yellow foam layer	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
7G 241300308-0058	Upper Rolled Asphalt Roof - craft paper on metal deck	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected
8G 241300308-0059	Upper Rolled Asphalt Roof - craft paper on metal deck	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected
9G 241300308-0060	Upper Rolled Asphalt Roof - craft paper on metal deck	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected
10G 241300308-0061	Lower Rolled Asphalt Roof - craft paper on metal deck	Gray Fibrous Heterogeneous	85% Cellulose 3% Glass	12% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			%	Fibrous	% Type
11G 241300308-0062	Lower Rolled Asphalt Roof - craft paper on metal deck	Gray Fibrous Heterogeneous	85% 3%	Cellulose Glass	12% Non-fibrous (other) None Detected
12A 241300308-0063	Upper Rolled Asphalt Roof - penetration/perimeter expansion joint	Black Fibrous Heterogeneous	10% 2%	Cellulose Glass	88% Non-fibrous (other) None Detected
12B 241300308-0064	Upper Rolled Asphalt Roof - penetration/perimeter expansion joint	Black Fibrous Heterogeneous	12% 3%	Cellulose Glass	85% Non-fibrous (other) None Detected
12C 241300308-0065	Upper Rolled Asphalt Roof - penetration/perimeter expansion joint	Black Fibrous Heterogeneous	10% 5%	Cellulose Glass	85% Non-fibrous (other) None Detected
13A 241300308-0066	Upper Rolled Asphalt Roof - expansion seam patch	Black Fibrous Heterogeneous	15% 6%	Cellulose Glass	79% Non-fibrous (other) None Detected
13B 241300308-0067	Upper Rolled Asphalt Roof - expansion seam patch	Black Fibrous Heterogeneous	15% 8%	Cellulose Glass	77% Non-fibrous (other) None Detected
13C 241300308-0068	Upper Rolled Asphalt Roof - expansion seam patch	Black Fibrous Heterogeneous	15% 5%	Cellulose Glass	80% Non-fibrous (other) None Detected

Analyst(s)

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241300308



Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

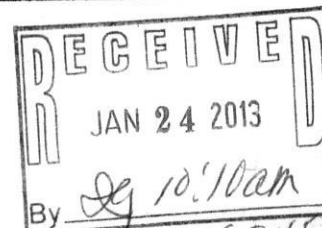
Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5978

Company: Loureiro Engineering Associates, Inc		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party	
Address: 100 Northwest Dr			
City/State/Zip: Plainville, CT 06062		Fax: 860-747-8822	
Report To (Name): Jamie Roche		Email Address: jaroche@loureiro.com	
Telephone: 860-747-6181			
Project Name/Number: PRATT BUILDING (Ora School, Mystic, CT) 18HM3.01			
Please Provide Results: Email		Purchase Order: State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input checked="" type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only)	
<input type="checkbox"/> NIOSH 7400		<input type="checkbox"/> AHERA 40 CFR, Part 763	
<input type="checkbox"/> w/ OSHA 8hr. TWA		<input type="checkbox"/> NIOSH 7402	
PLM - Bulk (reporting limit)		<input type="checkbox"/> EPA Level II	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)		<input type="checkbox"/> ISO 10312	
<input type="checkbox"/> PLM EPA NOB (<1%)		TEM - Bulk	
Point Count		<input type="checkbox"/> TEM EPA NOB	
<input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)	
Point Count w/Gravimetric		<input type="checkbox"/> Chatfield SOP	
<input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.6	
<input type="checkbox"/> NYS 198.1 (friable in NY)		TEM - Water: EPA 100.2	
<input type="checkbox"/> NYS 198.6 NOB (non-friable-NY)		Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
<input type="checkbox"/> NIOSH 9002 (<1%)		All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: W Apostolidis		Samplers Signature: W	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	TOP PLY Layer	Gravel Roof	1-18-13
2A	"		
3A	"		
1B	Fiberboard		
2B	"		
3B	"		
1C	Craft Paper		
2C	"		
Client Sample # (s): 1A - 13C		Total # of Samples: 68	
Relinquished (Client): W		Date: 1/23/13 Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions: POSITIVE STOPS			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 4 Pages

Any pos. hit in group 1 stop analysis
Any pos. hit in group II stop analysis



JAP 794584589361



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241300308
Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

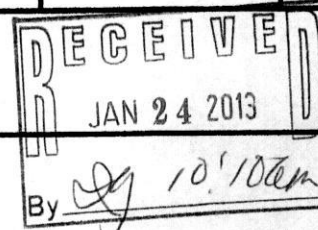
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3C	Craft Paper	Gravel Roof	1-18-13
1D	Foam Layer		
2D	" "		
3D	" "		
1E	Craft Paper		
2E	" "		
3E	" "		
1F	Tar Ply on Metal Deck (Bottom Layer)		
2F	" "		
3F	" "		
4A	Tar Ply @ Perimeter Flashing		
4B	" "		
4C	" "		
5A	Tar Ply @ Penetration Flashing		
5B	" "		
5C	" "		
6A	Pitch Pockets	upper rolled asphalt roof	1-18-13
6B	" "	"	
6C	" "	"	
7A	Grey Asphalt Ply (Top Layer)	upper rolled asphalt roof	
8A	" "	"	
9A	" "	"	
10A	" "	lower rolled asphalt roof	
11A	" "	"	

*Comments/Special Instructions:

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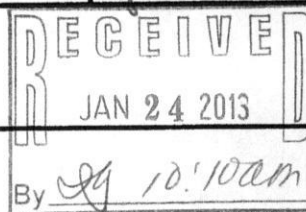
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Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
7B	Perlite Layer	upper rolled asphalt roof	1-18-13
8B	" "	"	
9B	" "	"	
10B	" "	lower rolled asphalt roof	
11B	" "	"	
7C	Craft Paper Layer	upper rolled asphalt roof	
8C	" "	"	
9C	" "	"	
10C	" "	lower rolled asphalt roof	
11C	" "	"	
7D	Yellow Foam Layer	upper rolled asphalt roof	
8D	" "	"	
9D	" "	"	
10D	" "	lower rolled asphalt roof	
11D	" "	"	
7E	Secondary Craft Paper Layer	upper rolled asphalt roof	
8E	" "	"	
9E	" "	"	
10E	" "	lower rolled asphalt roof	
11E	" "	"	
7F	Secondary Yellow Foam Layer	upper rolled asphalt roof	
8F	" "	"	
9F	" "	"	
10F	" "	lower rolled asphalt roof	

*Comments/Special Instructions:

POSITIVE STOPS



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Page 4 of 4 pages

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Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic (Pratt Bldg) 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/28/13 9:20 AM
 Analysis Date: 2/4/2013
 Collected: 1/25/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/25/13 1A 241300348-0001	Ext Grey Bldg/DFC	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/25/13 1B 241300348-0002	Ext Grey Bldg/DFC	Gray/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/25/13 1C 241300348-0003	Ext Grey Bldg/DFC	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/25/13 2A 241300348-0004	Ext Grey Foundation Cement for Paper	Gray/Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	10% Chrysotile
1/25/13 2B 241300348-0005	Ext Grey Foundation Cement for Paper				Stop Positive (Not Analyzed)
1/25/13 2C 241300348-0006	Ext Grey Foundation Cement for Paper				Stop Positive (Not Analyzed)
1/25/13 3A 241300348-0007	Ext Black Foundation Paper	Black Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
1/25/13 3B 241300348-0008	Ext Black Foundation Paper	Black Fibrous Heterogeneous	15% Cellulose	77% Non-fibrous (other)	8% Chrysotile

The sample group is not homogeneous

Analyst(s)

Frank Dicrescenzo (14)

Jennifer Mattero (31)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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			% Fibrous	% Non-Fibrous	% Type
1/25/13 3C 241300348-0009	Ext Black Foundation Paper				Stop Positive (Not Analyzed)
1/25/13 4A 241300348-0010	Gym Floor - brown mastic-gummy underlayment	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 4B 241300348-0011	Gym Floor - brown mastic-gummy underlayment	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 4C 241300348-0012	Gym Floor - brown mastic-gummy underlayment	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/25/13 5A 241300348-0013	Auditorium - sound proofing behind wood panels	Gray Fibrous Homogeneous	90% Glass	10% Non-fibrous (other)	None Detected
1/25/13 5B 241300348-0014	Auditorium - sound proofing behind wood panels	Gray Fibrous Homogeneous	90% Glass	10% Non-fibrous (other)	None Detected
1/25/13 5C 241300348-0015	Auditorium - sound proofing behind wood panels	Black Fibrous Homogeneous	90% Glass	10% Non-fibrous (other)	None Detected
1/25/13 6A 241300348-0016	Bathrooms - 1x1 ceramic tile grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/25/13 6B 241300348-0017	Bathrooms - 1x1 ceramic tile grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 6C 241300348-0018	Bathrooms - 1x1 ceramic tile grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 7A 241300348-0019	Interior - dark grey window + door frame caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 7B 241300348-0020	Interior - dark grey window + door frame caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 7C 241300348-0021	Interior - dark grey window + door frame caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 8A 241300348-0022	Laundry Rm. - light blue 12x12 floor tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 8B 241300348-0023	Laundry Rm. - light blue 12x12 floor tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 8C 241300348-0024	Laundry Rm. - light blue 12x12 floor tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/25/13 9A 241300348-0025	Laundry Rm. - yellow adhesive under l. blue 12x12	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 9B 241300348-0026	Laundry Rm. - yellow adhesive under l. blue 12x12	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 9C 241300348-0027	Laundry Rm. - yellow adhesive under l. blue 12x12	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 10A 241300348-0028	Vestibule - beige 12x12 floor tile	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 10B 241300348-0029	Vestibule - beige 12x12 floor tile	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 10C 241300348-0030	Vestibule - beige 12x12 floor tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 11A 241300348-0031	Vestibule - yellow adhesive under beige and blue 12x12 f.t.	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 11B 241300348-0032	Vestibule - yellow adhesive under beige and blue 12x12 f.t.	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/25/13 11C 241300348-0033	Vestibule - yellow adhesive under beige and blue 12x12 f.t.	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 12A 241300348-0034	Dark Blue Modeled Flr Tile Ent.	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 12B 241300348-0035	Dark Blue Modeled Flr Tile Ent.	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 12C 241300348-0036	Dark Blue Modeled Flr Tile Ent.	Blue Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1/25/13 13A 241300348-0037	Sprinkler Rm - expansion joint in floor	Brown Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
1/25/13 13B 241300348-0038	Sprinkler Rm - expansion joint in floor	Brown Non-Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
1/25/13 13C 241300348-0039	Sprinkler Rm - expansion joint in floor	Black Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (other)	None Detected
1/25/13 14A 241300348-0040	Boiler Rm - flex connector	White/Black Fibrous Homogeneous	50% Glass	50% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>	
			% Fibrous	% Non-Fibrous	% Type	
1/25/13 14B 241300348-0041	Boiler Rm - flex connector	White/Black Fibrous Homogeneous	40% Glass	60% Non-fibrous (other)		None Detected
1/25/13 14C 241300348-0042	Boiler Rm - flex connector	White/Black Fibrous Homogeneous	25% Glass	75% Non-fibrous (other)		None Detected
1/25/13 15A 241300348-0043	Fibrous Layer under Wood Flr Court	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (other)		None Detected
1/25/13 15B 241300348-0044	Fibrous Layer under Wood Flr Court	Brown Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (other)		None Detected
1/25/13 15C 241300348-0045	Fibrous Layer under Wood Flr Court	Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)		None Detected
1/25/13 16A 241300348-0046	Tan Adhesive @ Rubber Underlayment Weight Rm	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)		None Detected
1/25/13 16B 241300348-0047	Tan Adhesive @ Rubber Underlayment Weight Rm	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)		None Detected

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Analysis Date: 2/4/2013
Collected: 1/25/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/25/13 16C	Tan Adhesive @	Tan		100% Non-fibrous (other)	None Detected
241300348-0048	Rubber Underlayment Weight Rm	Non-Fibrous Heterogeneous			

Analyst(s)

Frank Dicrescenzo (14)Jennifer Mattero (31)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 09:42:35



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Asbestos Chain of Custody

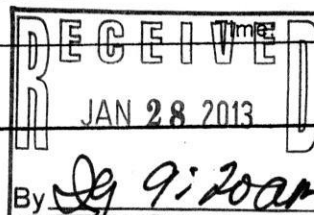
EMSL Order Number (Lab Use Only):

241300348

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077

PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates #: LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Mystic (Pratt Bldg) 18HM3.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: <u>Bulk #BA204</u> U.S. State Samples Taken: CT			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>			
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>W Apostolidis</u>		Samplers Signature: <u>W</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
<u>1/25/13 1A</u>	<u>Ext Grey Bldg/ DFC</u>	<u>Bulk</u>	<u>1/25/13</u>
<u>1B</u>	<u>↓</u>		
<u>1C</u>	<u>↓</u>		
<u>2A</u>	<u>Ext Grey Foundation Cement for Paper</u>		
<u>2B</u>			
<u>2C</u>			
<u>3A</u>	<u>Ext Black Foundation Paper</u>		
<u>3B</u>			
Client Sample # (s): <u>1A - 16C</u>		Total # of Samples: <u>48</u>	
Relinquished (Client): <u>W</u>		Date: <u>1/25/13</u> Time:	
Received (Lab):		Date:	
Comments/Special Instructions:			



80417221134



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300348

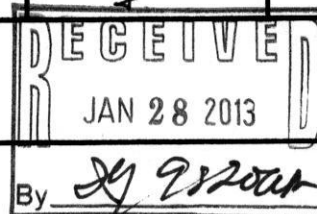
EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492

PHONE: (203) 284-5948

FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3C	Black Foundation Paper (Exterior)	Exterior	
4A	Brown Mastic - Gummy Underlayment	Gym Floor	
4B	"	↓	
4C	"	↓	
5A	Sound Proofing behind wood panels	Exterior Auditorium	
5B	"	↓	
5C	"	↓	
6A	1x1 Ceramic Tile Grout	Bathrooms	
6B	"	↓	
6C	"	↓	
7A	Dark Grey window + door frame caulk	Interior	
7B	"	↓	
7C	"	↓	
8A	Light Blue 12x12 Floor Tile	Laundry Rm.	
8B	"	↓	
8C	"	↓	
9A	Yellow Adhesive under L. Blue 12x12	Laundry Rm.	
9B	"	↓	
9C	"	↓	
10A	Beige 12x12 Floor Tile	Vestibule	
10B	"	↓	
10C	"	↓	
11A	Yellow Adhesive under Beige and Blue 12x12 F.T.	Vestibule	
11B	"	↓	
*Comments/Special Instructions:			



241300348

Controlled Document - Asbestos OGC - DE - 1/11/2014

APPENDIX G

Summary of HBM Survey, Sampling, and Analytical Information Crouter Building

Appendix G
Summary of HBM Survey, Sampling, and Analytical Information
Crouter Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
9 x 9 Blue/Gray Floor Tile	+	Main Hall, B9	See Below	Historical		
9 x 9 Blue/Gray Floor Tile Mastic	+	Main Hall	See Below	Historical		
9 x 9 Lt Brown Floor Tile	+	Main Hall	See Below	Historical		
9 x 9 Lt Brown Floor Tile Mastic	-	Main Hall		Historical		
9 x 9 Brown/Red Floor Tile	+	B-12, Supply Room 2	See Below	Historical		
9 x 9 Brown/Red Floor Tile Mastic	-	B-12, Supply Room 2		Historical		
9 x 9 Green Floor Tile	+	B7	See Below	Historical		
9 x 9 Green Floor Tile Mastic	-			Historical		
9 x 9 Red Floor Tile	+	B13	See Below	Historical		
9 x 9 Red Floor Tile Mastic	-			Historical		
Mud Fittings	+	B5, B6, B8, B9, Boys, Girls, Chase, B4, B12, B13, North, South...	165 ea	Historical		\$7,000
2 x 4 Ceiling Tile	-	Throughout		Historical		
Textured/Insulated Ceiling	-	Throughout, B5		Historical		
Caulking	Tr	Gym Door Frame		Historical		
Exterior Window Frame Caulk	+	B5	1000LF (70)	Historical		\$9,000
Caulking	+	Main Door Frame, B1	Included	Historical		
Remaining Positive Floor Tile	+	Throughout	1500 SF	Historical	1200 SF	\$9,000
Roof Black Ply Layer	-	Roof		1a-5a		
Roof Tectum Layer	-	Roof		1b-5b		
FLASHINGS Perimeter/Penetration	+	Flashing	1264 SF	6a,b,c		\$12,000
Exterior Panel Tar on Green Panels Exterior	-	Under Windows		7a,b,c		
Green Window Glazing Interior Shop Windows	-	Interior Shop		8a,b,c		
Black Tar on Face of Radiator	-	Interior		9a,b,c		
Black Glue Daubs on Wall	+	Classroom B-1	18SF	10a,b,c		\$150
Wood Panel Adhesive	-	Hall		11a,b,c		
Wood Panel Adhesive Molding	+	Hall	100 LF	12a,b,c		\$600

Appendix G
Summary of HBM Survey, Sampling, and Analytical Information
Crouter Building
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Black Vapor Barrier in Chase	-	Boys/Girls Bathroom		13a,b,c		
Gym Floor Black Mastic	-	Gym		14a,b,c		
Black Bottom Layer on Concrete Floor	+	Gym	2000 SF	15a,b,c		\$30,000
Black Flex Connector	-	Shop		16a,b,c		
Grey Tile Adhesive	-	Shower/Sink		17a,b,c		
Tile Grout	-	Bathrooms/Janitor		18a,b,c		
Shower Caulk	+	Teachers Room	15 LF	19a,b,c		\$75
Interior Window Glazing	-	Windows		20a,b,c		
Brown Ceiling Caulk	+	Supply/Paint/Machine	120 LF	21a,b,c		\$600
Pipe Insulation 2"	+	Janitor Closet	1 LF	22a,b,c		\$50
Shop Vent Fan Caulk	+	Wood Shop	10 LF	23a,b,c		\$50
Gaskets	Assumed	Interior				
HD (Sodium) lights shields, gaskets...	Assumed	Gym	20			\$1,000
						\$69,525
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				
Fluorescent Fixtures - ballasts		None Observed				
Mercury Switches		None Observed				
Notes:						
1. See attached laboratory analytical reports.						

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300301
CustomerID: LOUR62
CustomerPO: Batch # BA190
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School, Mysitc, CT, Crouter Bldg Roof, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/17/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300301-0001	Roof Field- ply layer	Black Non-Fibrous Heterogeneous	45% Cellulose	55% Non-fibrous (other)	None Detected
1B 241300301-0002	Roof Field- tectum layer	Tan Non-Fibrous Heterogeneous	80% Cellulose <1% Fibrous (other)	20% Non-fibrous (other)	None Detected
2A 241300301-0003	Roof Field- ply layer	Black Non-Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
2B 241300301-0004	Roof Field- tectum layer	Tan Non-Fibrous Heterogeneous	70% Cellulose <1% Fibrous (other)	30% Non-fibrous (other)	None Detected
3A 241300301-0005	Roof Field- ply layer	Black Non-Fibrous Heterogeneous	35% Cellulose <1% Synthetic	65% Non-fibrous (other)	None Detected
3B 241300301-0006	Roof Field- tectum layer	Tan Non-Fibrous Heterogeneous	75% Cellulose <1% Fibrous (other)	25% Non-fibrous (other)	None Detected
4A 241300301-0007	Roof Field- ply layer	Black Non-Fibrous Heterogeneous	45% Cellulose 5% Synthetic	50% Non-fibrous (other)	None Detected
4B 241300301-0008	Roof Field- tectum layer	Tan Non-Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (2)

William Shedrawy (9)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 10:24:54

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300301
CustomerID: LOUR62
CustomerPO: Batch # BA190
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School, Mysitc, CT, Crouter Bldg Roof, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
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Analysis Date: 2/4/2013
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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
5A 241300301-0009	Roof Field- ply layer	Black Fibrous Heterogeneous	25% Cellulose	75% Non-fibrous (other)	None Detected
5B 241300301-0010	Roof Field- tectum layer	Tan Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
6A 241300301-0011	Perimeter/penetrati on flashing	Black Non-Fibrous Heterogeneous	<1% Cellulose	85% Non-fibrous (other)	15% Chrysotile
6B 241300301-0012	Perimeter/penetrati on flashing				Stop Positive (Not Analyzed)
6C 241300301-0013	Perimeter/penetrati on flashing				Stop Positive (Not Analyzed)

Analyst(s)

Edward Leary (2)

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Analyst(s)

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Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/17/2013

Project: **Oral School, Mystic, CT, Crouter Bldg Roof, 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

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EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300301

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates # LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Opul School Mystic CT</u> <u>Crouter Bldg Roof.</u> <u>184M3.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: <u>Batch # 190</u>	U.S. State Samples Taken: CT

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☒ 5 Days ☒ 10 Days

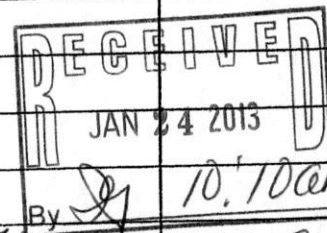
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
---	--	--

☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: <u>W Apostolidis</u>	Samplers Signature: <u>W Apostolidis</u>
-------------------------------------	--

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Roof Field Ply Layer	Bulk	1/17/13
1B	Tectum layer		
2A	Ply Layer		
2B	Tectum layer		
3A	Ply Layer		
3B	Tectum layer		
4A	Ply Layer		
4B	Tectum layer		



794584589361

Client Sample # (s): <u>1A - 6C</u>	Total # of Samples: <u>13</u>
Relinquished (Client): <u>W Apostolidis</u>	Date: <u>1/23/13</u> Time:
Received (Lab):	Date: Time:
Comments/Special Instructions: <u>A if 1A or 1B is pos do not analyze 2A, B, if 2AB is pos do not analyze 3AB-5AB etc</u>	



EMSL ANALYTICAL, INC.
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241300301

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*):

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

[illegible]

***Comments/Special Instructions:**

**EMSL Analytical, Inc.**

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

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

EMSL Order: 241300327
CustomerID: LOUR62
CustomerPO: Batch # BA201
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Crouter Bldg, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 1/31/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1/24/13 7A 241300327-0001	Black Tar on Green Metal Panels under Windows	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 7B 241300327-0002	Black Tar on Green Metal Panels under Windows	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 7C 241300327-0003	Black Tar on Green Metal Panels under Windows	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 8A 241300327-0004	Int Green WG Wire Windows	Green Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
1/24/13 8B 241300327-0005	Int Green WG Wire Windows	Green Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
1/24/13 8C 241300327-0006	Int Green WG Wire Windows	Green Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
1/24/13 9A 241300327-0007	Black Tar on Face of Radiators	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Nancy Stalter (10)

Will DiBella (27)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1/24/13 9B 241300327-0008	Black Tar on Face of Radiators	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 9C 241300327-0009	Black Tar on Face of Radiators	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 10A 241300327-0010	Black Glue Daubs on Wall Rm B-1	Black Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Anthophyllite
1/24/13 10B 241300327-0011	Black Glue Daubs on Wall Rm B-1				Stop Positive (Not Analyzed)
1/24/13 10C 241300327-0012	Black Glue Daubs on Wall Rm B-1				Stop Positive (Not Analyzed)
1/24/13 11A 241300327-0013	Tan Wood Panel Glue	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 11B 241300327-0014	Tan Wood Panel Glue	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 11C 241300327-0015	Tan Wood Panel Glue	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Will DiBella (27)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 12A 241300327-0016	Brown Mastic on Molding for Wood Panels	Brown Non-Fibrous Heterogeneous		95% Non-fibrous (other)	5% Chrysotile
1/24/13 12B 241300327-0017	Brown Mastic on Molding for Wood Panels				Stop Positive (Not Analyzed)
1/24/13 12C 241300327-0018	Brown Mastic on Molding for Wood Panels				Stop Positive (Not Analyzed)
1/24/13 13A 241300327-0019	Black Vapor Barrier in Chase Boy/Girls	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 13B 241300327-0020	Black Vapor Barrier in Chase Boy/Girls	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 13C 241300327-0021	Black Vapor Barrier in Chase Boy/Girls	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 14A 241300327-0022	Black Mastic for Gym Flr	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 14B 241300327-0023	Black Mastic for Gym Flr	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Gloria V. Oriol, Laboratory Manager
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 14C 241300327-0024	Black Mastic for Gym Flr	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 15A 241300327-0025	Black Layer on Concrete Gym Flr	Black Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
1/24/13 15B 241300327-0026	Black Layer on Concrete Gym Flr				Stop Positive (Not Analyzed)
1/24/13 15C 241300327-0027	Black Layer on Concrete Gym Flr				Stop Positive (Not Analyzed)
1/24/13 16A 241300327-0028	Black Flex Connector, Shop	Black Fibrous Heterogeneous	30% Glass	70% Non-fibrous (other)	None Detected
1/24/13 16B 241300327-0029	Black Flex Connector, Shop	Black Fibrous Heterogeneous	30% Glass	70% Non-fibrous (other)	None Detected
1/24/13 16C 241300327-0030	Black Flex Connector, Shop	Black Fibrous Heterogeneous	30% Glass	70% Non-fibrous (other)	None Detected
1/24/13 17A 241300327-0031	Grey Adhesive for Ceramic Tile	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Crouter Bldg, 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 17B 241300327-0032	Grey Adhesive for Ceramic Tile	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 17C 241300327-0033	Grey Adhesive for Ceramic Tile	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 18A 241300327-0034	Ceramic Tile Grout	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 18B 241300327-0035	Ceramic Tile Grout	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 18C 241300327-0036	Ceramic Tile Grout	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 19A 241300327-0037	Shower Caulk Teachers Rm	Gray Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
1/24/13 19B 241300327-0038	Shower Caulk Teachers Rm				Stop Positive (Not Analyzed)
1/24/13 19C 241300327-0039	Shower Caulk Teachers Rm				Stop Positive (Not Analyzed)

Analyst(s)

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Will DiBella (27)

Gloria V. Oriol, Laboratory Manager
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Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 20A 241300327-0040	Int WG Grey Steel Windows	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 20B 241300327-0041	Int WG Grey Steel Windows	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 20C 241300327-0042	Int WG Grey Steel Windows	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 21A 241300327-0043	Brown Caulk @ Tectum/Block Wall Intersection	Brown Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
1/24/13 21B 241300327-0044	Brown Caulk @ Tectum/Block Wall Intersection				Stop Positive (Not Analyzed)
1/24/13 21C 241300327-0045	Brown Caulk @ Tectum/Block Wall Intersection				Stop Positive (Not Analyzed)
1/24/13 22A 241300327-0046	2"/3" Line TSI Janitor Closet	Gray Fibrous Heterogeneous	40% Cellulose	20% Non-fibrous (other)	40% Chrysotile
1/24/13 22B 241300327-0047	2"/3" Line TSI Janitor Closet				Stop Positive (Not Analyzed)

Analyst(s)

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1/24/13 22C 241300327-0048	2"/3" Line TSI Janitor Closet				Stop Positive (Not Analyzed)
1/24/13 23A 241300327-0049	Black Caulk Painted Silver HVAC Unit	Black/Silver Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
1/24/13 23B 241300327-0050	Black Caulk Painted Silver HVAC Unit				Stop Positive (Not Analyzed)
1/24/13 23C 241300327-0051	Black Caulk Painted Silver HVAC Unit				Stop Positive (Not Analyzed)

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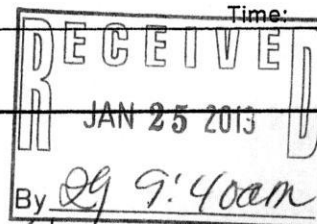
Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300327

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates #: LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Myshic Crouter Bldg 18HM301</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: <u>Batch # BA 201</u> U.S. State Samples Taken: CT	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days			
<small>*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.</small>			
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>W Apostolide</u>		Samplers Signature: <u>W. C.</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1/24/13 7A	Black Tar on green metal Panels under windows		1/24/13
7B	↓		
7C	↓		
8A	Int Green WG wire Windows		
8B	↓		
8C	↓		
9A	Black Tar on Face of Radiators		↓
9B	↓		
Client Sample # (s): <u>7A - 23C</u>		Total # of Samples: <u>51</u>	
Relinquished (Client): <u>W C</u>		Date: <u>1/24/13</u> Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions:			





EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

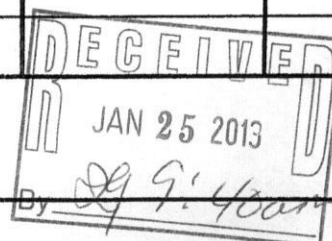
EMSL Order Number (Lab Use Only):

241300327

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
9C	↓	Bulk	1/24/13
10A	Black Glue Daubs on Wall Rm B-1		
10B			
10C	↓		
11A	Tan Wood Pane Glue		
11B	↓		
11C			
12A	Brown Mastic on Molding for Wood Pane ls		
12B	↓		
12C			
13A	Black Wyr Barnes ⁱⁿ Chase Box/Glue		
13B	↓		
13C			
14A	Black Mastic for Gym Flr		
14B	↓		
14C			
15A	Black Layer on concrete Gym Flr		
15B	↓		
15C			
16A	Black Flex Connector / Shop		
16B	↓		
16C			
17A	Grey Adhesive for Ceramic tile		
17B	↓		
*Comments/Special Instructions:			





EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

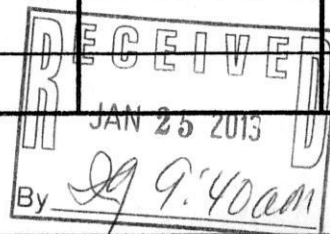
EMSL Order Number (Lab Use Only):

241300327

EMSL ANALYTICAL, INC.
4 FAIRFIELD BLVD
WALLINGFORD, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5948

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
17C	↓	Bulk	1/24/13
18A	Ceramic tile Grout		
18B	↓		
18C			
19A	Shower Caulk Teachers Rm		
19B	↓		
19C			
20A	Int WG Grey Steel Windows		
20B	↓		
20C			
21A	Brown Caulk @ Tectum / Block Wall Intersection		
21B	↓		
21C			
22A	2 1/3" Line TSE Junior Closet		
22B	↓		
22C			
23A	Black Caulk Painted Silver HVAC Unit		
23B	↓		
23C			
*Comments/Special Instructions:			



APPENDIX H

Summary of HBM Survey, Sampling, and Analytical Information Rainbow House

Appendix H
Summary of HBM Survey, Sampling, and Analytical Information
Rainbow House
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
Mud Fitting	+	Boiler Room	0	Historical	Abated	
Joint Compound	-	Throughout		Historical		
Boiler Breeching	-	Boiler Room		Historical		
Cement Wall Board	-	Boiler Room		Historical		
Sheetrock	-	Throughout		Historical		
White Linoleum, Type 1	-	Porch		Historical		
Wall Plaster	-	West Side		Historical		
12" x 12" Grey Floor Tile	Tr	West Side	0	Historical		
White Linoleum, Type 2	-	Floor 2 Bathroom		Historical		
Interior window Glazing	Tr	Attic		Historical		Included
White Linoleum, Type 2 Mastic	-	Floor 2 Bathroom		Historical		
Window Caulk	+	Ground Floor		Historical		Included
Boiler Insulation	-	Rear of Boiler		Historical		
Asphalt Shingle Reddish Tint Top Layer	-	House/Garage		1a,b,c		
Bottom Layer Shingle Black	-	House/Garage		2a,b,c		
Tar Paper Under Shingle	-	House/Garage		3a,b,c		
Window Glazing	-	Garage		4a,b,c		
Ext WFC	+	House	480 LF	5a,b,c		\$4,500
Sheetrock Tape	-	House		6a,b,c		
4" Brown Cove Base	-	Kitchen		7a,b,c		
4" Brown Cove Base Tan Mastic	-	Kitchen		8a,b,c		
Linoleum Mastic	-	Kitchen/Porch		9a,b,c		
White Sink Undercoating	-	Kitchen		10a,b,c		
Black Glue Daub	-	Basement		11a,b,c		
Fiber Board Panel	-	Basement Ceiling		12a,b,c		
Rib Gasket Residue	-	Basement		13a,b,c		
Flue Mortar/Cement	+	Basement	2 SF	14a,b,c		\$100

Appendix H
Summary of HBM Survey, Sampling, and Analytical Information
Rainbow House
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number	Abated/ Records	Est Fees. Confidential
4" Tan Cove Base	-	Basement Stairs		15a,b,c		
4" Tan Cove Base Brown Mastic	-	Basement Stairs		16a,b,c		
Black Paper Under Hardwood floor	-	House		17a,b,c		
12"x12" Tan Modeled Floor Tile	-	House		18a,b,c		
12"x12" Tan Modeled Flr Tile Yellow Mastic	-	House		19a,b,c		
Yellow Mastic for Grey Mottled Flr Tile	-	House		20a,b,c		
Inventory - Other		Location	Quantity			
Fluorescent Fixtures - Bulbs		None Observed				
Fluorescent Fixtures - ballasts		None Observed				
Mercury Switches		None Observed				
						\$4,600
Notes:						
1. See attached laboratory analytical reports.						

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300299
CustomerID: LOUR62
CustomerPO: Batch # BA196
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/18/2013

Project: **Rainbow House + Garage (Oral School, Mystic, CT) 18HM3.01**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300299-0001	Garage Roof- reddish asphalt shingles (top)	Red/Black Non-Fibrous Heterogeneous	35% Cellulose <1% Fibrous (other)	65% Non-fibrous (other)	None Detected
1B 241300299-0002	House Roof- reddish asphalt shingles (top)	Red/Black Non-Fibrous Heterogeneous	40% Cellulose <1% Glass <1% Fibrous (other)	60% Non-fibrous (other)	None Detected
1C 241300299-0003	House Roof- reddish asphalt shingles (top)	Red/Black Non-Fibrous Heterogeneous	20% Cellulose <1% Fibrous (other)	80% Non-fibrous (other)	None Detected
2A 241300299-0004	Garage Roof- black asphalt shingles (bottom)	Black Non-Fibrous Heterogeneous	50% Cellulose 8% Synthetic	42% Non-fibrous (other)	None Detected
2B 241300299-0005	Garage Roof- black asphalt shingles (bottom)	Black Non-Fibrous Heterogeneous	45% Cellulose 10% Synthetic	45% Non-fibrous (other)	None Detected
2C 241300299-0006	House Roof- black asphalt shingles (middle)	Black Non-Fibrous Heterogeneous	40% Cellulose <1% Fibrous (other)	60% Non-fibrous (other)	None Detected
3A 241300299-0007	House Roof- tar paper under all shingles	Black Non-Fibrous Heterogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected
3B 241300299-0008	House Roof- tar paper under all shingles	Black Non-Fibrous Heterogeneous	65% Cellulose	35% Non-fibrous (other)	None Detected

Analyst(s)

Todd Patrick (3)

William Shedrawy (6)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 10:23:20

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300299
CustomerID: LOUR62
CustomerPO: Batch # BA196
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/4/2013
Collected: 1/18/2013

Project: **Rainbow House + Garage (Oral School, Mystic, CT) 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3C 241300299-0009	House Roof- tar paper under all shingles	Black Fibrous Heterogeneous	65% Cellulose	35% Non-fibrous (other)	None Detected

Analyst(s)

Todd Patrick (3)

William Shedrawy (6)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/04/2013 10:23:20

241300299



Asbestos Lab Services Chain of Custody

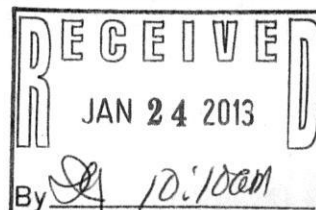
EMSL Order Number (Lab Use Only):

Wallingford, CT
4 Fairfield Blvd
Wallingford, CT 06492
PHONE: (203) 284-5948
FAX: (203) 284-5976

Company: Loureiro Engineering Associates, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments	
Address: 100 Northwest Dr		Third Party Billing requires written authorization from third party	
City/State/Zip: Plainville, CT 06062			
Report To (Name): Jamie Roche		Fax: 860-747-8822	
Telephone: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>RAINBOW HOUSE + GARAGE (Oral School, Mystic, CT) 18HMS-01</u>			
Please Provide Results: Email		Purchase Order: State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input checked="" type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other:			
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: <u>W Apostolidis</u>		Samplers Signature: <u>W Apostolidis</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Reddish Asphalt Shingles (Top)	Garage Roof	1-18-13
1B	" "	House Roof	
1C	" "	"	
2A	Black Asphalt Shingles (Bottom)	Garage Roof	
2B	" "	"	
2C	" " (Middle)	House Roof	
3A	Tar Paper under ALL shingles	House Roof	
3B	" "	"	
Client Sample # (s): <u>1A</u> <u>3C</u>		Total # of Samples: <u>9</u>	
Relinquished (Client): <u>W Apostolidis</u>		Date: <u>1/23/13</u> Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions:			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 2 Pages



Jdp 794584859361

Page 2 of 2 pages

**EMSL Analytical, Inc.**

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

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

EMSL Order: 241300329
CustomerID: LOUR62
CustomerPO: Batch # BA202
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 1/31/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1/24/13 4A 241300329-0001	Ext White WG Garage	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 4B 241300329-0002	Ext White WG Garage	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 4C 241300329-0003	Ext White WG Garage	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 5A 241300329-0004	Ext Tan WFC Painted White at House	White Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
1/24/13 5B 241300329-0005	Ext Tan WFC Painted White at House				Stop Positive (Not Analyzed)
1/24/13 5C 241300329-0006	Ext Tan WFC Painted White at House				Stop Positive (Not Analyzed)
1/24/13 6A 241300329-0007	Sheetrock Tape	White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
1/24/13 6B 241300329-0008	Sheetrock Tape	White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected

Analyst(s)

Nancy Stalter (15)

Thomas Schwab (32)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300329
CustomerID: LOUR62
CustomerPO: Batch # BA202
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 1/31/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 6C 241300329-0009	Sheetrock Tape	White Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
1/24/13 7A 241300329-0010	4" Brown Cove Base Kitchen	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 7B 241300329-0011	4" Brown Cove Base Kitchen	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 7C 241300329-0012	4" Brown Cove Base Kitchen	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 8A 241300329-0013	Tan Mastic for #7	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 8B 241300329-0014	Tan Mastic for #7	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 8C 241300329-0015	Tan Mastic for #7	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 9A 241300329-0016	Tan Linoleum Mastic Kitchen	Tan Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected

Analyst(s)

Nancy Stalter (15)

Thomas Schwab (32)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53

**EMSL Analytical, Inc.**

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

EMSL Order: 241300329
CustomerID: LOUR62
CustomerPO: Batch # BA202
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 1/31/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 9B 241300329-0017	Tan Linoleum Mastic Kitchen	Tan Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
1/24/13 9C 241300329-0018	Tan Linoleum Mastic Porch	Tan Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
1/24/13 10A 241300329-0019	White Sink Undercoating	White Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
1/24/13 10B 241300329-0020	White Sink Undercoating	White Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
1/24/13 10C 241300329-0021	White Sink Undercoating	White Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
1/24/13 11A 241300329-0022	Black Glue Daub Ceiling in Bsmt	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 11B 241300329-0023	Black Glue Daub Ceiling in Bsmt	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 11C 241300329-0024	Black Glue Daub Ceiling in Bsmt	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Nancy Stalter (15)

Thomas Schwab (32)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

EMSL Order: 241300329
CustomerID: LOUR62
CustomerPO: Batch # BA202
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 1/31/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 12A 241300329-0025	Fiberboard on Top of SR Ceiling	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
1/24/13 12B 241300329-0026	Fiberboard on Top of SR Ceiling	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
1/24/13 12C 241300329-0027	Fiberboard on Top of SR Ceiling	Brown Fibrous Heterogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
1/24/13 13A 241300329-0028	Residual Rib Gasket Old Boiler	Rust Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 13B 241300329-0029	Residual Rib Gasket Old Boiler	Rust Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 13C 241300329-0030	Residual Rib Gasket Old Boiler	Rust Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 14A 241300329-0031	Grey Flue Mortar/Cement	Gray Non-Fibrous Heterogeneous		85% Non-fibrous (other)	15% Chrysotile
1/24/13 14B 241300329-0032	Grey Flue Mortar/Cement				Stop Positive (Not Analyzed)

Analyst(s)

Nancy Stalter (15)

Thomas Schwab (32)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53

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EMSL Order: 241300329
 CustomerID: LOUR62
 CustomerPO: Batch # BA202
 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
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Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/25/13 9:40 AM
 Analysis Date: 1/31/2013
 Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 14C 241300329-0033	Grey Flue Mortar/Cement				Stop Positive (Not Analyzed)
1/24/13 15A 241300329-0034	4" Tan Cove Base Bsmt Stairs	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 15B 241300329-0035	4" Tan Cove Base Bsmt Stairs	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 15C 241300329-0036	4" Tan Cove Base Bsmt Stairs	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 16A 241300329-0037	Brown Mastic for 15	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 16B 241300329-0038	Brown Mastic for 15	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 16C 241300329-0039	Brown Mastic for 15	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 17A 241300329-0040	Black Paper under Hardwood Floor	Black Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (other)	None Detected

Analyst(s)

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Thomas Schwab (32)

Gloria V. Oriol, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53

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EMSL Order: 241300329
 CustomerID: LOUR62
 CustomerPO: Batch # BA202
 ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 01/25/13 9:40 AM
 Analysis Date: 1/31/2013
 Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 17B 241300329-0041	Black Paper under Hardwood Floor	Black Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
1/24/13 17C 241300329-0042	Black Paper under Hardwood Floor	Black Fibrous Heterogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
1/24/13 18A 241300329-0043	12"x12" Tan Modeled Flr Tile - 2nd Flr Laundry Rm	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 18B 241300329-0044	12"x12" Tan Modeled Flr Tile - 2nd Flr Laundry Rm	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 18C 241300329-0045	12"x12" Tan Modeled Flr Tile - 2nd Flr Laundry Rm	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 19A 241300329-0046	Yellow Mastic for 18	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 19B 241300329-0047	Yellow Mastic for 18	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Nancy Stalter (15)

Thomas Schwab (32)

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 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53

**EMSL Analytical, Inc.**

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EMSL Order: 241300329
CustomerID: LOUR62
CustomerPO: Batch # BA202
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, Rainbow Bldg, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 1/31/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1/24/13 19C 241300329-0048	Yellow Mastic for 18	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 20A 241300329-0049	Yellow Mastic for Grey Modeled Fir Tile	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 20B 241300329-0050	Yellow Mastic for Grey Modeled Fir Tile	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1/24/13 20C 241300329-0051	Yellow Mastic for Grey Modeled Fir Tile	Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 01/31/2013 09:59:53



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EMSL Order Number (Lab Use Only):

241300329

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates # : LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Mystic Rainbow Bldg 18H13.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: <u>Bulk # BA202</u> U.S. State Samples Taken: CT			

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☒ 5 Days ☐ 10 Days

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

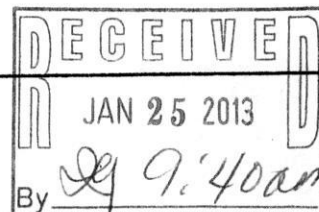
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
---	--	--

☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: <u>w/ Apostolides</u>	Samplers Signature: <u>V. [Signature]</u>
--------------------------------------	---

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1/24/13 4A	Ext White WG Garage	Bulk	1/24/13
4B	oh		
4C			
5A	Ext Tan WFC Painted White at House		
5B			
5C			
6A	Sheetrock Tape		
6B			

Client Sample # (s): <u>4C - 20C</u>	Total # of Samples: <u>51</u>
Relinquished (Client): <u>[Signature]</u>	Date: <u>1/24/13</u> Time: _____
Received (Lab): _____	Date: _____ Time: _____
Comments/Special Instructions:	





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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300329

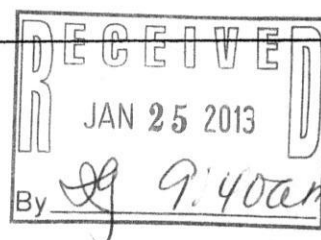
EMSL ANALYTICAL, INC.
107 HADDON AVENUE
WESTMONT, NJ 08108
PHONE (856) 858-4800
FAX (856) 858-4960

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
6C	↓	Bulk	1/24/13
7A	4" Brown Cove Base Kitchen		
7B	↓		
7C	↓		
8A	Tan Mastic for # 7		
8B	↓		
8C	↓		
9A	Tan Linoleum Mastic Kitchen		
9B	↓		
9C	Porch		
10A	White Sink Undercoating		
10B	↓		
10C	↓		
11A	Black Blue Daub Ceiling in Bsmr		
11B	↓		
11C	↓		

*Comments/Special Instructions:

Page 2 of 4 pages





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Asbestos Chain of Custody
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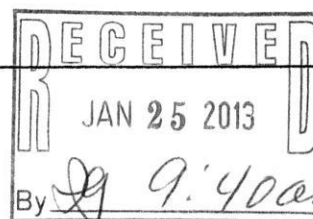
PHONE (856) 858-4800
FAX (856) 858-4960

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
12A	Fiberboard on top of SR Ceiling	Bulk	1/24/13
12B	↓		
12C	↓		
13A	Residual Rib Gasket old Boiler		
13B	↓		
13C	↓		
14A	Grey Flue Mortar/Cement		
14B	Grey Flue Mortar/Cement		
14C	"		
15A	4" Tan Cove Base Bsmt Stairs		
15B	↓		
15C	↓		
16A	Brown Mastic for 15		
16B	↓		
16C	↓		
17A	Black Paper under hardwood floor		

*Comments/Special Instructions:

Page 3 of 4 pages





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Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300329

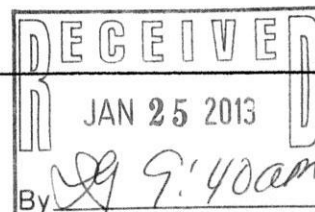
107 HADDON AVENUE
WESTMONT, NJ 08108
PHONE (856) 858-4800
FAX (856) 858-4960

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

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
17B	↓	Bulk	1/24/13
17C	2nd Flr		
18A	12" x 12" Tan Modeled Flr Tile Laundry Rm		
Composite 18B	↓		
18C	↓		
19A	Yellow Mastic for 18		
19B	↓		
19C	↓		
20A	Yellow Mastic for Grey Modeled Flr Tile		
20B	↓		
20C	↓		

*Comments/Special Instructions:

Page 4 of 4 pages



APPENDIX I

Summary of HBM Survey, Sampling, and Analytical Information Maintenance Garage

Appendix I
Summary of HBM Survey, Sampling, and Analytical Information
Maintenance Garage
240 Oral School Road, Groton, Connecticut



Description	Results	Location	Quantity (SF/LF/EA)	Sample Number
Window Frame Caulk	-	Windows		1a,b,c
Window Glazing	-	Windows		2a,b,c
Chimney Flue Cement	-	Chimney		3a,b,c
Roofing				
Rubber Membrane (Top Layer)	-	Roof Field		1a,2a,3a
Foam Layer	-	Roof Field		1b,2b,3b
Craft Paper Layer	-	Roof Field		1c,2c,3c
Tar Paper (Bottom Layer)	-	Roof Field		1d,2d,3d
Roof Perimeter Flashing	-	Flashing		4a,b,c
Inventory - Other		Location	Quantity	
Fluorescent Fixtures - Bulbs		None Observed		
Fluorescent Fixtures - Ballasts		None Observed		
Mercury Switches		None Observed		
Notes:				
1. See attached laboratory analytical reports.				

**EMSL Analytical, Inc.**

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EMSL Order: 241300302
CustomerID: LOUR62
CustomerPO: Batch # BA192
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, CT, Maint Garage Roof, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/3/2013
Collected: 1/17/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 241300302-0001	Roof Field- rubber layer top	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1B 241300302-0002	Roof Field- foam layer	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
1C 241300302-0003	Roof Field- craft paper layer	Brown Fibrous Heterogeneous	85% Cellulose 10% Glass	5% Non-fibrous (other)	None Detected
1D 241300302-0004	Roof Field- tar paper layer	Brown/Black Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
2A 241300302-0005	Roof Field- rubber layer	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
2B 241300302-0006	Roof Field- foam layer	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
2C 241300302-0007	Roof Field- craft paper layer	Brown Fibrous Heterogeneous	85% Cellulose 10% Glass	5% Non-fibrous (other)	None Detected
2D 241300302-0008	Roof Field- tar paper layer	Brown/Black Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected

Analyst(s)

Anne Paul (1)

Christopher Mercer (14)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 09:32:00

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300302
CustomerID: LOUR62
CustomerPO: Batch # BA192
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic, CT, Maint Garage Roof, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/3/2013
Collected: 1/17/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3A 241300302-0009	Roof Field- rubber layer top	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3B 241300302-0010	Roof Field- foam layer	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
3C 241300302-0011	Roof Field- craft paper layer	Brown Fibrous Heterogeneous	85% Cellulose 10% Glass	5% Non-fibrous (other)	None Detected
3D 241300302-0012	Roof Field- tar paper layer	Brown/Black Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected
4A 241300302-0013	Roof- perimeter flashing	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
4B 241300302-0014	Roof- perimeter flashing	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
4C 241300302-0015	Roof- perimeter flashing	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Anne Paul (1)

Christopher Mercer (14)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 02/04/2013 09:32:00



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

241300302

Company : Loureiro Engineering Associates # : LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Mystic, CT Mount Garage Roof 18HM3.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: <u>Batch # BA193</u>	U.S. State Samples Taken: CT

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☒ 6 Days ☒ 10 Days

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
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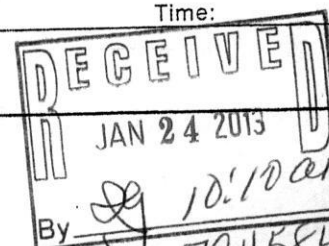
☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: <u>W Apostolides</u>	Samplers Signature: <u>WLL</u>
-------------------------------------	--------------------------------

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Rubber Layer Top Roof Field	Bulk	1/17/13
1B	Foam layer		
1C	Craft Paper Layer		
1d	Tar Paper Layer		
2A	Rubber Layer		
2B	Foam Layer		
2C	Craft Paper Layer		
2d	Tar Paper Layer		

Client Sample # (s): <u>1A - 4C</u>	Total # of Samples: <u>15</u>
Relinquished (Client): <u>WLL</u>	Date: <u>1/23/13</u> Time:
Received (Lab):	Date: Time:

Comments/Special Instructions: 1A-3d Any pos hit stop analysis



241300302

Page 2 of 2 pages

APPENDIX J

Summary of HBM Survey, Sampling, and Analytical Information Material Storage Shed

Loureiro
Engineering • Construction • EH&S • Energy • Waste

Page 1 of 1

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300304
CustomerID: LOUR62
CustomerPO: Batch # BA191
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/7/2013
Collected: 1/17/2013

Project: **Oral School Mystic, CT, Material Storage Shed, 18HM3.01****Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos			Asbestos
			%	Fibrous	% Non-Fibrous	% Type
1A 241300304-0001	Roof- red asphalt shingle	Red/Black Fibrous Heterogeneous	20% <1% <1%	Cellulose Glass Fibrous (other)	80% Non-fibrous (other)	None Detected
1B 241300304-0002	Roof- red asphalt shingle	Red/Black Fibrous Heterogeneous	25% <1%	Cellulose Fibrous (other)	75% Non-fibrous (other)	None Detected
1C 241300304-0003	Roof- red asphalt shingle	Red/Black Non-Fibrous Heterogeneous	30% <1% <1%	Cellulose Hair Fibrous (other)	70% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (2)

Todd Patrick (1)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/07/2013 09:10:39



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300304

EMSL ANALYTICAL INC
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077

PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates # LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: Oral School Mystic CT Material Storage Shed 18HM3.01			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: Batch # 84191 U.S. State Samples Taken: CT			

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☐ 5 Days ☒ 10 Days

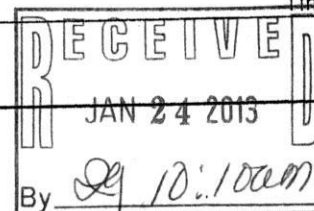
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
---	--	--

☒ Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: W Apostolides		Samplers Signature: [Signature]	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Red Asphalt Shingle Roof	Bulk	1/17/13
1B	↓	↓	↓
1C			

Client Sample # (s): 1A - 1C	Total # of Samples: 3
Relinquished (Client): [Signature]	Date: 1/23/13 Time:
Received (Lab):	Date: Time:
Comments/Special Instructions:	



784794584589361

APPENDIX K

Summary of HBM Survey, Sampling, and Analytical Information Small Shed

Loureiro
Engineering • Construction • EH&S • Energy • Waste

Page 1 of 1

**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300305
CustomerID: LOUR62
CustomerPO: Batch # BA195
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062

Project: **North Shed Small (Oral School, Mystic, CT) 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/24/13 10:10 AM
Analysis Date: 2/7/2013
Collected: 1/21/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A 241300305-0001	Grey Asphalt Rolled Shingle	White/Black Fibrous Heterogeneous	7% Glass <1% Cellulose <1% Fibrous (other)	93% Non-fibrous (other)	None Detected
1B 241300305-0002	Grey Asphalt Rolled Shingle	White/Black Fibrous Heterogeneous	8% Glass <1% Cellulose <1% Fibrous (other)	92% Non-fibrous (other)	None Detected
1C 241300305-0003	Grey Asphalt Rolled Shingle	White/Black Non-Fibrous Heterogeneous	12% Glass <1% Fibrous (other)	88% Non-fibrous (other)	None Detected
2A 241300305-0004	Tar Bead at Edges of Shingles	Black Fibrous Heterogeneous	4% Cellulose 2% Glass	94% Non-fibrous (other)	None Detected
2B 241300305-0005	Tar Bead at Edges of Shingles	Black Fibrous Heterogeneous	7% Cellulose 2% Glass 2% Fibrous (other)	89% Non-fibrous (other)	None Detected
2C 241300305-0006	Tar Bead at Edges of Shingles	Black Non-Fibrous Heterogeneous	10% Cellulose 5% Glass <1% Fibrous (other)	85% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (4)

Todd Patrick (2)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/07/2013 09:08:44

241300305



Asbestos Lab Services Chain of Custody

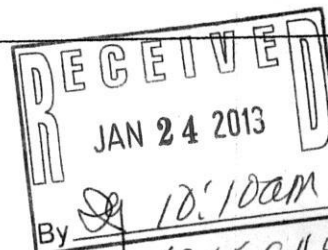
EMSL Order Number (Lab Use Only):

 Wallingford, CT
 4 Fairfield Blvd
 Wallingford, CT 06492
 PHONE: (203) 284-5948
 FAX: (203) 284-5978

Company: Loureiro Engineering Associates, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Address: 100 Northwest Dr		Third Party Billing requires written authorization from third party	
City/State/Zip: Plainville, CT 06062			
Report To (Name): Jamie Roche		Fax: 860-747-8822	
Telephone: 860-747-8181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>NORTH SHED small (Oral School, Mystic, CT) 18HM3-01</u>			
Please Provide Results: Email		State Samples Taken: CT Connecticut Samples: <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	
PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)		Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: <u>W Apostolakis</u>		Samplers Signature: <u>W Apostolakis</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	Grey Asphalt Rolled Shingle	Roof	1-21-13
1B	"	"	"
1C	"	"	"
2A	Tar Bead at Edges of Shingles	"	"
2B	"	"	"
2C	"	"	"
Client Sample # (s): <u>1A</u> — <u>2C</u>		Total # of Samples: <u>6</u>	
Relinquished (Client): <u>W Apostolakis</u>		Date: <u>1/23/13</u> Time:	
Received (Lab):		Date: Time:	
Comments/Special Instructions: <u>POSITIVE STOPS</u>			

Controlled Document - Asbestos Lab Services COC - A1.0 - 11/23/2009

Page 1 of 1 Pages



**EMSL Analytical, Inc.**

4 Fairfield Boulevard, Wallingford, CT 06492

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

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

EMSL Order: 241300330
CustomerID: LOUR62
CustomerPO: Batch # BA200
ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Plainville, CT 06062Project: **Oral School Mystic Shed, 18HM3.01**

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/25/13 9:40 AM
Analysis Date: 2/1/2013
Collected: 1/24/2013

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3A 241300330-0001	Dark Gray Asphalt Shingle on Floor	Gray/Black Non-Fibrous Heterogeneous	20% Cellulose <1% Fibrous (other)	80% Non-fibrous (other)	None Detected
3B 241300330-0002	Dark Gray Asphalt Shingle on Floor	Gray/Black Non-Fibrous Heterogeneous	15% Cellulose <1% Fibrous (other)	85% Non-fibrous (other)	None Detected
3C 241300330-0003	Dark Gray Asphalt Shingle on Floor	Gray/Black Fibrous Heterogeneous	20% Cellulose <1% Fibrous (other) <1% Glass	80% Non-fibrous (other)	None Detected

Analyst(s)

Edward Leary (1)

Todd Patrick (2)

Gloria V. Oriol, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Wallingford, CT NVLAP Lab Code 200700-0.

Initial report from 02/01/2013 09:42:23



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

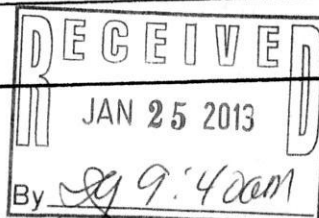
Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

241300330

EMSL ANALYTICAL INC
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (856) 858-4800
FAX: (856) 858-4960

Company : Loureiro Engineering Associates #: LOUR62		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 100 Northwest Drive		Third Party Billing requires written authorization from third party	
City: Plainville	State/Province: CT	Zip/Postal Code: 06062	Country: USA
Report To (Name): Jamie Roche		Fax #: 860-747-8822	
Telephone #: 860-747-6181		Email Address: jaroche@loureiro.com	
Project Name/Number: <u>Oral School Mystic Shed 18HM3.01</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email Purchase Order: <u>Batch # 84200</u> U.S. State Samples Taken: CT			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>W Apostolidis</u>		Samplers Signature: <u>WCC</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3A	Dark Gray Asphalt Shingles on Floor	Bulk	1/24/12
3B	↓		
3C			
Client Sample # (s): <u>1A - 1C</u>		Total # of Samples: <u>3</u>	
Relinquished (Client): <u>WCC</u>		Date: <u>1/24/12</u>	Time: <u> </u>
Received (Lab): <u> </u>		Date: <u> </u>	Time: <u> </u>
Comments/Special Instructions: <u> </u>			



70608041722123

APPENDIX L

Laboratory Analytical Reports - Samples Analyzed for PCBs



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

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

Attn:

Jamie Roche
Loureiro Engineering Associates, Inc.
100 Northwest Drive

2/8/2013

Plainville, CT 06062

Phone: (860) 747-6181

Fax: (860) 747-8822

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 2/1/2013. The results are tabulated on the attached data pages for the following client designated project:

Oral School, Mystic, CT (18HM3.01)

The reference number for these samples is EMSL Order #011300390. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director



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

The PCB samples were received in plastic containers and outside the temperature requirement. The reporting limits for the PCB analysis are elevated of sample -0005 due to matrix interference.

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

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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

<http://www.emsl.com>jsmith@emsl.com

EMSL Order: 011300390

CustomerID: LOUR62

CustomerPO: BN#26

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Phone: (860) 747-6181
 Fax: (860) 747-8822
 Received: 02/01/13 9:40 AM
 Collected: 1/30/2013

Plainville, CT 06062Project: **Oral School, Mystic, CT (18HM3.01)****Analytical Results**

Client Sample Description 1A
 Whipple - Caulk
Collected: 1/30/2013 **Lab ID:** 0001

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1221	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1232	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1242	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1248	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1254	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1260	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1262	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1268	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH

Client Sample Description 2A
 Whipple - Glazing
Collected: 1/30/2013 **Lab ID:** 0002

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1221	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1232	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1242	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1248	ND	10	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1254	120	10	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1260	ND	10	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1262	ND	10	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1268	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH

Client Sample Description 3A
 Durant - Caulk
Collected: 1/30/2013 **Lab ID:** 0003

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1221	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1232	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1242	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1248	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1254	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1260	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1262	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1268	ND	0.49	mg/Kg	2/4/2013	AB	2/5/2013	EH

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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

<http://www.emsl.com>jsmith@emsl.com

EMSL Order: 011300390

CustomerID: LOUR62

CustomerPO: BN#26

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 02/01/13 9:40 AM
Collected: 1/30/2013

Plainville, CT 06062Project: **Oral School, Mystic, CT (18HM3.01)****Analytical Results**

Client Sample Description 4A **Collected:** 1/30/2013 **Lab ID:** 0004
Durant - Caulk

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1221	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1232	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1242	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1248	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1254	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1260	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1262	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH
3540C/8082A	Aroclor-1268	ND	0.50	mg/Kg	2/4/2013	AB	2/5/2013	EH

Client Sample Description 5A **Collected:** 1/30/2013 **Lab ID:** 0005
Pratt - Caulk

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1221	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1232	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1242	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1248	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1254	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1260	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1262	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH
3540C/8082A	Aroclor-1268	ND	2.5	mg/Kg	2/4/2013	AB	2/8/2013	EH

Definitions:

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

RL - Reporting Limit



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Environmental Chemistry Chain of Custody

EMSL Order Number (Lab Use Only):

01300390

Cinnaminson, NJ

EMSL ANALYTICAL, INC.

~~26000000~~

~~WESTMANTON, NJ 08060~~

PHONE: (856) 858-4800

FAX: (856) 858-3899

Report To Contact Name: <u>Janie Roche</u>		Bill To Company: <u>Same</u>		Sampled By (Signature): <u>[Signature]</u>		
Company Name: <u>Loureiro Engineering Assoc.</u>		Attention To:		Number of Samples in Shipment:		
Address 1: <u>100 Hawthorne Dr</u>		Address 1:		Date of Shipment: <u>1-31-13</u>		
Address 2: <u>Pineville, CT 06062</u>		Address 2:		U.S. State where Samples Collected: <u>CT</u>		
Phone: <u>860-410-2945</u> Fax:		Phone:		Purchase Order: <u>BN # 26</u>		
Email Results To: <u>jarochke@loureiro.com</u>		Project Name: <u>Oral School, Mystic, CT (18HM3.01)</u>				
Standard Turnaround Time: <input type="checkbox"/> 2 Weeks <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input type="checkbox"/> 1 Day		The following TAT's are subject to lab approval: <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input type="checkbox"/> 1 Day				
Failure to complete will hinder processing of samples		List Test(s) Needed				
Client Sample ID	Comp	Grab	Date/Time	Matrix	Preservative	Comments
1A		<input checked="" type="checkbox"/>	1-30-13			Whipple - Caulk
2A		<input checked="" type="checkbox"/>				Whipple - Glazing
3A		<input checked="" type="checkbox"/>				Durant - Caulk
4A		<input checked="" type="checkbox"/>				Durant - Caulk
5A		<input checked="" type="checkbox"/>				Pratt - Caulk
Released By (Signature): <u>[Signature]</u>		Date & Time: <u>1-31-13</u>		Received By: <u>Frank Albert</u>		Date & Time: <u>2/1/13 9:40AM</u>
Please indicate reporting requirements: <input checked="" type="checkbox"/> Results Only <input type="checkbox"/> Results and QC <input type="checkbox"/> Reduced Deliverables <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other _____						
Instructions or Comments: <u>5-Day TAT</u> <u>per Janie - Proceed in plastic at room temp.</u> <u>2/1/13 11:15AM -TA</u>						



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

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

Attn:

Jamie Roche
Loureiro Engineering Associates, Inc.
100 Northwest Drive

2/11/2013

Plainville, CT 06062

Phone: (860) 747-6181

Fax: (860) 747-8822

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 2/7/2013. The results are tabulated on the attached data pages for the following client designated project:

Oral School, Mystic, CT (Maintenance Garage) 18HM3.01

The reference number for these samples is EMSL Order #011300458. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director



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

The PCB samples were received in plastic containers and outside the temperature requirement.

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

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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

<http://www.emsl.com>jsmith@emsl.com

EMSL Order: 011300458

CustomerID: LOUR62

CustomerPO: BN# 29

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 02/07/13 9:00 AM
Collected: 2/6/2013

Plainville, CT 06062Project: **Oral School, Mystic, CT (Maintenance Garage) 18HM3.01****Analytical Results**

Client Sample Description PCB-1
caulk **Collected:** 2/6/2013 **Lab ID:** 0001

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1221	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1232	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1242	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1248	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1254	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1260	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1262	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1268	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH

Client Sample Description PCB-2
glazing **Collected:** 2/6/2013 **Lab ID:** 0002

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
3540C/8082A	Aroclor-1016	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1221	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1232	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1242	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1248	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1254	0.84	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1260	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1262	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH
3540C/8082A	Aroclor-1268	ND	0.50	mg/Kg	2/7/2013	RS	2/8/2013	EH

Definitions:

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

RL - Reporting Limit

Environmental Chemistry Chain of Custody

EMSL Order Number/Lab Use Only:

01300458

Corporate - Cinnaminson, NJ
200 Route 130 North
Cinnaminson, NJ 08077
PHONE 1-800-220-3675
FAX (856) 786-5974

EMSL Analytical, Inc.



Report To Contact Name: JAMIE ROCHE	Bill To Company: LOUREIRO	Sampled By (Signature): <i>[Signature]</i>
Company Name: LOUREIRO	Attention To: JAMIE ROCHE	Number of Samples in Shipment: 2
Address 1: 100 NORTHWEST DR	Address 1: 100 NORTHWEST DR	Date of Shipment: 2-6-13
Address 2: PLAINVILLE, CT 06062	Address 2: PLAINVILLE, CT 06062	U.S. State where Samples Collected: CT
Phone : 860-747-6181 Fax :	Phone : 860-747-6181 Fax :	Purchase Order: BN# 29
Email Results To: JAROCHE@LOUREIRO.COM	Project Name: DCL School, Mystic, CT (Maintenance Garage)	184M3.01

Standard Turnaround Time: ☐ 2 Weeks ☒ The following TAT's are subject to lab approval: ☐ 1 Week ☐ 4 Days ☐ 3 Days ☒ 2 Days ☐ 1 Day

Failure to complete will hinder processing of samples				List Test(s) Needed		Comments
Client Sample ID	Comp	Grab	Date/Time	Matrix W=Water S=Soil A=Air SL=Sludge O= Other	Preservative 1=HCL 2=HNO3 3=H2SO4 4=ICE 5=Other	
1 PCB-1 (calk) ✓			2-6-13	O		✓
2 PCB-2 (greig) ✓			2-6-13	O		✓
Please indicate reporting requirements: <input checked="" type="checkbox"/> Results Only <input type="checkbox"/> Results and QC <input type="checkbox"/> Reduced Deliverables <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other						

Comments/Special Instructions:

Released By (Signature) *[Signature]* Date & Time 2-6-13 / 1500 Received By *[Signature]* 1800 Date & Time 2/7/13 9:00am

Controlled Document - Environmental Chemistry COC - ECT-0 - 11/23/2009

Page 1 of 1 Pages

Per JAMIE, OK TO PROCEED AT RAMP REC'D AND IN PLANT 11:00am 2/7/13 -ER

Report Date:
06-Feb-13 15:04



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Laboratory Report

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
Attn: Jamie Roche

Project: Oral School- Mystic, CT
Project #: 18HM3.01

- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SB63752-01	1A- Rainbow Glazing	Glazing	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-02	2A- Rainbow Caulk	Caulk	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-03	3A - Girl's Caulk	Caulk	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-04	4A- Girl's Glazing	Glazing	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-05	5A- Admin/Boys Caulk	Caulk	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-06	6A- Admin/Boys Glazing	Glazing	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-07	7A- Crouter Door Caulk	Caulk	28-Jan-13 00:00	29-Jan-13 10:15
SB63752-08	8A- Crouter Window Caulk	Caulk	28-Jan-13 00:00	29-Jan-13 10:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435



Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 12 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

The samples were received 13.9 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Identification

1A- Rainbow Glazing

SB63752-01

Client Project #

18HM3.01

Matrix

Glazing

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 128		µg/kg dry	128	63.8	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 128		µg/kg dry	128	115	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 128		µg/kg dry	128	81.9	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 128		µg/kg dry	128	75.2	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 128		µg/kg dry	128	62.6	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 128		µg/kg dry	128	106	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 128		µg/kg dry	128	79.1	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 128		µg/kg dry	128	119	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 128		µg/kg dry	128	40.1	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	105			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	105			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	120			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	100			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	99.2	%					1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302829	
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Sample Identification

2A- Rainbow Caulk

SB63752-02

Client Project #

18HM3.01

Matrix

Caulk

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 182		µg/kg dry	182	90.9	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 182		µg/kg dry	182	164	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 182		µg/kg dry	182	117	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 182		µg/kg dry	182	107	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 182		µg/kg dry	182	89.3	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 182		µg/kg dry	182	152	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 182		µg/kg dry	182	113	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 182		µg/kg dry	182	169	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 182		µg/kg dry	182	57.1	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	95			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	140			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	98.9	%					1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302829	
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Sample Identification

3A - Girl's Caulk

SB63752-03

Client Project #

18HM3.01

Matrix

Caulk

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 114		µg/kg dry	114	56.8	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 114		µg/kg dry	114	102	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 114		µg/kg dry	114	73.0	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 114		µg/kg dry	114	67.0	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 114		µg/kg dry	114	55.8	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 114		µg/kg dry	114	94.8	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 114		µg/kg dry	114	70.5	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 114		µg/kg dry	114	106	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 114		µg/kg dry	114	35.7	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	110			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	130			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	98.6	%					1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302831	
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Sample Identification

4A- Girl's Glazing

SB63752-04

Client Project #

18HM3.01

Matrix

Glazing

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 124		µg/kg dry	124	62.0	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 124		µg/kg dry	124	112	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 124		µg/kg dry	124	79.6	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 124		µg/kg dry	124	73.1	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 124		µg/kg dry	124	60.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 124		µg/kg dry	124	103	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 124		µg/kg dry	124	76.9	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 124		µg/kg dry	124	116	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 124		µg/kg dry	124	38.9	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	135			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	99.0			%			1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302831	
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Sample Identification

5A- Admin/Boys Caulk

SB63752-05

Client Project #

18HM3.01

Matrix

Caulk

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 156		µg/kg dry	156	78.2	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 156		µg/kg dry	156	141	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 156		µg/kg dry	156	100	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 156		µg/kg dry	156	92.1	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 156		µg/kg dry	156	76.8	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 156		µg/kg dry	156	130	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 156		µg/kg dry	156	97.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 156		µg/kg dry	156	146	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 156		µg/kg dry	156	49.1	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	105			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	130			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	96.9	%					1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302831	
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Sample Identification

6A- Admin/Boys Glazing

SB63752-06

Client Project #

18HM3.01

Matrix

Glazing

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 125		µg/kg dry	125	62.7	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 125		µg/kg dry	125	113	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 125		µg/kg dry	125	80.5	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 125		µg/kg dry	125	73.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 125		µg/kg dry	125	61.5	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 125		µg/kg dry	125	105	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 125		µg/kg dry	125	77.7	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 125		µg/kg dry	125	117	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 125		µg/kg dry	125	39.4	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	105			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	120			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	130			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	99.0			%			1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302831	
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Sample Identification

7A- Crouter Door Caulk

SB63752-07

Client Project #

18HM3.01

Matrix

Caulk

Collection Date/Time

28-Jan-13 00:00

Received

29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 188		µg/kg dry	188	94.1	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 188		µg/kg dry	188	170	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 188		µg/kg dry	188	121	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 188		µg/kg dry	188	111	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 188		µg/kg dry	188	92.4	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	3,130		µg/kg dry	188	157	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260 [2C]	367		µg/kg dry	188	84.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 188		µg/kg dry	188	175	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 188		µg/kg dry	188	59.1	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	120			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	140			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	140			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	98.6			%			1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302831	
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Sample Identification

8A- Crouter Window Caulk
SB63752-08

Client Project #
18HM3.01

Matrix
Caulk

Collection Date/Time
28-Jan-13 00:00

Received
29-Jan-13

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Semivolatile Organic Compounds by GCPolychlorinated BiphenylsPrepared by method SW846 3540C

12674-11-2	Aroclor-1016	< 149		µg/kg dry	149	74.3	1	SW846 8082A	31-Jan-13	01-Feb-13	IMR	1302626	X
11104-28-2	Aroclor-1221	< 149		µg/kg dry	149	134	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 149		µg/kg dry	149	95.4	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 149		µg/kg dry	149	87.6	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 149		µg/kg dry	149	72.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	193		µg/kg dry	149	124	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 149		µg/kg dry	149	92.2	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 149		µg/kg dry	149	138	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 149		µg/kg dry	149	46.7	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	135			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	120			30-150 %			"	"	"	"	"	

General Chemistry Parameters

% Solids	97.5			%			1	SM2540 G Mod.	04-Feb-13	04-Feb-13	DT	1302831	
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Semivolatile Organic Compounds by GC - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1302626 - SW846 3540C										
Blank (1302626-BLK1)					Prepared: 31-Jan-13 Analyzed: 01-Feb-13					
Aroclor-1016	< 20.0		µg/kg wet	20.0						
Aroclor-1016 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1221	< 20.0		µg/kg wet	20.0						
Aroclor-1221 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1232	< 20.0		µg/kg wet	20.0						
Aroclor-1232 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1242	< 20.0		µg/kg wet	20.0						
Aroclor-1242 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1248	< 20.0		µg/kg wet	20.0						
Aroclor-1248 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1254	< 20.0		µg/kg wet	20.0						
Aroclor-1254 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1260	< 20.0		µg/kg wet	20.0						
Aroclor-1260 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1262	< 20.0		µg/kg wet	20.0						
Aroclor-1262 [2C]	< 20.0		µg/kg wet	20.0						
Aroclor-1268	< 20.0		µg/kg wet	20.0						
Aroclor-1268 [2C]	< 20.0		µg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.0		µg/kg wet		20.0		100	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	21.0		µg/kg wet		20.0		105	30-150		
Surrogate: Decachlorobiphenyl (Sr)	24.0		µg/kg wet		20.0		120	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	22.0		µg/kg wet		20.0		110	30-150		
LCS (1302626-BS1)					Prepared: 31-Jan-13 Analyzed: 01-Feb-13					
Aroclor-1016	221		µg/kg wet	20.0	250		88	40-140		
Aroclor-1016 [2C]	220		µg/kg wet	20.0	250		88	40-140		
Aroclor-1260	205		µg/kg wet	20.0	250		82	40-140		
Aroclor-1260 [2C]	194		µg/kg wet	20.0	250		78	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	19.0		µg/kg wet		20.0		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	19.0		µg/kg wet		20.0		95	30-150		
Surrogate: Decachlorobiphenyl (Sr)	24.0		µg/kg wet		20.0		120	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	23.0		µg/kg wet		20.0		115	30-150		
LCS Dup (1302626-BSD1)					Prepared: 31-Jan-13 Analyzed: 01-Feb-13					
Aroclor-1016	222		µg/kg wet	20.0	250		89	40-140	0.5	30
Aroclor-1016 [2C]	218		µg/kg wet	20.0	250		87	40-140	0.9	30
Aroclor-1260	205		µg/kg wet	20.0	250		82	40-140	0	30
Aroclor-1260 [2C]	197		µg/kg wet	20.0	250		79	40-140	2	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	19.0		µg/kg wet		20.0		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	19.0		µg/kg wet		20.0		95	30-150		
Surrogate: Decachlorobiphenyl (Sr)	24.0		µg/kg wet		20.0		120	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	22.0		µg/kg wet		20.0		110	30-150		

This laboratory report is not valid without an authorized signature on the cover page.

Notes and Definitions

dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Kimberly Wisk



SPECTRUM ANALYTICAL, INC.
Featuring
HAMBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

SB63752RH

Special Handling:

- ☒ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- ☐ All TATs subject to laboratory approval.
- ☐ Min. 24-hour notification needed for rushes.
- ☐ Samples disposed of after 60 days unless otherwise instructed.

Report To: Jarvis Roche (LEA)
100 Northwest Dr.
Plainville, CT 06062
jarroche@lovelace.com
Telephone #: 866-747-6181

Invoice To: Same
P.O. No.: _____
RQN: _____

Project No.: 18HMS.01
Site Name: Oral School
Location: Mystic State: CT
Sampler(s): B. Nicholas + W. Apostolides

1= $\text{Na}_2\text{S}_2\text{O}_3$ 2= HCl 3= H_2SO_4 4= HNO_3 5= NaOH 6=Ascorbic Acid 7= CH_3OH
8= NaHSO_4 9=Deionized Water 10= _____ 11= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=Caulk X2=Glazing X3= _____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Containers:	Analyses:	List preservative code below:	QA/QC Reporting Notes: * additional charges may apply
<u>1A-Rainbow</u>	<u>1A-Rainbow</u>	<u>1-28-13</u>		<u>G</u>	<u>X2</u>								MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> CT DPH RCP Report: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<u>2A-Caulk</u>	<u>2A-Caulk</u>			<u>G</u>	<u>X1</u>								QA/QC Reporting Level Standard <input type="checkbox"/> No QC <input type="checkbox"/> DOA* <input checked="" type="checkbox"/> NY ASP A* <input type="checkbox"/> NY ASP B* <input type="checkbox"/> NJ Reduced* <input type="checkbox"/> NJ Full* <input type="checkbox"/> TIER II* <input type="checkbox"/> TIER V*
<u>3A-Caulk</u>	<u>3A-Caulk</u>			<u>G</u>	<u>X1</u>								State-specific reporting standards: <input type="checkbox"/> Other _____
<u>4A-Plazing</u>	<u>4A-Plazing</u>			<u>G</u>	<u>X2</u>								
<u>5A-Rainbow</u>	<u>5A-Rainbow</u>			<u>G</u>	<u>X1</u>								
<u>6A-Rainbow</u>	<u>6A-Rainbow</u>			<u>G</u>	<u>X2</u>								
<u>7A-Caulk</u>	<u>7A-Caulk</u>			<u>G</u>	<u>X1</u>								
<u>8A-Caulk</u>	<u>8A-Caulk</u>			<u>G</u>	<u>X1</u>								

Relinquished by:

Received by:

Date:

Time:

Temp °C

☐ EDD Format

☒ E-mail to jarroche@lovelace.com

☒ Ambient ☐ Iced ☐ Refrigerated ☐ Fridge temp _____ °C ☐ Freezer temp _____ °C

033
200

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx *NEW Package*
Express *US Airbill*FedEx
Tracking
Number

8007 8257 8150

SPH1

Form
ID No.

0215

Recipient's Copy

1 From This portion can be removed for Recipient's records.

Date 1/28/13
FedEx
Tracking Number

800782578150

Sender's
Name

Phone 860 747-6181

Company LOUREIRO ENGINEERING ASSOC

Address 100 NORTHWEST DR

Dept./Floor/Suite/Room

City PLAINVILLE

State CT ZIP 06062-1559

2 Your Internal Billing Reference

18HM03.01

3 To

Recipient's
Name

Phone 413 789-9018

Company

Spectrum Analytical

Address

11 Almgren Dr.

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City

Agawam

State

MA

ZIP

01001

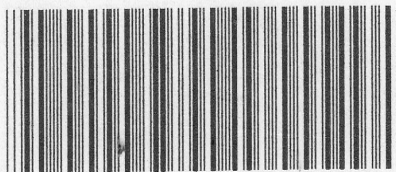
HOLD Weekday

FedEx location address

REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday

FedEx location address

REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

8007 8257 8150

4 Express Package Service

*To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.

For packages over 150 lbs., use the new
FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select
locations. Friday shipments will be delivered on
Monday unless SATURDAY Delivery is selected.☒ FedEx Priority Overnight
Next business morning.* Friday shipments will be
delivered on Monday unless SATURDAY Delivery
is selected.☐ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

2 or 3 Business Days

☐ NEW FedEx 2Day A.M.
Second business morning.*
Saturday Delivery NOT available.☐ FedEx 2Day
Second business afternoon.* Thursday shipments
will be delivered on Monday unless SATURDAY
Delivery is selected.☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

☐ FedEx Envelope*☒ FedEx Pak*☐ FedEx
Box☐ FedEx
Tube☐ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery

NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without
obtaining a signature for delivery.☐ Direct Signature
Someone at recipient's address
may sign for delivery. Fee applies.☐ Indirect Signature
If no one is available at recipient's
address, someone at a neighboring
address may sign for delivery. For
residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No☐ Yes
As per attached
Shipper's Declaration.☐ Yes
Shipper's Declaration
not required.☐ Dry Ice
Dry ice, 3 UN 1845 _____ x _____ kgDangerous goods (including dry ice) cannot be shipped in FedEx packaging
or placed in a FedEx Express Drop Box.☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip.
Acct. No. ☐☒ Sender
Acct. No. in Section
1 will be billed.☐ Recipient☐ Third Party☐ Credit Card☐ Cash/Check

Total Packages

Total Weight

lbs.

Credit Card Auth.

†Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.



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Batch Summary

1302626

Semivolatile Organic Compounds by GC

1302626-BLK1

1302626-BS1

1302626-BSD1

SB63752-01 (1A- Rainbow Glazing)

SB63752-02 (2A- Rainbow Caulk)

SB63752-03 (3A - Girl's Caulk)

SB63752-04 (4A- Girl's Glazing)

SB63752-05 (5A- Admin/Boys Caulk)

SB63752-06 (6A- Admin/Boys Glazing)

SB63752-07 (7A- Crouter Door Caulk)

SB63752-08 (8A- Crouter Window Caulk)

1302829

General Chemistry Parameters

SB63752-01 (1A- Rainbow Glazing)

SB63752-02 (2A- Rainbow Caulk)

1302831

General Chemistry Parameters

SB63752-03 (3A - Girl's Caulk)

SB63752-04 (4A- Girl's Glazing)

SB63752-05 (5A- Admin/Boys Caulk)

SB63752-06 (6A- Admin/Boys Glazing)

SB63752-07 (7A- Crouter Door Caulk)

SB63752-08 (8A- Crouter Window Caulk)

S215895

Semivolatile Organic Compounds by GC

S215895-CAL1

S215895-CAL2

S215895-CAL3

S215895-CAL4

S215895-CAL5

S215895-CAL6

S215895-CAL7

S215895-CAL8

S215895-CAL9

S215895-CALA

S215895-CALB

S215895-CALC

S215895-CALD

S215895-CALE

S215895-CALF

S215895-CALG

S215895-CALH

S215895-CALI

S215895-CALJ

S215895-CALK

S215895-CALL

S215895-CALM

S215895-CALN

S215895-CALO

S215895-CALP

S215895-CALQ

S215895-CALR

S215895-CALS

S215895-CALT

S215895-CALU

S215895-ICV1

S215895-ICV2

S215895-ICV3

S215895-ICV4

S215895-ICV5

S215895-ICV6

S215895-LCV1

S215895-LCV2

S215895-LCV3

S215895-LCV4

S215895-LCV5

S215895-LCV6

S301289

Semivolatile Organic Compounds by GC

S301289-CCV1

S301289-CCV2

S301289-CCV3

S301289-CCV4

S301289-CCV5

S301289-CCV6

S301289-CCV7

S301289-CCV8

S301289-IBL1

S301289-IBL2

S301289-IBL3

S301289-IBL4

APPENDIX M

Historical Lead-Based Paint Survey Results



Mystic Air Quality Consultants, Inc.

1204 North Road (Rt. 117) Groton, Connecticut 06340

January 23, 2006

Ms. Dawn Flannegan
Mystic Education Center
240 Oral Road
Mystic, Connecticut 06355

*Lead Paint Sample
Results for Fire Escapes!
MST*

Re: Laboratory Analysis Lead-in-Paint Sampling
Mystic Education Center
Mystic, Connecticut
Location: Anteon Building - Fire Escapes

Dear Mr. Flannegan:

As requested, Mystic Air Quality Consultants had analyzed for lead content paint samples that were collected from the location noted above on January 17, 2006. The samples were analyzed by EMSL Analytical (NVLAP # 101048-0) in New York.

Identification was performed using atomic absorption spectrophotometry (AAS). The analysis results reflect the content of the samples and applies only to the submitted samples.

The paint samples collected from the white, green and blue painted fire escapes did not exceed the recommended standard of 0.5% and would not be considered significant levels of lead in paint.

Please do not hesitate to contact us with questions or comments relating to the sample result and any subsequent work that may be performed by your company. We thank you for selecting Mystic Air Quality to perform your sampling and analysis.

Sincerely,

Richard Haffey
President

Communications (24 hours):

Office: (860) 449-8903

website: www.mysticair.com

FAX: (860) 449-8860

e-mail: maqc2@aol.com

Toll Free: 1 (800) 247-7746



*Helping clients
breathe easier
since 1987*

Fax Transmittal Cover Sheet

Mystic Air Quality Consultants
1204 North Road, Groton, CT 06340

Phone: 860 449 8903
Fax: 860 449 8860
E-mail: maq2@aol.com

Visit at our website
www.mysticair.com

Date of facsimile transmittal: 1 / 23 / 2006

Reply Requested? Yes No

TO: Dawn Flanagan

Fax #: 536-4222

FROM: Cover for Rick

Number of pages 5
(including this cover sheet)

Message:

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Fax Copy also sent to:						<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	[]						<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	_____						<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	[]						<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	_____						<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	_____						<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	_____						<input checked="" type="checkbox"/>

Master Card



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Mystic Air Quality Consultants

1204 North Road (Rt. 117)
Groton, CT 06340

Date 11/17/2006

Page of

DAILY JOB LOG

Client Mystic Education Ctr. Site Supervisor

Site Location Anteon Bldg Containment Location Phase 2 Escape

GENERAL OBSERVATIONS

On-site to sample paint layers for
Lead Content.

Telecommunications
Office: 860 449 8903
Nights & Weekends: 860 464 2050
FAX: 860 449 8860
Toll Free: 1 800 247 7746

HYGIENIST'S NAME Stewart B. Chiles HYGIENIST'S SIGNATURE [Signature]

TIME ON SITE: TIME OFF SITE:

EMSL Analytical, Inc.

307 West 38th Street, New York, NY 10018

Phone: (212) 290-0051 Fax: (212) 290-0050 Email: manhattan@emsl.com

EMSL

Attn: **Mystic Air Quality Consultants, Inc.**
1204 North Road (Rt 117)
Groton, CT 06340

Fax: (860) 449-8860 Phone: (860) 449-8903
Project: **MYSTIC ED CTR/ ANTEON BLDG**

Customer ID: **MYST50**
Customer PO:
Received: **01/18/06 11:17 AM**
EMSL Order: **030601650**
EMSL Proj:

Report Date: **1/21/2006****Lead in Paint Chips by Flame AAS (SW 846 3050B and 7420*)**

Client Sample Description	Lab ID	Analyzed	Lead Concentration
1 WHITE - FIRE ESCAPE	0001	1/21/2006	0.11 % wt
2 GREEN - FIRE ESCAPE	0002	1/21/2006	0.07 % wt
3 BLUE - FIRE ESCAPE	0003	1/21/2006	0.14 % wt

M. Apfeldorfer

Miron Apfeldorfer
or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. 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.

* slight modifications to methods applied

ACCREDITATIONS: AHA Environmental Lead Laboratory Approval Program #102581

Date Printed: 1/21/2006 7:29:02 PM

EMSL ANALYTICAL CHAIN OF CUSTODY - LEAD

EMSL

Date: 1/17/2006

EMSL Representative: Andy DeJohn

Contact Name: Rich Haffey

Company Name: Mystic Air Quality

EMSL - Bill to: SAME

Street: 1204 North Road

Street: _____

Box #: _____

Box #: _____

City/State/Zip: Groton, CT 06340

City/State/Zip: _____

Phone: (860) 449-8903

Fax: (860) 449-8860

Project Name/ No.: MYSTIC Ed. CTR ANTON Bldg

MATRIX	METHOD	INSTRUMENT	mdls	# of samples
Lead Chips	SW846-7420	Flame Atomic Absorption	0.01%	3
Lead Soil	SW846-7420	Flame Atomic Absorption	50.0 mg/kg	
Lead in Wipe	SW846-7420	Flame Atomic Absorption	10.0 ug/wipe	
Lead in Air	NIOSH 7082	Flame Atomic Absorption	10.0 ug/filter	
Lead in Drinking Water	SW846-239.2	Graphite Furnace Atomic Absorption	5.0 ppb	
TCLP Lead	NIOSH 7300/7082 SW 846-1311	Flame Atomic Absorption	0.1 ppm	

TAT (turnaround) - Same Day 1 Day 2 Days 3 Days 4 Days 5 Days 6-10 Days

Relinquished: _____

Date: _____

Received: [Signature]

Date: 1/18/06

SAMPLE DATE	SAMPLE #	LOCATION	AREA TESTED
<u>1/17/2006</u>	<u>1</u>	<u>White Fire Escape</u>	
<u>"</u>	<u>2</u>	<u>Green "</u>	
<u>"</u>	<u>3</u>	<u>Blue "</u>	

EMSL MATERIAL
RECEIVED

As per Rich, called at 11:24 AM the TAT is 3-5 days.
NL 1/18/06.



Mystic Air Quality Consultants, Inc.

1204 North Road (Rt. 117) Groton, Connecticut 06340

February 14, 2006

Ms. Dawn Hannegan
Mystic Education Center
240 Oral School Road
Mystic, Connecticut 06355

Re: Laboratory Analysis Lead-in-Paint Sampling
Anteon Building
240 Oral School Road
Mystic, Connecticut
Location: Exterior Windows

Dear Ms. Hannegan:

As requested, Mystic Air Quality Consultants had analyzed for lead content paint samples collected from the exterior windows of the Anteon Building at the above address on February 10, 2006. The samples were analyzed by Environmental Hazards Services (101882-0) in Virginia.

Identification was performed using atomic absorption spectrophotometry (AAS). The analysis results reflect the content of the samples and applies only to the submitted samples.

The paint samples collected from the exterior windows of the Anteon Building did exceed the recommended standard of 0.5% and would be considered a significant level of lead in paint.

Please do not hesitate to contact us with questions or comments relating to the sample result and any subsequent work that may be performed by your company. We thank you for selecting Mystic Air Quality to perform your sampling and analysis.

Sincerely,

Richard Haffey
President

Communications (24 hours):

Office: (860) 449-8903

website: www.mysticair.com

FAX: (860) 449-8860

e-mail: maqc2@aol.com

Toll Free: 1 (800) 247-7746

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7489 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

LEAD IN PAINT ANALYSIS SUMMARY

CLIENT: Mystic Air Quality Consultants
1204 North Road, Rt. 117
Groton, CT 06840

DATE OF SAMPLING: 10 FEB 2006
DATE OF RECEIPT: 13 FEB 2006
DATE OF ANALYSIS: 13 FEB 2006
DATE OF REPORT: 14 FEB 2006

CLIENT NUMBER: 7-2564 B
EHS PROJECT #: 2006-02-1800
PROJECT: Mystic Education Ctr.; Antown Bldg.

EHS SAMPLE#	CLIENT SAMPLE#	SAMPLE WEIGHT (g)	CONCENTRATION (% BY WEIGHT)
01	1	0.225	9.8
02	2	0.257	21
03	3	0.270	19
04	4	0.239	24
05	5	0.221	10

QUALITY CONTROL DATA**BATCH#:****INCLUSIVE EHS SAMPLE NUMBERS:**

Initial Calibration Verification (5.00ppm Pb)

Continuing Calibration Verification 10 (10.0ppm Pb)

Continuing Calibration Verification 5 (5.00ppm Pb)

Laboratory Control Standard

Matrix Spike

Duplicate Relative Percent Difference

Reporting Limit

Method Detection Limit

021806P-1

01-03

108% Recovery

104% Recovery

99.8% Recovery

98.5% Recovery

104% Recovery

3.52 RPD

20ug

2.9ug

BATCH#:**INCLUSIVE EHS SAMPLE NUMBERS:**

Continuing Calibration Verification 10 (10.0ppm Pb)

Continuing Calibration Verification 5 (5.00ppm Pb)

Laboratory Control Standard

Matrix Spike

Duplicate Relative Percent Difference

Reporting Limit

Method Detection Limit

021806P-2

04-05

102% Recovery

102% Recovery

101% Recovery

99.6% Recovery

0.401 RPD

20ug

2.9ug


ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 7-2564 B
EHS PROJECT #: 2006-02-1600
PROJECT: Mystic Education Ctr.; Antown Bldg.

PREPARATION METHOD: EPA 600/R-99/200
ANALYSIS METHOD: EPA SW846 7420

ANALYST: Aubrey Simonds

Reviewed By Authorized Signatory:


Michael A. Mueller, MPH, Laboratory Director
Howard Varner, General Manager
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist

This method has been validated for sample weights of 0.020g or greater. When samples with a weight of less than that are analyzed those results fall outside of the scope of accreditations.

Sample results denoted with a "less than" (<) sign contain less than 20ug total lead, based on a 40ml sample volume.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume etc., was provided by the client. This report shall not be reproduced, except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714

LEGEND g = gram ug = microgram ppm = parts per million
 ml = milliliter Pb = lead

painpb08.AAFS220A.dot/06FEB2006/REV2/MRV

- PAGE 02 of 02 - END OF REPORT -

MENTAL HAZARDS SERVICES, L.L.C.
ord, Virginia 23237 Phone (804) 276-4788 Fax (804) 276-4907

CHAIN OF CUSTODY FORM

Company Name: Mystic Air Quality ConsultantsAddress: 1204 North RoadCity, State, Zip: Groton, CT 06340EHS Client Account #: 7-2564 BPhone #: 860-449-8903Fax #: 860-449-8860

P.O. #: _____

Date: 2/10/2006Contact Name: CHRIS ELBERTSampler Name: STEVEN B. DIKESProject #: MYSTIC EDUCATION CTR. AUSTIN, TXClient: Mystic Education Ctr.

Sample Number	Sample & Date	Asbestos				Lead				Other Metals			Indoor Air Quality			Periculate: Total Nitrogen (NIOSH 0510)		Comments							
		Bulk ID by PLM	(PCM) Fiber Count	PLM Point Count	PLM Gravimetric	Air	Paint (%)	Paint (PPM)	Paint (mg/cm ²)	Soil	Wine * (See Note)	TCLP (Pb)	Waste Water	TCLP RCRA 8	Welding Fume	Toxic Metal Profile	Bioassess		Slide	Surface Swab	Surface Tape	Bulk	Viable Analysis*	Air Volume (L) OR Wipe Area (ft ²) OR Sorape Area (cm ²)	Respirable (NIOSH 0806)
1	2/10																								
2	2/10																								
3	"																								
4	"																								
5	"																								
6	2/10/06																								

Do wipe samples submitted meet ASTM E1702 requirements? Yes ☐ No ☒

Released by: STEVEN B. DIKES Signature: [Signature] Date/Time: 2/10/06 5:30

Received by: [Signature] Signature: [Signature] Date/Time: 2/13/06 09:40



Mystic Air Quality Consultants

1204 North Road (Rt. 117)
Groton, CT 06340

Date 2/10/2006

Page 1 of 1

DAILY JOB LOG

Client Mystic Education, etc. Site Supervisor _____

Site Location _____

GENERAL OBSERVATIONS

Containment Location _____

On site to sample paint chips
from structures in historic village,

HYGIENIST'S
NAME Stewart D. Chua

HYGIENIST'S
SIGNATURE

TIME ON SITE: _____

TIME OFF SITE: _____

Telecommunications

Office: 860 449 8903

Nights &

Weekends: 860 464 2050

FAX: 860 449 8860

Toll Free: 1 800 247 7746

LEAD PAINT INSPECTIONS

**MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

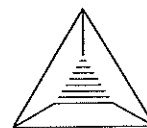
**PRATT BUILDING (DPW Building 16943)
ADMINISTRATION BUILDING (DPW Building 16945)
GIRLS' BUILDING (DPW Building 16946)
WHIPPLE BUILDING (DPW Building 16947)
CROUTER BUILDING (DPW Building No. 16948)
RAINBOW HOUSE (DPW Building 16951)
DURANT BUILDING (DPW Building 16958)**

PREPARED FOR:

**Mr. Gerald S. Glassman
Chief of Project Management
Department of Public Works
165 Capitol Avenue, Room 280
Hartford, CT 06106**

PROJECT NUMBER: BI-RC-275 (ASB)

REPORT DATE: March 2001



**DELTA
ENVIRONMENTAL
SERVICES®, INC.**

**81 Schoolground Road
P.O. Box 564, Branford, CT
(203) 481-7668**

LEAD PAINT INSPECTIONS

**MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

**PRATT BUILDING (DPW Building 16943)
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APPENDICES

APPENDIX A - Lead Inspector's Survey Reports



1.0 INTRODUCTION

This report summarizes the results of lead-based paint (LBP) inspections for the following buildings at Mystic Education Center in Mystic, Connecticut: Pratt Building, Administration Building, Girls' Building, Whipple Building, Crouter Building, Rainbow House and Durant Building at Mystic Education Center in Mystic, Connecticut. The project consisted of a screening inspection for lead-based paint using an X-Ray Fluorescence (XRF) analyzer.

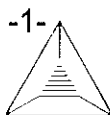
2.0 FACILITY DESCRIPTION

Mystic Education Center is a seven-building campus-type facility. The property consists of approximately 122 acres and 250,000 square feet of building floor space. The oldest buildings on the campus (the "Girls' Building" and "Rainbow House") were constructed in 1928. The "Main Building" (also known as the "Administration Building") was constructed in 1944. The Crouter building was constructed in the 1950's. The Whipple Building was constructed in 1968. The Pratt and Durant buildings were constructed in 1974. Uses of the buildings vary and include: day programs run by the Department of Mental Retardation (DMR); apartments for approximately twenty full-time residents under the care of DMR; and office space leased to the Engineering Technology Center, a private corporation. Large portions of the buildings are vacant.

3.0 SUMMARY OF LEAD INSPECTION FINDINGS

An X-Ray Fluorescence (XRF) screening inspection of the facility was conducted by Peter Shannon and Gene Burch, licensed lead inspectors from Leadsafe, Inc. (a subcontractor to DELTA) in October and December, 2000. The purpose of the inspection was to determine whether toxic levels of lead are present in painted surfaces in the buildings as defined by State and Federal regulations.

Areas tested included door, window and wall surfaces throughout the buildings. The data was evaluated in the context of the regulatory standard of 1.0 milligrams per square centimeter of surface used to define lead-based paint (LBP). Surfaces found to exceed the standard are listed in Table 3-1.



A brief summary of the findings for each building is provided below.

Administration Building

The inspection identified only one area of lead-based paint in the Administration Building. This area is the east wall of Room A147 (a secretary's office). The paint is in good condition.

Girls' Building

The inspection identified only one area of lead-based paint in the Girls' Building. This area is the baseboard of Room G102. The paint is in poor condition.

Whipple Building

No surfaces containing LBP were found in the Whipple Building.

Crouter Building

The inspection identified only one area of lead-based paint in the Crouter Building. This area is a pipe in the former machine room (Room B-6). The paint is in good condition.

Pratt Building

The inspection identified a few isolated areas of lead-based paint in the Pratt Building. These areas are all metal surfaces and include: a beam and pipe in the gym; and a pipe and stair handrail in the mechanical room. The paint is in good condition, with the exception of the beam in the gym, which has some damage.

Durant Building

No surfaces containing LBP were found in the Durant Building.

Rainbow House

A large number of surfaces in this building were found to contain LBP. These areas include: window sills, wells, sash and casings; walls; doors and exterior surfaces. Peeling paint was noted in several areas, particularly doors and windows.



In general, LBP is unlikely to present a hazard unless it is actively disturbed through scraping, sanding, demolition or other means. Generally, lead abatement is only required in buildings where children under six years of age reside. However, it is recommended that restoration of the defective LBP surfaces in Rainbow House be considered.

All renovation or maintenance activities involving disturbance of LBP in any of the buildings must be performed in compliance with OSHA lead regulation 29 CFR 1926.62.

Copies of the detailed reports prepared by Leadsafe, Inc. are included in Appendix A.



**TABLE 3-1 - SUMMARY OF XRF SCREENING RESULTS FOR LEAD-BASED PAINT
MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

TEST NUMBER	ROOM	COMPONENT	SUBSTRATE	K-SHELL RESULT (mg/cm ² of lead)
ADMINISTRATION BUILDING				
21608 - 21609, 21625	First Floor Room A147	East Wall	Plaster	1.5 - 3.0
GIRLS' BUILDING				
21617	First Floor Room G102	East Wall (Baseboard)	Plaster	1.3
WHIPPLE BUILDING				
No LBP Surfaces Found.				
CROUTER BUILDING				
67459 - 67461	Frmr. Machine Room B-6	Pipe Along East Wall	Metal	2.8 - 12.0
PRATT BUILDING				
67500 - 67501	Gymnasium West Side	Beam	Metal	4.7
67502	Gymnasium North Side	Pipe	Metal	2.5
67506	Mech. Room East Side	Handrail on Stairs	Metal	1.3
67509	Mech. Room South Side	Stringer	Metal	2.3
67510	Mech. Room South Side	Pipe	Metal	5.5
DURANT BUILDING				
No LBP Surfaces Found.				



**TABLE 3-1 - SUMMARY OF XRF SCREENING RESULTS FOR LEAD-BASED PAINT
MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

RAINBOW HOUSE				
67618 - 67620	Dining Room East Side	Window Case, Sill and Sash	Wood	2.2 - 5.5
67624	Dining Room West Side	Wall	Plaster	1.5
67627	Porch North Side	Siding	Masonry	8.1
67628 - 67639	Porch North Side	Door Case	Wood	8.7 - 10.1
67629	Porch East Side	Wall	Sheetrock	4.5
67630 - 67632	Porch South Side	Window Case, Sill and Sash	Wood	6.5 - 7.6
67633 - 67635	Porch South Side	Door, Door Case and Door Jamb	Wood	2.9 - 6.2
67636	Porch South Side	Wall	Sheetrock	3.9
67637	Porch West Side	Wall	Wood	5.2
67638	Porch West Side	Ceiling	Wood	2.3
67641	Living Room East Side	Door Case	Wood	1.6
67643	Living Room South Side	Mantle	Wood	1.5
67646	Living Room South Side	Door Case	Wood	2.2
67647 - 67648	Living Room West Side	Window Sash and Sill	Wood	4.0 - 4.7



**TABLE 3-1 - SUMMARY OF XRF SCREENING RESULTS FOR LEAD-BASED PAINT
MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

RAINBOW HOUSE				
67650	Ground Floor West Corridor North Side	Wall	Plaster	4.4
67651 - 67652	Ground Floor West Corridor North Side	Door and Door Case	Wood	2.2 - 2.4
67655	Ground Floor West Corridor West Side	Baseboard	Wood	3.3
67661	Ground Floor Front Foyer	Door	Wood	3.3
67665	Ground Floor Bathroom North Side	Wall	Plaster	1.5
67667	Ground Floor Bathroom	Door	Wood	1.7
67670	Ground Floor Bathroom	Window Sash	Wood	3.6
67678	Ground Floor Study South Side	Door	Wood	2.4
67680 - 67682	Ground Floor Study West Side	Window Sash Sill and Case	Wood	2.6 - 3.7
67684 - 67686	Second Floor NW Bedroom North Side	Window Sash and Well	Wood	1.4 - 2.6
67690	Second Floor NW Bedroom South Side	Wall	Sheetrock	3.0



**TABLE 3-1 - SUMMARY OF XRF SCREENING RESULTS FOR LEAD-BASED PAINT
MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

RAINBOW HOUSE				
67669	Second Floor NE Bedroom North Side	Window Sash	Wood	2.1
67715	Second Floor North Corridor East Side Near Bathroom	Window Sash	Wood	3.2
67722	Second Floor SE Bedroom East Side	Window Sash	Wood	2.8
67731	Second Floor SW Bedroom East Side	Wall	Sheetrock	2.4
67733 - 67735	Second Floor SW Bedroom South Side	Window Sash, Well and Case	Wood	1.6 - 4.0
67745	Exterior North Side	Door	Wood	14.9
67747, 67751, 67752, 67757, 67759, 67760, 67764, 67765, 67769 - 67771, 67774	Exterior	Windows	Wood	1.3 - 15.0
67746, 67754, 67772	Exterior	Siding	Wood	1.6 - 11.5
67748	Exterior North Side	Porch Ceiling	Wood	12.4
67753	Exterior North Side	Porch Column	Wood	13.5
67766 - 67768	Exterior South Side	Door, Door Case and Threshold	Wood	2.1 - 11.1



**TABLE 3-1 - SUMMARY OF XRF SCREENING RESULTS FOR LEAD-BASED PAINT
MYSTIC EDUCATION CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CONNECTICUT**

RAINBOW HOUSE				
67776	Exterior West Side	Porch Column	Wood	12.0
67777	Exterior West Side	Door	Wood	1.7



APPENDIX A
Lead Inspector's Survey Report



DELTA Environmental Services, Inc.



WWW.LEADSAFEINC.COM

LEAD PAINT INSPECTION REPORT

LEADSAFE INC. LICENSE # 001443

FOR STRUCTURE(S) LOCATED AT:

240 ORAL SCHOOL ROAD
MYSTIC, CT

October 17, 2000

Mr. Jim McCarthy
Delta Environmental Services, Inc.
81 Schoolground Road
Branford, CT. 06405

10-17-00
Lead ID #00334477

Leadsafe, Inc. has conducted an on-site inspection for the detection of lead based paint at *The Mystic Educational Center, 240 Oral School Road, Mystic, CT.* on 10-17-00. The rooms/spaces were tested using the HUD Chapter 7 Guidelines for Lead Base paint Inspection, 1997 Revision. This methodology requires testing of representative components in each room/space, for example walls, ceilings, windows, doors, baseboards etc. The testing was accomplished by a licensed lead inspector, Peter Shannon (Lic. # 001443) with a MAP 4 XRF Spectrum Analyzer instrument.

Summary of Findings

The following areas tested were *above* the action level of 1.0 mg/cm²:

Administration Building- Room A147, plaster wall (side 3)
Girls Dorm- Room G102, concrete baseboard (side 2)

Test Report: Please read each section of the report prior to reviewing the XRF Results . This is important in understanding the report. A brief description of each section of the report is provided below.

XRF Procedures: This section of the report describes in detail the methodology used to conduct the testing.

Floor Plan: The floor plan is a diagram depicting the layout of the areas tested. Each space is named and numbered in a manner which corresponds to how these areas are identified in the XRF Results. The diagram shows wall #1 in each space, the other walls are numbered in a *clockwise rotation* starting at wall #1.

XRF Results: All of the measurements taken at the site are shown in this section. The MAP 4 tests for lead concentration at two levels in the paint. The K-Shell represents the total concentration of lead in all layers of the paint. The L-Shell represents the concentration of lead in the top layers of the paint. The test results in the report are based on an action level of 1.0 milligrams per square centimeter (mg/cm²) in the K-Shell. The action level is determined by the HUD Guidelines.

Shaded Areas: Every location where the lead concentration was confirmed to be greater than the action level (taking into account the precision of the instrument) is shown in this section. These locations are shown as POS in the XRF Results pages. An inconclusive (INCL) result indicates the concentration of lead is in the vicinity of the action level within the boundaries of the precision of the Map 4. Inconclusive measurements can be qualified by taking paint chip samples and analyzing them at a laboratory. Due to additional expense, paint chip samples are only taken when authorized by the client.

This inspection report is for the exclusive private use of the client. The report provided to the client is confidential and is not to be copied or disseminated to any party other than the property owner, buyer, insurance carrier or tenant without the express written consent of the inspector. Use of all disclosures contained in this report is specifically restricted to the transaction for which the inspection was performed. Use of or reliance upon the report by other parties, or for other transactions is strictly prohibited. None of these test results or reports developed through the inspectors performance of the work are intended or represented to be suitable for reuse by the client or others as presenting an accurate description of the property or its condition beyond that existing on the date of the performance of the inspection. Use of said test results or reports or other materials by client without written permission or adaptation by the inspector for the specific purpose intended shall be at the user's sole risk, without liability on the inspector's part, and the client agrees to indemnify and hold the inspector harmless from all claims, damages and expenses, including attorney's fees, arising out of such unauthorized use.

All renovations which interrupt lead based paint must be done in compliance with applicable Federal, State and local laws. The Occupational Safety and Health Administration (OSHA) released new worker safety guidelines for all renovations that interrupt lead based paint in May, 1993. We recommend the use of a professional contractor for the interruption or removal of hazardous levels of lead based paint and other lead contaminated materials. Please keep in mind, "shop vacuums" and ordinary vacuums do not have adequate filtration systems for collection and containment of hazardous materials and may aggravate lead dust conditions. A high efficiency particulate arresting (HEPA) vacuum and special detergents are needed to remove lead contaminated dust and debris.

Leadsafe can provide consulting services to help you assess any hazardous conditions detected at this property and determine the best approach to resolve these problem areas. If any questions arise regarding this report, please call anytime 860-523-1950 Or 800-392-6468. Thank you for using Leadsafe.

Sincerely,



Peter Shannon

Site Name: MYSTIC ED. CTR.- ADMIN. BLDG
MYSTIC, CT.

26

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21602	1111	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21603	1111	Calibration	*	*	*	*	*	0.898 K	0.809 L	354		Incl
21604	1111	Office	1	1	Wall	Plaster	Intact	-0.020 K	-0.103 L	354		Neg
21605	1111	Office	1	1	Baseboard	Thin Metal	Intact	0.456 K	0.898 L	354		Neg
21606	1111	Office	2	3	Wall	Plaster	Intact	0.352 K	-0.243 L	354		Neg
21607	1111	Office	2	1	Baseboard	Thin Metal	Intact	0.680 K	0.501 L	354		Neg
21608	1111	Office	3	3	Wall	Plaster	Intact	3.030 K	-0.478 L	354		Pos
21609	1111	Office	3	3	Wall	Plaster	Intact	1.502 K	-0.120 L	354		Pos
21610	1111	Office	3	3	Wall	Plaster	Intact	1.181 K	-0.071 L	354		Incl
21611	1111	Office	4	4	Wall	Plaster	Intact	0.429 K	-0.032 L	354		Neg
21612	1111	Office	4	4	Baseboard	Thin Metal	Intact	0.233 K	0.072 L	354		Neg
21613	1111	Hallway	1	2	Wall	Plaster	Intact	-0.047 K	-0.068 L	354		Neg
21614	1111	Hallway	1	2	Baseboard	Thin Metal	Intact	0.492 K	0.875 L	354		Neg
21615	1111	Foyer	1	4	Wall	Plaster	Intact	-0.711 K	-0.131 L	354		Neg
21616	1111	Foyer	1	4	Column	Wood	Intact	0.686 K	-0.026 L	354		Neg
21617	1111	Office	5	1	Wall	Plaster	Intact	0.397 K	0.183 L	354		Neg
21618	1111	Office	5	1	Chair Rail	Wood	Intact	-1.283 K	-0.598 L	354		Neg
21619	1111	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21620	1111	Office	3	4	Floor	Plaster	Intact	-0.886 K	-0.317 L	0		Neg
21621	1111	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21622	1111	Office	2	1	Wall	Plaster	Intact	0.215 K	0.174 L	0		Neg

Page 1 of 2

Limit Set: 0

Coding Set: 1

No Averaging Selected

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR.- ADMIN. BLDG
MYSTIC, CT.

Action Level 1,000 mg /cm2 Lab 1,000 mg /cm2

Total Assays Reported 26

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21623	1111	Office	3	3	Wall	Plaster	Intact	0.822 K	0.067 L	0		Neg
21624	1111	Office	3	3	Wall	Plaster	Intact	1.048 K	0.215 L	0		Incl
21625	1111	Office	3	3	Wall	Plaster	Intact	2.346 K	0.627 L	0		Pos
21626	1111	Office	3	4	Wall	Plaster	Intact	0.216 K	-0.127 L	0		Neg
21627	1111	Calibration	*	*	*	*	*	0.965 K	0.649 L	354		Incl

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR.- ADMIN. BLDG.
MYSTIC, CT.

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported

3

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21629	1112	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21630	1112	Hallway	1	2	Wall	Plaster	Intact	0.182 K	0.017 L	0		Neg
21631	1112	Hallway	1	2	Ceiling	Plaster	Intact	0.204 K	0.059 L	0		Neg

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR.- ADMIN BLDG.
MYSTIC, CT.

Action Level 1,000 mg /cm2 Lab 1,000 mg /cm2

Total Assays Reported

9

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21633	1113	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21634	1113	Office	1	1	Wall	Plaster	Intact	-1.211 K	-0.456 L	0		Neg
21635	1113	Office	1	3	Baseboard	Thin Metal	Intact	0.563 K	0.269 L	0		Neg
21636	1113	Office	2	3	Wall	Plaster	Intact	0.220 K	0.108 L	0		Neg
21637	1113	Office	2	3	Ceiling	Plaster	Intact	0.215 K	-0.029 L	0		Neg
21638	1113	Office	3	3	Wall	Plaster	Intact	0.796 K	-0.028 L	0		Neg
21639	1113	Office	3	3	Wall	Plaster	Intact	0.121 K	0.409 L	0		Neg
21640	1113	Office	3	3	Ceiling	Plaster	Intact	-0.475 K	-0.674 L	0		Neg
21641	1113	Office	3	1	Wall	Plaster	Intact	-0.579 K	0.569 L	0		Neg

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR. ADMIN. BLDG.
MYSTIC, CT.

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 8

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21643	1114	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21644	1114	Service Room	1	4	Ceiling	Plaster	Intact	0.315 K	0.287 L	0		Neg
21645	1114	Service Room	1	3	Wall	Brick	Intact	-0.175 K	-0.080 L	0		Neg
21646	1114	Janitor Room	1	1	Ceiling	Plaster	Intact	-1.771 K	0.687 L	0		Neg
21647	1114	Janitor Room	1	4	Ceiling	Concrete	Intact	0.294 K	0.237 L	0		Neg
21648	1114	Janitor Room	1	4	Beam	Concrete	Intact	-0.571 K	0.001 L	0		Neg
21649	1114	Storage Room	1	1	Wall	Brick	Intact	0.793 K	0.097 L	0		Neg
21650	1114	Storage Room	1	1	Wall	Brick	Intact	0.299 K	-0.248 L	0		Neg

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR. - GIRLS DORM
MYSTIC, CT.

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported

27

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21602	2222	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21603	2222	Hallway	1	4	Wall	Plaster	Intact	0.700 K	-0.528 L	0		Neg
21604	2222	Hallway	1	4	Wall	Plaster	Intact	0.862 K	-0.481 L	0		Neg
21605	2222	Hallway	1	4	Chair Rail	Wood	Intact	0.953 K	-0.062 L	0		Incl
21606	2222	Hallway	1	4	Chair Rail	Wood	Intact	0.908 K	0.071 L	0		Incl
21607	2222	Hallway	1	4	Baseboard	Concrete	Intact	0.446 K	0.475 L	0		Neg
21608	2222	Hallway	1	4	Ceiling	Plaster	Intact	0.460 K	-0.680 L	0		Neg
21609	2222	Hallway	1	2	Wall	Plaster	Intact	0.142 K	-0.086 L	0		Neg
21610	2222	Auditorium	1	4	Wall	Wallboard	Poor	0.290 K	0.434 L	0		Neg
21611	2222	Auditorium	1	4	Ceiling	Plaster	Intact	1.112 K	-0.770 L	0		Incl
21612	2222	Auditorium	1	4	Ceiling	Plaster	Intact	0.861 K	-0.465 L	0		Neg
21613	2222	Copy Room	1	2	Wall	Wallboard	Intact	-0.295 K	0.080 L	0		Neg
21614	2222	Copy Room	1	2	Door Buck	Thin Metal	Intact	0.360 K	0.602 L	0		Neg
21615	2222	Office	1	2	Wall	Plaster	Intact	-0.399 K	-0.214 L	0		Neg
21616	2222	Office	1	2	Chair Rail	Wood	Intact	0.287 K	0.230 L	0		Neg
21617	2222	Office	1	2	Baseboard	Concrete	Poor	1.275 K	0.507 L	0		Pos
21618	2222	Office	1	2	Baseboard	Concrete	Poor	0.306 K	0.730 L	0		Neg
21619	2222	Hallway	2	1	Wall	Plaster	Intact	0.798 K	-0.059 L	0		Neg
21620	2222	Hallway	2	1	Chair Rail	Wood	Intact	1.155 K	0.499 L	0		Incl
21621	2222	Hallway	2	1	Chair Rail	Wood	Intact	0.782 K	0.376 L	0		Neg
21622	2222	Hallway	2	1	Floor	Concrete	Intact	-0.946 K	0.386 L	0		Neg

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR.- GIRLS DORM
MYSTIC, CT.

Action Level 1,000 mg /cm2 Lab 1,000 mg /cm2

Total Assays Reported

27

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21623	2222	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21624	2222	Basement	1	1	Wall	Plaster	Poor	0.195 K	0.108 L	0		Neg
21625	2222	Basement	1	4	Wall	Plaster	Poor	0.415 K	0.434 L	0		Neg
21626	2222	Basement	1	4	Ceiling	Plaster	Poor	-0.008 K	-0.790 L	0		Neg
21627	2222	Basement	1	3	Wall	Plaster	Poor	0.476 K	-1.003 L	0		Neg
21628	2222	Basement	1	4	Wall	Plaster	Poor	0.423 K	0.114 L	0		Neg

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR.- WHIPPLE
MYSTIC, CT.

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported

4

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21630	3331	Calibration	*	* *		*	*	0.000 X	0.000 X	0		
21631	3331	Hallway	1	2 Wall		Concrete	Intact	0.304 K	0.038 L	0		Neg
21632	3331	Hallway	1	3 Wall		Concrete	Intact	0.457 K	0.107 L	0		Neg
21633	3331	Teacher Room	1	3 Wall		Concrete	Intact	0.255 K	-0.167 L	0		Neg

XRF and Lab Results

Customer: Leadsafe, Inc.
1-800-392-6468

Project Name: DELTA ENVIRONMENTAL
10-17-00

Site Name: MYSTIC ED. CTR.- WHIPPLE
MYSTIC, CT.

Action Level 1.000 mg /cm2 Lab 1.000 mg /cm2

Total Assays Reported 5

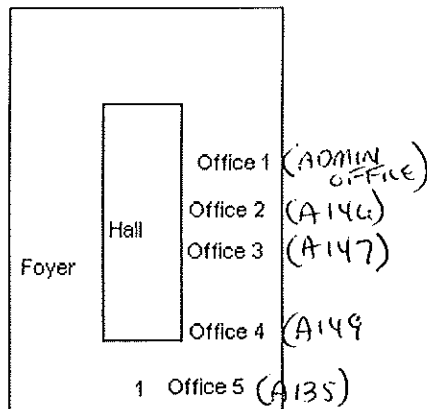
#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
21635	3333	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
21636	3333	Classroom	1	1	Wall	Concrete	Intact	-0.151 K	-0.031 L	0		Neg
21637	3333	Classroom	1	1	Door Buck	Thin Metal	Intact	0.867 K	0.960 L	0		Neg
21638	3333	Office	1	1	Wall	Concrete	Intact	0.347 K	0.133 L	0		Neg
21639	3333	Office	1	1	Radiator	Thin Metal	Intact	0.394 K	0.599 L	0		Neg

FLOOR PLAN

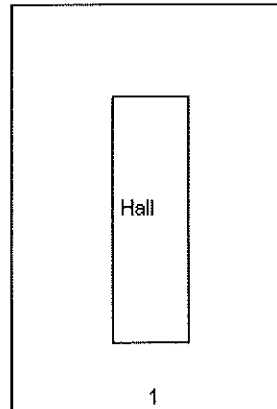
MYSTIC EDUCATIONAL CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CT.

ADMINISTRATION BUILDING

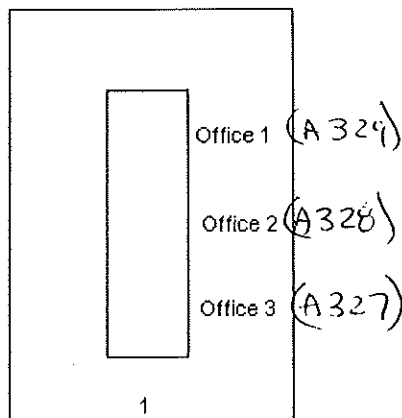
Site #1111-
1st Floor



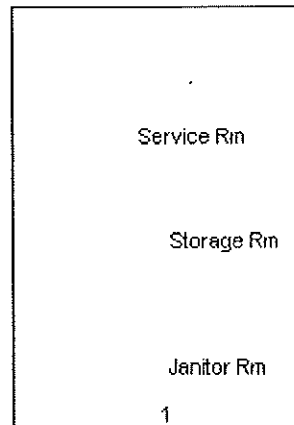
Site #1112-
2nd Floor



Site #1113-
3rd Floor



Site #1114-
Basement



STREET SIDE- EXTERIOR SIDE 1

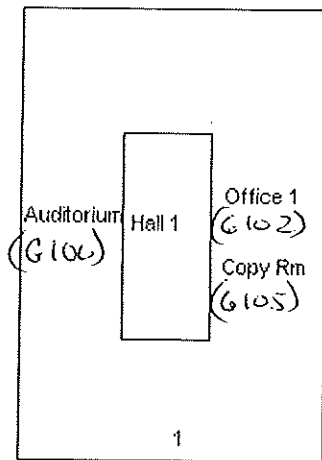
NOTE: The room layout sketch is only for identifying the rooms/spaces on the test report.
Wall #1 is shown in each room, additional walls are numbered in a clockwise rotation.
This sketch is not to scale.

FLOOR PLAN

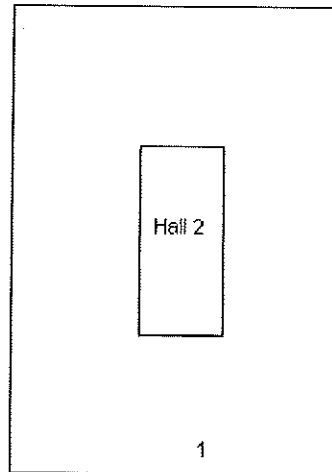
MYSTIC EDUCATIONAL CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CT.

GIRLS DORM

FIRST
FLOOR



BASEMENT



STREET SIDE- EXTERIOR SIDE 1

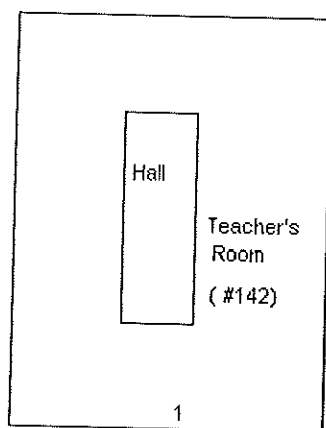
NOTE: The room layout sketch is only for identifying the rooms/spaces on the test report.
Wall #1 is shown in each room, additional walls are numbered in a clockwise rotation.
This sketch is not to scale.

FLOOR PLAN

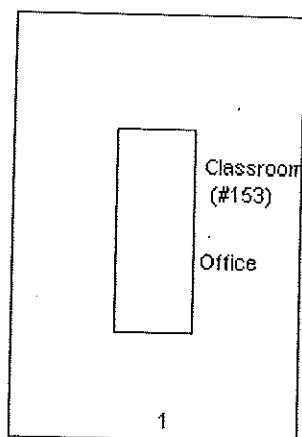
MYSTIC EDUCATIONAL CENTER
240 ORAL SCHOOL ROAD
MYSTIC, CT.

WHIPPLE BUILDING

Basement
SITE #3331



First Floor
SITE #3333



STREET SIDE- EXTERIOR SIDE 1

NOTE: The room layout sketch is only for identifying the rooms/spaces on the test report.
Wall #1 is shown in each room, additional walls are numbered in a clockwise rotation.
This sketch is not to scale.



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DEC 11 2000

LEAD PAINT INSPECTION REPORT

LEADSAFE INC. LICENSE # 000722

FOR STRUCTURE(S) LOCATED AT:
**Mystic Education Center
East Hartford, CT**

December 07, 2000



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Jim McCarthy
Delta Environmental Services, Inc.
81 Schoolground Rd.
Branford, CT 06405

12-07-00
Lead ID #00334547

Leadsafe, Inc. has conducted an on-site inspection for the detection of lead based paint at Mystic Education Center, Durant, Pratt, Rainbow & Crouter Buildings, Mystic, CT. on 12-07-00. The rooms/spaces were tested using the HUD Chapter 7 Guidelines for Lead Base paint Inspection, 1997 Revision. This methodology requires testing of representative components in each room/space, for example walls, ceilings, windows, doors, baseboards etc. The testing was accomplished by a licensed lead inspector, Gene Burch (Lic. # 000722) with a MAP 4 XRF Spectrum Analyzer instrument.

Test Report: Please read each section of the report prior to reviewing the XRF

Results . This is important in understanding the report. A brief description of each section of the report is provided below.

XRF Procedures: This section of the report describes in detail the methodology used to conduct the testing.

Floor Plan: The floor plan is a diagram depicting the layout of the areas tested. Each space is named and numbered in a manner which corresponds to how these areas are identified in the XRF Results. The diagram shows wall #1 in each space, the other walls are numbered in a *clockwise rotation* starting at wall #1.

XRF Results: All of the measurements taken at the site are shown in this section. The MAP 4 tests for lead concentration at two levels in the paint. The K-Shell represents the total concentration of lead in all layers of the paint. The L-Shell represents the concentration of lead in the top layers of the paint. The test results in the report are based on an action level of 1.0 milligrams per square centimeter (mg/cm²) in the K-Shell. The action level is determined by the HUD Guidelines.

Shaded Areas: Every location where the lead concentration was confirmed to be greater than the action level (taking into account the precision of the instrument) is shown in this section. These locations are shown as POS in the XRF Results pages. An inconclusive (INCL) result indicates the concentration of lead is in the vicinity of the action level within the boundaries of the precision of the Map 4. Inconclusive measurements can be qualified by taking paint chip samples and analyzing them at a laboratory. Due to additional expense, paint chip samples are only taken when authorized by the client.



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This inspection report is for the exclusive private use of the client. The report provided to the client is confidential and is not to be copied or disseminated to any party other than the property owner, buyer, insurance carrier or tenant without the express written consent of the inspector. Use of all disclosures contained in this report is specifically restricted to the transaction for which the inspection was performed. Use of or reliance upon the report by other parties, or for other transactions is strictly prohibited. None of these test results or reports developed through the inspectors performance of the work are intended or represented to be suitable for reuse by the client or others as presenting an accurate description of the property or its condition beyond that existing on the date of the performance of the inspection. Use of said test results or reports or other materials by client without written permission or adaptation by the inspector for the specific purpose intended shall be at the user's sole risk, without liability on the inspector's part, and the client agrees to indemnify and hold the inspector harmless from all claims, damages and expenses, including attorney's fees, arising out of such unauthorized use.

All renovations which interrupt lead based paint must be done in compliance with applicable Federal, State and local laws. The Occupational Safety and Health Administration (OSHA) released new worker safety guidelines for all renovations that interrupt lead based paint in May, 1993. We recommend the use of a professional contractor for the interruption or removal of hazardous levels of lead based paint and other lead contaminated materials. Please keep in mind, "shop vacuums" and ordinary vacuums do not have adequate filtration systems for collection and containment of hazardous materials and may aggravate lead dust conditions. A high efficiency particulate arresting (HEPA) vacuum and special detergents are needed to remove lead contaminated dust and debris.

Leadsafe can provide consulting services to help you assess any hazardous conditions detected at this property and determine the best approach to resolve these problem areas. If any questions arise regarding this report, please call anytime 860-523-1950 Or 800-392-6468. Thank you for using Leadsafe.

Sincerely,

Gene Burch



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Report Disclaimer

THE INFORMATION PROVIDED IN THIS REPORT IS LIMITED BY THE SCOPE OF THE INSPECTION REQUESTED BY THE CLIENT.

NOT ALL INSPECTIONS YIELD INFORMATION REGARDING THE PRESENCE OF LEAD AND THE EXISTENCE OF LEAD HAZARDS IN ALL MEDIA. YOU ARE ADVISED TO CLARIFY THE SCOPE OF THE INSPECTION PROVIDED WITH THE INSPECTOR.

It is generally acknowledged that the condition of the lead based paint ("LBP") in or on a residential structure will determine the extent of the hazard arising out of such LBP. Accordingly, any change in the condition of the LBP in the property in question will alter the validity of the test results provided herewith. The accuracy of any lead hazard evaluation performed is, therefore, limited to the condition of the property at the time the investigation reported herewith was conducted. The inspector assumes no responsibility for retesting or reinvestigating the property to determine changed conditions. Any and all changes in the premises or it's condition may result in the creation of lead based paint hazards not in existence at the time of the inspection.

Client is advised that results which are reported as negative or inconclusive are not indicative of the total absence of lead in surface coating materials. Such results indicate that lead is not present in concentration levels defined by federal, state or local regulations as lead based paint. Client is notified that care should be taken in the event of an accidental or intentional disturbance of or the undertaking of activities which could affect surfaces coated with paints or coverings containing any amount of lead.

Not all surfaces were tested or were accessible for testing. The inspector makes no representation with respect to the presence of lead-based paint or the condition of any surfaces which were inaccessible. Surfaces which were not tested may, if tested, yield results which indicate the presence of lead in greater or lesser concentrations than those tested, due to variability in application, paint quality, usage or other factors. The Client is advised to take such factors into account when undertaking any activities which may have an impact upon such surfaces.

This report is intended only for the benefit of the Inspector and the Client and does not create any rights in any third parties.



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PRO-TECT SAFETY ZONE™ Consulting Services

Leadsafe provides PRO-TECT SAFETY ZONE consulting services to our clients as a followup to testing their properties for lead hazards. When elevated levels of lead are detected, it is critical to properly assess the present and potential future conditions that may exist at this property. A **Lead Hazard Assessment** will highlight the areas that may pose a health threat or create a liability exposure. Once these areas have been identified, a viable plan of action must be developed to solve the problem. An **InPlace Management Plan** or an **Abatement Plan** should be designed and executed to ensure a safe environment exists at this property. **Project Management** services are available to oversee the abatement and/ or inplace management process and the contractors fulfilling the project. Please contact the office if you have any questions on these services. The services are outlined below.

The **Hazard Assessment** report combines the results of the lead testing analysis with general and specific information about the occupants and the functional use of the property. This information enables the consultant to determine the potential health risks to the occupants associated with known lead hazards. Avenues of exposure to lead hazards can vary significantly depending on a multitude of factors. The presence of known lead hazards at a property can impose financial risks as well. Federal, State and local ordinances often require specific actions be taken to correct conditions that are deemed hazardous. These actions generally have to be complied to within a predetermined time frame. The cost of bringing a property up to requirements of these ordinances can be expensive. The greatest financial risk to the owners may be the threat of litigation by a party who has been injured as a result of the lead hazards present on their property.

A **Hazard Assessment** Report will point out to the owners the locations and conditions which need to be addressed to enable them to reduce, minimize or eliminate these risks. Our consultant can work with you to determine the best and most cost effective method to satisfy your needs and requirements and solve the problem

There are two approaches to address known lead hazards:

1) Management

Management involves taking a proactive approach to control lead hazards *inplace*. When an owner chooses to utilize the Management approach, an **InPlace Management Plan** is designed. A Leadsafe consultant will work with you to develop an InPlace Management Plan which will implement interim controls to maintain existing lead hazards in a stable "*leadsafe*" condition. The plan will take into account the test results, Hazard Assessment and economics. The InPlace Management Plan may propose a variety of solutions to be implemented to control lead hazards in



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paint, dust, soil and water. In some instances, partial or full abatement may be recommended for areas that might not be safely managed in place, such as, chewable surfaces in a residence with one or more young children. There are a number of different methods and products that can be employed to cover, coat, encapsulate, filter, clean and maintain various levels of lead hazards in a variety of environments. These systems all have different life spans, levels of effectiveness and costs. Each system may require regular maintenance and scheduled inspections.

2) Abatement

Abatement requires removal of the lead hazards. Leadsafe consultants will work with the owner or their representative to create a solution that meets the owner's needs in conjunction with their economic capabilities. The consultant will take this solution and design an **Abatement Plan**. The abatement plan will identify areas of the property slated for abatement and will specify the method by which the abatement will be carried out on specific components. The abatement plan will be used for obtaining bids from abatement contractors. To maintain continuity, it is important that all contractors are bidding according to the same plan. Due to a conflict of interest, Leadsafe does not bid or contract for any abatement work. An abatement project can be a complicated procedure, we offer **Project Management** services to our clients to assist in accomplishing the job safely and in accordance with applicable regulations. Leadsafe can also provide clearance testing for lead dust upon completion of the abatement project to determine if the site has been properly decontaminated.



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Decorating concepts, moisture, wear and tear and traffic are some of the reasons different paints may have been applied, creating a unique paint history for each space. It is important to note, individual spaces may not be separated by a wall. For example, a living/dining room or hall/stairway depending on the configuration may be considered two separate spaces. In general, closets are considered to be a part of the space from which they are entered.

TESTING BUILDING COMPONENTS

In every space tested, each building component will be tested based on a representative sampling methodology (building components may consist of: door, door jambs, baseboards, walls, ceiling, window sashes, window cases, etc.) In each space, identical building components will be considered a "*homogenous group*" when their age and construction can be judged the same. In most instances, a homogeneous group of building components will have the same paint history. For example, if the baseboards in a room appear to be identical in age and construction, it is likely that each time the room was painted, all of these baseboards were painted with the same paint. When paint is applied to a surface, the thickness of the paint film can vary significantly in various locations on that surface. It is important to understand that paint films are applied to the surface (substrate material) by a variety of tools (brushes, rollers, sprayers, etc.) When various tools are employed to apply paint, the paint film thickness is rarely uniform. Hence, the concentration of materials (including lead) that paint is comprised of will vary at different locations on the same painted component. Paint film thickness can also be influenced by renovations along with general wear and tear. Based on these facts, we realize that testing for the presence and concentration of lead in paint is an evaluation that will rarely yield the same measurement. Instead, the test results will indicate a range of concentration on each component tested. For example, if a measurement taken on a door yields a test result of 3.0 mg/cm², it is likely that further testing on that same door, in a different location, would yield higher or lower measurements in the range of 3.0 mg/cm². Hence, when evaluating and interpreting the test results for individual building components, the measurement indicates the approximate range of lead concentration.

Leadsafe field technicians conduct all on-site testing with unlimited mode on the MAP-4 instrument. The MAP-4 instrument automatically determines the length of time required to accurately distinguish the level of precision necessary to establish whether the painted surface has a lead concentration which is above (POS) or below (NEG) the action level. The degree of precision is based on the length of time the scanner is held to the surface being tested. The longer the test time, the greater the precision of the results. If the lead concentration measurement falls within + or - 0.15mg/cm² of the action level, as determined by the instrument, a second location on the same component will be tested. In the event the measurement falls in the same range, the result will be reported as inconclusive (INCL). With this level of precision, we can accurately define the potential range of concentration of lead in the paint film at a specific location. This enables Leadsafe to establish the lead concentration range within very narrow parameters.



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MAP-4 XRF LEAD BASED PAINT TESTING

PLEASE READ THIS EXPLANATION PRIOR TO REVIEWING THE TEST REPORT:

Leadsafe requires their lead testing technicians to work in accordance with our strict standard operating procedure. Non-destructive on-site testing for the presence of lead-based paint is accomplished by utilizing the MAP-4 XRF Spectrum Analyzer instrument. This state-of-the-art testing instrument examines painted films by X-ray fluorescence (XRF). The testing is accomplished in conjunction with the AcuData™ System, an automated test data control system that virtually eliminates the presence of errors that commonly exist from test data gathered in the field. The SCITEC state-of-the-art testing system validates each field measurement at the site. The AcuTransfer™ software prevents any tampering with the test data and invalid measurements are automatically removed from the printed report. All data will be archived for a period of thirty years.

The Federal Government and many states have decided to allow up to 1.0 mg/cm² of lead in dried paint for regulatory purposes. **NOTE:** When a local ordinance has a stricter (lower) action level, all testing and report generation will be done to reflect the strictest guideline.

MAP-4 XRF: MEASUREMENT PRECISION

The precision of the MAP-4 instrument is qualified throughout each day by systematic calibration checks on reference standards. Upon arrival at the job site, a calibration check is done before testing commences, approximately once an hour as the testing proceeds, and upon completion of the testing at the site. The calibration results are shown in sequence on the test report.

ON-SITE MEASUREMENT VALIDATION

The quality control validation checks performed by the AcuTransfer software along with regular instrument calibration checks combined with a high degree of measurement precision produce validated data with a 95% confidence level on each individual test measurement.

AREAS TESTED

Buildings are comprised of a variety of functional spaces. When a building is tested for lead-based paint, each individual space is tested separately. In many instances, a space may be a room, such as: a living room, dining room, kitchen, bedroom, etc. In other cases, a space may be identified by its functional purpose, such as: a hallway, a stairway, basement, the exterior of the building, etc. Due to the fact that each space has a different functional purpose, it is possible that each space has been painted at a separate time and with a variety of paints.



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How to Read the Test Report Data Sheets

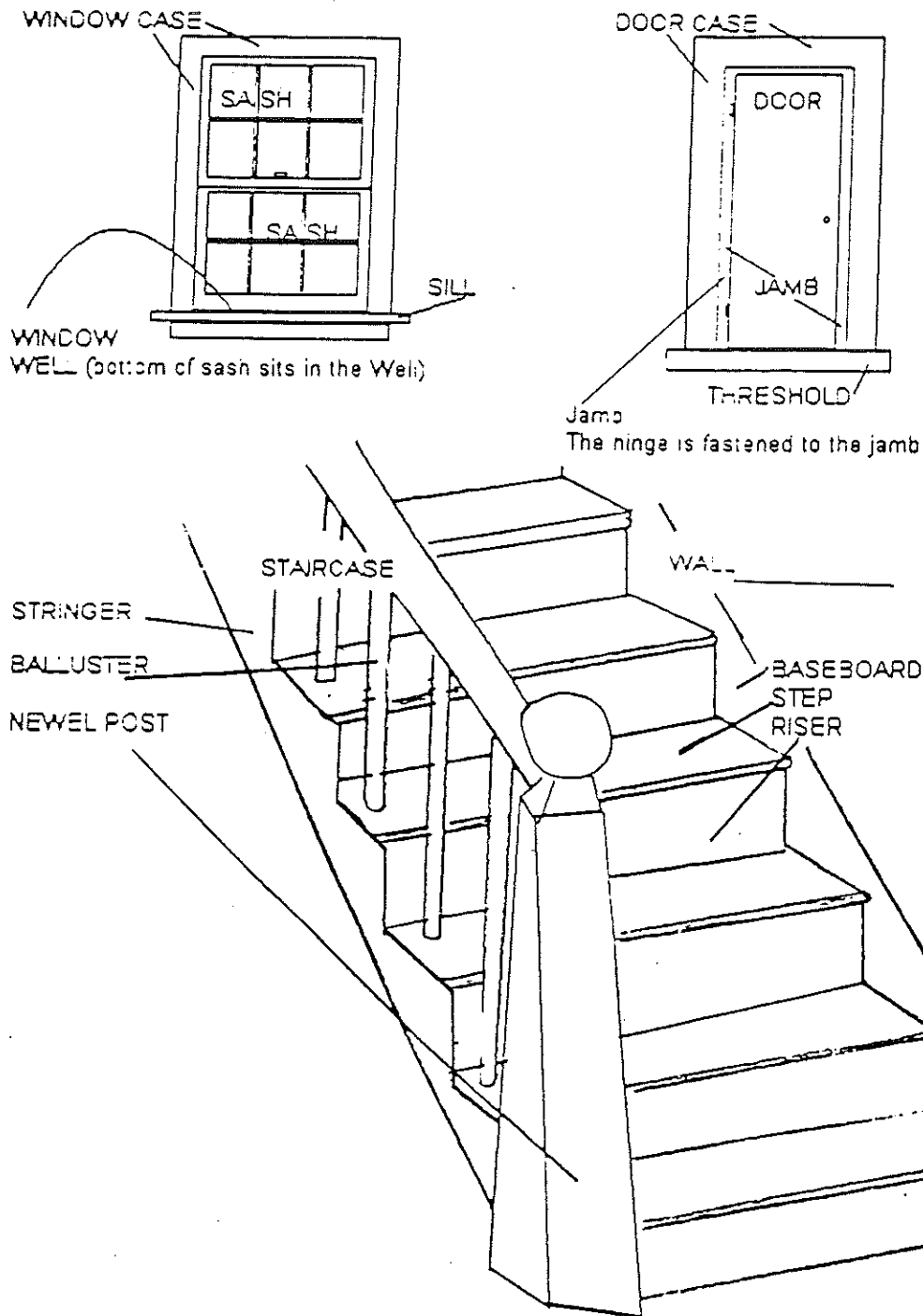
The standard test report data sheets in the XRF Test Results section of the report have thirteen columns of information. An explanation of each column is detailed below:

- 1) **#** All of the measurements taken at the site are numbered sequentially.
- 2) **Site** The number in this column is the identification number for this job site.
- 3) **Room-Tested** Each room/space tested is identified in this column. When more than one similar type of room/space is tested they are numbered sequentially as shown in column 4. Each room/space, as identified in the test data, is shown on the floor plan.
- 4) **#** The number in this column is coupled with column 3 (Room-Tested) to distinguish similar room types. For example: Bedroom 1, Bedroom 2, etc. as shown on the floor plan.
- 5) **Wall** The walls in each room/space are identified to show on which wall surface in the room each measurement was taken. The wall numbers are shown on the floor plan.
- 6) **Component** This column identifies the type of building component where the measurement was taken. The location of each measurement is randomly selected on that component.
- 7) **Condition** The paint condition at the time of testing is listed in this column.
- 8) **Substrate** The material that the building component is made of is called the substrate.
- 9) **K-Shell (mg/cm²)** The K-Shell is the measurement that evaluates the lead content in all layers of paint down to the substrate material. The measurement is in milligrams per square centimeter.
- 10) **L-Shell (mg/cm²)** The L-Shell is the measurement that evaluates the lead content in surface layers of paint.
- 11) **Map #** Identification number of the MAP instrument used for this test.
- 12) **Result** The result of the measurement is related to the action level (allowable lead level) and adjusted for the level of precision used for that measurement.

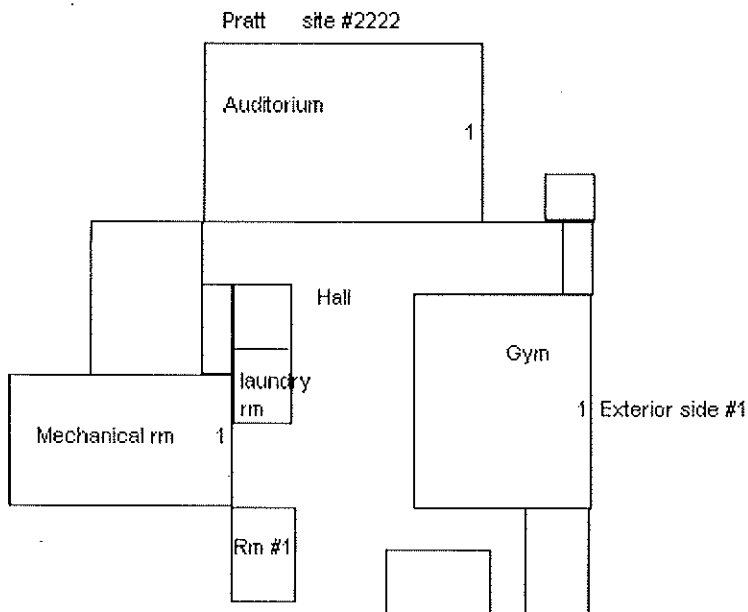
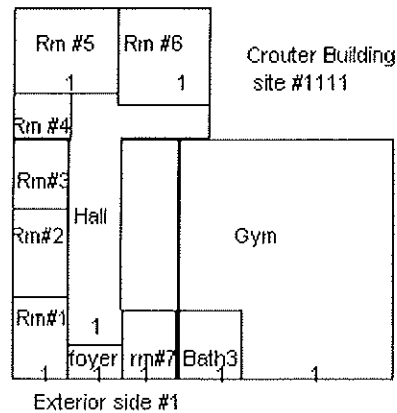
(Pos)	Positive result	>	Action Level + precision level
(Incl)	Inconclusive range	=	Action Level +/- precision level.
(Neg)	Negative result	<	Action Level - precision level

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FLOOR PLAN
Mystic Education Center



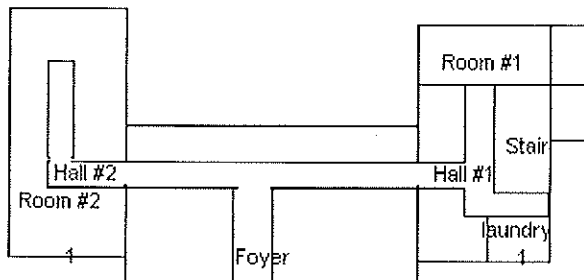
NOTE: The room layout sketch is only for identifying the rooms/spaces on the test report.
Wall #1 is shown in each room, additional walls are numbered in a clockwise rotation.
This sketch is not to scale.

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OFFICES ALSO IN HARTFORD, CT AND MAMARONECK, NY

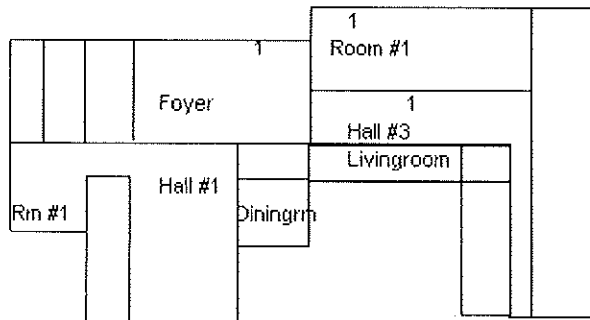
FLOOR PLAN

Mystic Education Center

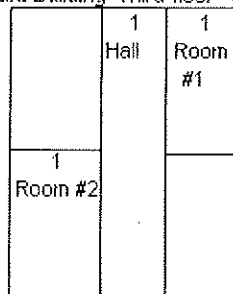
Durant Building First floor site 3331



Durant Building Second floor site #3332



Durant Building Third floor site #3333



NOTE: The room layout sketch is only for identifying the rooms/spaces on the test report.

Wall #1 is shown in each room, additional walls are numbered in a clockwise rotation.

This sketch is not to scale.

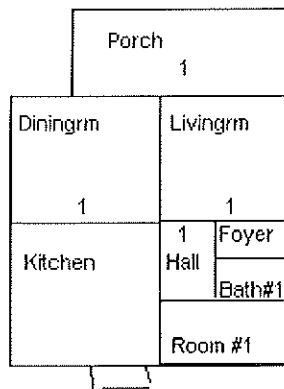
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FLOOR PLAN

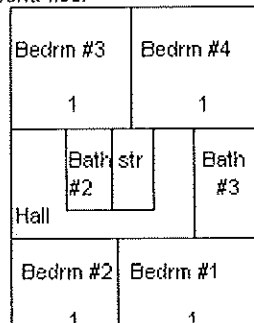
Mystic Education Center

Rainbow House First floor site 4444



Exterior side #1

Second floor



NOTE: The room layout sketch is only for identifying the rooms/spaces on the test report.

Wall #1 is shown in each room, additional walls are numbered in a clockwise rotation.

This sketch is not to scale.

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OFFICES ALSO IN HARTFORD, CT AND MAMARONECK, NY

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Crouter Building

Action Level 1.000 Lab 1.000 0

Total Assays Reported

53

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67428	1111	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67429	1111	Calibration	*	*	*	*	*	1.040 K	0.969 L	354		Incl
67430	1111	Foyer	1	2	Radiator	Thin Metal	Intact	0.289 S	0.000 X	354		Neg
67431	1111	Hallway	1	2	Wall	Thin Metal	Intact	0.014 S	0.000 X	354		Neg
67432	1111	Hallway	1	2	Door	Thin Metal	Intact	-0.135 S	0.000 X	354		Neg
67433	1111	Hallway	1	2	Door Buck	Thin Metal	Intact	0.382 S	0.000 X	354		Neg
67434	1111	Hallway	1	4	Door	Thin Metal	Intact	-0.175 S	0.000 X	354		Neg
67435	1111	Hallway	1	4	Door	Thin Metal	Intact	0.036 S	0.000 X	354		Neg
67436	1111	Hallway	1	4	Door Buck	Thin Metal	Intact	0.013 S	0.000 X	354		Neg
67437	1111	Hallway	1	4	Column	Thin Metal	Intact	0.121 S	0.000 X	354		Neg
67438	1111	Hallway	1	4	Door	Thin Metal	Intact	-0.292 S	0.000 X	354		Neg
67439	1111	Room #1	1	1	Radiator	Thin Metal	Intact	-0.298 S	0.000 X	354		Neg
67440	1111	Room #1	1	2	Door	Thin Metal	Intact	-0.143 S	0.000 X	354		Neg
67441	1111	Room #1	1	2	Door Buck	Thin Metal	Intact	0.339 S	0.000 X	354		Neg
67442	1111	Room #1	1	3	Wall	Thin Metal	Intact	0.413 S	0.000 X	354		Neg
67443	1111	Room #1	1	4	Door	Thin Metal	Intact	-0.180 S	0.000 X	354		Neg
67444	1111	Room #2	1	1	Wall	Thin Metal	Intact	0.197 S	0.000 X	354		Neg
67445	1111	Room #2	1	1	Door	Thin Metal	Intact	0.019 S	0.000 X	354		Neg
67446	1111	Room #2	1	2	Door	Thin Metal	Intact	0.330 S	0.000 X	354		Neg
67447	1111	Room #2	1	2	Door Buck	Thin Metal	Intact	0.132 S	0.000 X	354		Neg
67448	1111	Room #2	1	4	Door	Thin Metal	Poor	0.251 S	0.000 X	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Crouter Building

Action Level 1.000 Lab 1.000 0

Total Assays Reported 53

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67449	1111	Room #3	1	2	Radiator	Thin Metal	Intact	-0.021 S	0.000 X	354		Neg
67450	1111	Room #3	1	4	Door Buck	Thin Metal	Intact	0.391 S	0.000 X	354		Neg
67451	1111	Room #3	1	2	Beam	Thin Metal	Intact	0.343 S	0.000 X	354		Neg
67452	1111	Room #5	1	3	Door	Thin Metal	Poor	-0.086 S	0.000 X	354		Neg
67453	1111	Room #5	1	3	Door Buck	Thin Metal	Intact	0.177 S	0.000 X	354		Neg
67454	1111	Room #5	1	4	Wall	Thin Metal	Intact	-0.241 S	0.000 X	354		Neg
67455	1111	Room #5	1	1	Pipe	Thin Metal	Intact	-0.024 S	0.000 X	354		Neg
67456	1111	Room #6	1	2	Door	Thin Metal	Intact	-0.012 S	0.000 X	354		Neg
67457	1111	Room #6	1	4	Door	Thin Metal	Intact	0.193 S	0.000 X	354		Neg
67458	1111	Room #6	1	4	Door Buck	Thin Metal	Poor	0.123 S	0.000 X	354		Neg
67459	1111	Room #6	1	4	Pipe	Thin Metal	Intact	2.838 S	0.000 X	354		Pos
67460	1111	Room #6	1	4	Pipe	Thin Metal	Intact	10.460 S	0.000 X	354		Pos
67461	1111	Room #6	1	4	Pipe	Thin Metal	Intact	12.065 S	0.000 X	354		Pos
67462	1111	Foyer	2	1	Handrail	Thin Metal	Poor	0.190 S	0.000 X	354		Neg
67463	1111	Foyer	2	1	Stringer	Thin Metal	Poor	0.121 S	0.000 X	354		Neg
67464	1111	Foyer	2	2	Stair Riser	Thin Metal	Poor	0.508 S	0.000 X	354		Neg
67465	1111	Bathroom	3	2	Door	Thin Metal	Intact	-0.167 S	0.000 X	354		Neg
67466	1111	Bathroom	3	2	Door Buck	Thin Metal	Intact	0.115 S	0.000 X	354		Neg
67467	1111	Gymnasium	1	1	Column	Thin Metal	Intact	0.226 S	0.000 X	354		Neg
67468	1111	Gymnasium	1	2	Door Buck	Thin Metal	Intact	0.106 S	0.000 X	354		Neg
67469	1111	Gymnasium	1	3	Door	Thin Metal	Intact	0.289 S	0.000 X	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Crouter Building

Action Level 1.000 Lab 1.000 0

Total Assays Reported

53

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67470	1111	Gymnasium	1	3	Door Buck	Thin Metal	Poor	-0.076 S	0.000 X	354		Neg
67471	1111	Gymnasium	1	2	Baseboard	Thin Metal	Poor	0.280 S	0.000 X	354		Neg
67472	1111	Room #6	1	4	Floor	Masonry	Poor	0.078 K	0.240 L	354		Neg
67473	1111	Exterior	1	1	Siding	Masonry	Poor	-0.737 K	-0.050 L	354		Neg
67474	1111	Exterior	1	1	Door	Thin Metal	Intact	0.426 S	0.000 X	354		Neg
67475	1111	Exterior	1	2	Door	Thin Metal	Intact	0.392 S	0.000 X	354		Neg
67476	1111	Exterior	1	2	Siding	Thin Metal	Intact	0.048 S	0.000 X	354		Neg
67477	1111	Exterior	1	3	Door	Thin Metal	Intact	0.633 S	0.000 X	354		Neg
67478	1111	Exterior	1	3	Siding	Masonry	Poor	-0.139 K	0.330 L	354		Neg
67479	1111	Exterior	1	4	Siding	Masonry	Poor	0.172 K	0.095 L	354		Neg
67480	1111	Calibration	*	*	*	*	*	1.076 K	0.908 L	354		Incl

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Pratt Building

Action Level 1.000 Lab 1.000 0

Total Assays Reported 40

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67482	2222	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67483	2222	Calibration	*	*	*	*	*	1.112 K	0.870 L	354		Incl
67484	2222	Room #1	1	1	Door Buck	Thin Metal	Intact	0.091 S	0.000 X	354		Neg
67485	2222	Room #1	1	1	Door	Thin Metal	Intact	-0.227 S	0.000 X	354		Neg
67486	2222	Laundry Room	1	2	Door	Thin Metal	Intact	-0.371 S	0.000 X	354		Neg
67487	2222	Laundry Room	1	2	Door Buck	Thin Metal	Intact	0.384 S	0.000 X	354		Neg
67488	2222	Laundry Room	1	2	Wall	Masonry	Intact	-0.279 K	0.212 L	354		Neg
67489	2222	Hallway	1	1	Wall	Masonry	Intact	-0.567 K	0.265 L	354		Neg
67490	2222	Hallway	1	3	Wall	Masonry	Intact	-0.057 K	-0.085 L	354		Neg
67491	2222	Auditorium	1	1	Wall	Masonry	Intact	0.167 K	0.016 L	354		Neg
67492	2222	Auditorium	1	2	Door Buck	Thin Metal	Intact	0.240 S	0.000 X	354		Neg
67493	2222	Auditorium	1	3	Door	Thin Metal	Intact	0.256 S	0.000 X	354		Neg
67494	2222	Auditorium	1	2	Wall	Masonry	Intact	-0.052 K	-0.124 L	354		Neg
67495	2222	Auditorium	1	4	Floor	Masonry	Intact	0.218 K	0.014 L	354		Neg
67496	2222	Gymnasium	1	1	Wall	Masonry	Intact	-0.762 K	0.098 L	354		Neg
67497	2222	Gymnasium	1	1	Door	Wood	Varnish	0.100 K	-0.013 L	354		Neg
67498	2222	Gymnasium	1	1	Door Buck	Thin Metal	Intact	0.223 S	0.000 X	354		Neg
67499	2222	Gymnasium	1	2	Door	Thin Metal	Intact	0.044 S	0.000 X	354		Neg
67500	2222	Gymnasium	1	3	Beam	Thin Metal	Intact	4.744 S	0.000 X	354		Pos
67501	2222	Gymnasium	1	3	Beam	Thin Metal	Poor	4.682 S	0.000 X	354		Pos
67502	2222	Gymnasium	1	4	Pipe	Thin Metal	Intact	2.466 S	0.000 X	354		Pos

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Pratt Building

Action Level 1.000 Lab 1.000 0

Total Assays Reported

40

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67503	2222	Gymnasium	1	4	Door	Thin Metal	Intact	0.288 S	0.000 X	354		Neg
67504	2222	Gymnasium	1	4	Wall	Masonry	Intact	-0.874 S	0.000 X	354		Neg
67505	2222	Gymnasium	1	4	Bench	Wood	Varnish	-0.433 S	0.000 X	354		Neg
67506	2222	Mechanical Room	1	1	Handrail	Thin Metal	Intact	1.260 S	0.000 X	354		Pos
67507	2222	Mechanical Room	1	2	Stair Tread	Thin Metal	Intact	0.147 S	0.000 X	354		Neg
67508	2222	Mechanical Room	1	2	Stringer	Thin Metal	Intact	0.981 S	0.000 X	354		Incl
67509	2222	Mechanical Room	1	2	Stringer	Thin Metal	Intact	2.297 S	0.000 X	354		Pos
67510	2222	Mechanical Room	1	2	Pipe	Thin Metal	Intact	5.459 S	0.000 X	354		Pos
67511	2222	Mechanical Room	1	2	Machinery	Thin Metal	Intact	-0.147 S	0.000 X	354		Neg
67512	2222	Mechanical Room	1	3	Garage Door	Thin Metal	Intact	-0.036 S	0.000 X	354		Neg
67513	2222	Exterior	1	3	Door Buck	Thin Metal	Poor	0.074 S	0.000 X	354		Neg
67514	2222	Exterior	1	3	Door	Thin Metal	Intact	0.017 S	0.000 X	354		Neg
67515	2222	Exterior	1	3	Garage Door	Thin Metal	Intact	-0.134 S	0.000 X	354		Neg
67516	2222	Exterior	1	3	Door Buck	Thin Metal	Intact	0.167 S	0.000 X	354		Neg
67517	2222	Exterior	1	3	Lintel	Thin Metal	Intact	0.203 S	0.000 X	354		Neg
67518	2222	Exterior	1	2	Door	Thin Metal	Intact	0.012 S	0.000 X	354		Neg
67519	2222	Exterior	1	1	Door	Thin Metal	Intact	0.278 S	0.000 X	354		Neg
67520	2222	Calibration	*	*	*	*	*	0.715 S	0.000 X	354		Neg
67521	2222	Calibration	*	*	*	*	*	0.979 K	0.879 L	354		Incl

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Durant Building 1st. floor

Action Level 1.000 Lab 1.000 0

Total Assays Reported

38

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67523	3331	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67524	3331	Calibration	*	*	*	*	*	1.012 K	0.876 L	354		Incl
67525	3331	Room #1	1	1	Wall	Wallboard	Wallpaper	-0.110 K	-0.173 L	354		Neg
67526	3331	Room #1	1	1	Ceiling	Wallboard	Intact	0.472 K	0.284 L	354		Neg
67527	3331	Room #1	1	1	Door	Wood	Varnish	-0.084 K	-0.106 L	354		Neg
67528	3331	Room #1	1	3	Door	Thin Metal	Intact	-0.218 S	0.000 X	354		Neg
67529	3331	Room #1	1	3	Door Buck	Thin Metal	Intact	-0.096 S	0.000 X	354		Neg
67530	3331	Room #1	1	3	Radiator	Thin Metal	Intact	0.118 S	0.000 X	354		Neg
67531	3331	Room #1	1	1	Window Case	Thin Metal	Intact	-0.015 S	0.000 X	354		Neg
67532	3331	Room #2	1	1	Wall	Wallboard	Wallpaper	-0.421 S	0.000 X	354		Neg
67533	3331	Room #2	1	1	Wall	Wallboard	Wallpaper	0.316 K	-0.115 L	354		Neg
67534	3331	Room #2	1	4	Wall	Wallboard	Wallpaper	-0.490 K	0.364 L	354		Neg
67535	3331	Hallway	1	3	Wall	Wallboard	Wallpaper	-0.210 K	-0.060 L	354		Neg
67536	3331	Hallway	1	3	Door	Wood	Varnish	-0.233 K	0.083 L	354		Neg
67537	3331	Hallway	1	3	Door Buck	Thin Metal	Intact	0.248 S	0.000 X	354		Neg
67538	3331	Hallway	1	3	Window Case	Thin Metal	Intact	-0.154 S	0.000 X	354		Neg
67539	3331	Hallway	1	4	Door Buck	Thin Metal	Intact	0.256 S	0.000 X	354		Neg
67540	3331	Hallway	1	2	Radiator	Thin Metal	Intact	0.062 S	0.000 X	354		Neg
67541	3331	Hallway	2	2	Door	Thin Metal	Intact	-0.623 S	0.000 X	354		Neg
67542	3331	Hallway	2	2	Door Buck	Thin Metal	Intact	0.110 S	0.000 X	354		Neg
67543	3331	Hallway	2	3	Door Buck	Thin Metal	Intact	0.086 S	0.000 X	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Durant Building 1st. floor

Action Level 1.000 Lab 1.000 0

Total Assays Reported

38

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67523	3331	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67524	3331	Calibration	*	*	*	*	*	1.012 K	0.876 L	354		Incl
67525	3331	Room #1	1	1	Wall	Wallboard	Wallpaper	-0.110 K	-0.173 L	354		Neg
67526	3331	Room #1	1	1	Ceiling	Wallboard	Intact	0.472 K	0.284 L	354		Neg
67527	3331	Room #1	1	1	Door	Wood	Varnish	-0.084 K	-0.106 L	354		Neg
67528	3331	Room #1	1	3	Door	Thin Metal	Intact	-0.218 S	0.000 X	354		Neg
67529	3331	Room #1	1	3	Door Buck	Thin Metal	Intact	-0.096 S	0.000 X	354		Neg
67530	3331	Room #1	1	3	Radiator	Thin Metal	Intact	0.118 S	0.000 X	354		Neg
67531	3331	Room #1	1	1	Window Case	Thin Metal	Intact	-0.015 S	0.000 X	354		Neg
67532	3331	Room #2	1	1	Wall	Wallboard	Wallpaper	-0.421 S	0.000 X	354		Neg
67533	3331	Room #2	1	1	Wall	Wallboard	Wallpaper	0.316 K	-0.115 L	354		Neg
67534	3331	Room #2	1	4	Wall	Wallboard	Wallpaper	-0.490 K	0.364 L	354		Neg
67535	3331	Hallway	1	3	Wall	Wallboard	Wallpaper	-0.210 K	-0.060 L	354		Neg
67536	3331	Hallway	1	3	Door	Wood	Varnish	-0.233 K	0.083 L	354		Neg
67537	3331	Hallway	1	3	Door Buck	Thin Metal	Intact	0.248 S	0.000 X	354		Neg
67538	3331	Hallway	1	3	Window Case	Thin Metal	Intact	-0.154 S	0.000 X	354		Neg
67539	3331	Hallway	1	4	Door Buck	Thin Metal	Intact	0.256 S	0.000 X	354		Neg
67540	3331	Hallway	1	2	Radiator	Thin Metal	Intact	0.062 S	0.000 X	354		Neg
67541	3331	Hallway	2	2	Door	Thin Metal	Intact	-0.623 S	0.000 X	354		Neg
67542	3331	Hallway	2	2	Door Buck	Thin Metal	Intact	0.110 S	0.000 X	354		Neg
67543	3331	Hallway	2	3	Door Buck	Thin Metal	Intact	0.086 S	0.000 X	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Durant Building 2nd. floor

Action Level 1.000 Lab 1.000 0

Total Assays Reported

30

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67562	3332	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67563	3332	Foyer	1	2	Wall	Wallboard	Wallpaper	-0.124 K	0.082 L	0		Neg
67564	3332	Foyer	1	2	Wall	Wallboard	Intact	0.083 K	0.136 L	0		Neg
67565	3332	Foyer	1	2	Door Buck	Thin Metal	Intact	-0.188 S	0.000 X	0		Neg
67566	3332	Foyer	1	2	Door	Thin Metal	Intact	0.222 S	0.000 X	0		Neg
67567	3332	Hallway	1	1	Door Buck	Thin Metal	Intact	0.105 S	0.000 X	0		Neg
67568	3332	Hallway	1	1	Door	Thin Metal	Intact	0.047 S	0.000 X	0		Neg
67569	3332	Hallway	1	2	Wall	Wallboard	Intact	0.126 K	0.286 L	0		Neg
67570	3332	Hallway	1	3	Wall	Wallboard	Intact	0.260 K	0.296 L	0		Neg
67571	3332	Hallway	1	3	Door	Wood	Varnish	0.138 K	-0.259 L	0		Neg
67572	3332	Living Room	1	2	Wall	Wallboard	Wallpaper	0.013 K	0.029 L	0		Neg
67573	3332	Living Room	1	3	Wall	Wallboard	Wallpaper	-0.050 K	-0.027 L	0		Neg
67574	3332	Living Room	1	1	Door Buck	Thin Metal	Intact	0.218 S	0.000 X	0		Neg
67575	3332	Living Room	1	1	Door	Thin Metal	Intact	0.148 S	0.000 X	0		Neg
67576	3332	Living Room	1	4	Door Buck	Thin Metal	Intact	-0.067 S	0.000 X	0		Neg
67577	3332	Room #1	1	1	Window Case	Thin Metal	Intact	0.088 S	0.000 X	0		Neg
67578	3332	Room #1	1	3	Door Buck	Thin Metal	Intact	0.111 S	0.000 X	0		Neg
67579	3332	Room #1	1	3	Door	Thin Metal	Intact	-0.154 S	0.000 X	0		Neg
67580	3332	Room #1	1	2	Wall	Wallboard	Wallpaper	-0.544 K	-0.108 L	0		Neg
67581	3332	Room #2	1	1	Wall	Wallboard	Wallpaper	0.217 K	0.128 L	0		Neg
67582	3332	Room #2	1	3	Wall	Wallboard	Wallpaper	-0.457 K	0.018 L	0		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Durant Building 2nd. floor

Action Level 1.000 Lab 1.000 0

Total Assays Reported 30

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67583	3332	Room #2	1	2	Door	Wood	Varnish	0.118 K	0.140 L	0		Neg
67584	3332	Dining Room	1	1	Wall	Wallboard	Wallpaper	0.264 K	-0.070 L	0		Neg
67585	3332	Dining Room	1	3	Wall	Wallboard	Wallpaper	-0.069 K	-0.157 L	0		Neg
67586	3332	Dining Room	1	4	Wall	Wallboard	Wallpaper	0.341 K	-0.066 L	0		Neg
67587	3332	Dining Room	1	4	Door	Wood	Varnish	-0.211 K	-0.233 L	0		Neg
67588	3332	Hallway	3	2	Wall	Wallboard	Wallpaper	0.155 K	0.136 L	0		Neg
67589	3332	Hallway	3	4	Wall	Wallboard	Wallpaper	0.124 K	0.087 L	0		Neg
67590	3332	Hallway	3	4	Door Buck	Thin Metal	Intact	0.109 S	0.000 X	0		Neg
67591	3332	Hallway	3	4	Door	Thin Metal	Intact	0.243 S	0.000 X	0		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00

Site Name: Mystic Education Center
Durant Building 3rd. floor

Action Level 1.000 Lab 1.000.0

Total Assays Reported

14

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67593	3333	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67594	3333	Hallway	1	2	Wall	Wallboard	Wallpaper	-0.017 S	0.000 X	0		Neg
67595	3333	Hallway	1	2	Wall	Wallboard	Wallpaper	0.397 K	0.217 L	0		Neg
67596	3333	Hallway	1	2	Door	Wood	Varnish	-0.039 K	0.022 L	0		Neg
67597	3333	Hallway	1	4	Wall	Wallboard	Intact	-0.294 K	0.533 L	0		Neg
67598	3333	Room #1	1	1	Wall	Wallboard	Intact	-0.432 K	0.493 L	0		Neg
67599	3333	Room #1	1	2	Wall	Wallboard	Intact	0.374 K	0.069 L	0		Neg
67600	3333	Room #1	1	4	Wall	Wallboard	Intact	0.125 K	0.262 L	0		Neg
67601	3333	Room #1	1	4	Door Buck	Thin Metal	Intact	-0.027 S	0.000 X	0		Neg
67602	3333	Room #2	1	1	Wall	Wallboard	Intact	0.399 K	0.233 L	0		Neg
67603	3333	Room #2	1	4	Wall	Wallboard	Intact	0.192 K	0.140 L	0		Neg
67604	3333	Room #2	1	2	Wall	Wallboard	Wallpaper	-0.068 K	0.214 L	0		Neg
67605	3333	Calibration	*	*	*	*	*	1.136 K	0.895 L	354		Incl
67606	3333	Calibration	*	*	*	*	*	1.167 K	0.919 L	354		Incl

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported

171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67608	4444	Calibration	*	*	*	*	*	0.000 X	0.000 X	0		
67609	4444	Calibration	*	*	*	*	*	1.161 K	0.976 L	354		Incl
67610	4444	Kitchen	1	1	Door	Wood	Varnish	-0.165 K	-0.002 L	354		Neg
67611	4444	Kitchen	1	1	Door Case	Wood	Varnish	0.355 K	0.019 L	354		Neg
67612	4444	Kitchen	1	1	Wall	Wallboard	Intact	-0.033 K	-0.102 L	354		Neg
67613	4444	Kitchen	1	2	Window Case	Wood	Varnish	0.456 K	0.114 L	354		Neg
67614	4444	Kitchen	1	4	Wall	Wallboard	Intact	0.365 K	0.164 L	354		Neg
67615	4444	Kitchen	1	4	Door Case	Wood	Intact	0.098 K	-0.064 L	354		Neg
67616	4444	Dining Room	1	1	Wall	Plaster	Intact	-0.145 K	0.079 L	354		Neg
67617	4444	Dining Room	1	2	Wall	Plaster	Intact	0.007 K	0.439 L	354		Neg
67618	4444	Dining Room	1	2	Window Case	Wood	Intact	2.188 K	-0.026 L	354		Pos
67619	4444	Dining Room	1	2	Window Sill	Wood	Poor	3.474 K	0.576 L	354		Pos
67620	4444	Dining Room	1	2	Window Sash	Wood	Poor	5.495 K	0.591 L	354		Pos
67621	4444	Dining Room	1	3	Wall	Plaster	Intact	0.835 K	-0.617 L	354		Incl
67622	4444	Dining Room	1	3	Wall	Plaster	Intact	0.461 K	-0.578 L	354		Neg
67623	4444	Dining Room	1	3	Door Case	Wood	Intact	0.196 K	-0.085 L	354		Neg
67624	4444	Dining Room	1	4	Wall	Plaster	Intact	1.505 K	-0.776 L	354		Pos
67625	4444	Dining Room	1	4	Baseboard	Wood	Intact	0.548 K	-0.066 L	354		Neg
67626	4444	Dining Room	1	4	Ceiling	Plaster	Intact	-0.022 K	-0.816 L	354		Neg
67627	4444	Porch	1	1	Siding	Masonry	Intact	8.078 K	0.162 L	354		Pos
67628	4444	Porch	1	1	Door Case	Wood	Intact	8.687 K	0.485 L	354		Pos

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00

Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67629	4444	Porch	1	2	Wall	Wallboard	Intact	4.480 K	-0.059 L	354		Pos
67630	4444	Porch	1	3	Window Sash	Wood	Poor	6.497 K	0.845 L	354		Pos
67631	4444	Porch	1	3	Window Case	Wood	Poor	7.331 K	0.003 L	354		Pos
67632	4444	Porch	1	3	Window Sill	Wood	Intact	7.614 K	-0.793 L	354		Pos
67633	4444	Porch	1	3	Door	Wood	Poor	5.374 K	0.621 L	354		Pos
67634	4444	Porch	1	3	Door Case	Wood	Poor	6.213 K	-0.162 L	354		Pos
67635	4444	Porch	1	3	Door Jamb	Wood	Poor	2.883 K	-0.645 L	354		Pos
67636	4444	Porch	1	3	Wall	Wallboard	Intact	3.915 K	-0.206 L	354		Pos
67637	4444	Porch	1	4	Wall	Wood	Poor	5.197 K	0.062 L	354		Pos
67638	4444	Porch	1	4	Ceiling	Wood	Intact	2.326 K	-0.125 L	354		Pos
67639	4444	Porch	1	1	Door Case	Wood	Poor	10.095 K	0.603 L	354		Pos
67640	4444	Living Room	1	1	Wall	Wallboard	Intact	0.247 K	-0.138 L	354		Neg
67641	4444	Living Room	1	2	Door Case	Wood	Poor	1.645 K	0.091 L	354		Pos
67642	4444	Living Room	1	2	Wall	Plaster	Intact	0.382 K	-0.658 L	354		Neg
67643	4444	Living Room	1	3	Mantle	Wood	Intact	1.495 K	-0.309 L	354		Pos
67644	4444	Living Room	1	3	Wall	Plaster	Intact	0.490 K	-0.937 L	354		Neg
67645	4444	Living Room	1	3	Wall	Plaster	Intact	1.038 K	-0.805 L	354		Incl
67646	4444	Living Room	1	3	Door Case	Wood	Poor	2.195 K	0.177 L	354		Pos
67647	4444	Living Room	1	4	Window Sash	Wood	Intact	4.742 K	-0.146 L	354		Pos
67648	4444	Living Room	1	4	Window Sill	Wood	Intact	4.021 K	0.349 L	354		Pos
67649	4444	Living Room	1	4	Window Case	Wood	Intact	0.718 K	0.108 L	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported

171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67650	4444	Hallway	1	1	Wall	Plaster	Intact	4.437 K	-0.311 L	354		Pos
67651	4444	Hallway	1	1	Door Case	Wood	Intact	2.238 K	-0.362 L	354		Pos
67652	4444	Hallway	1	1	Door	Wood	Intact	2.390 K	0.081 L	354		Pos
67653	4444	Hallway	1	2	Wall	Wallboard	Intact	0.481 K	0.398 L	354		Neg
67654	4444	Hallway	1	4	Wall	Plaster	Intact	-0.058 K	0.303 L	354		Neg
67655	4444	Hallway	1	4	Baseboard	Wood	Poor	3.322 K	0.185 L	354		Pos
67656	4444	Hallway	1	4	Ceiling	Wallboard	Intact	-0.321 K	0.084 L	354		Neg
67657	4444	Foyer	1	1	Wall	Wallboard	Intact	0.104 K	0.204 L	354		Neg
67658	4444	Foyer	1	3	Wall	Plaster	Poor	0.404 K	0.066 L	354		Neg
67659	4444	Foyer	1	4	Door Case	Wood	Intact	0.969 K	-0.280 L	354		Incl
67660	4444	Foyer	1	4	Door Case	Wood	Intact	0.483 K	0.028 L	354		Neg
67661	4444	Foyer	1	4	Door	Wood	Intact	3.273 K	-0.059 L	354		Pos
67662	4444	Foyer	1	4	Wall	Plaster	Intact	0.410 K	0.227 L	354		Neg
67663	4444	Foyer	1	4	Ceiling	Plaster	Intact	0.441 K	0.158 L	354		Neg
67664	4444	Bathroom	1	1	Wall	Plaster	Intact	0.944 K	0.233 L	354		Incl
67665	4444	Bathroom	1	1	Wall	Plaster	Intact	1.474 K	0.036 L	354		Pos
67666	4444	Bathroom	1	2	Door Case	Wood	Poor	0.163 K	-0.604 L	354		Neg
67667	4444	Bathroom	1	2	Door	Wood	Intact	1.709 K	0.639 L	354		Pos
67668	4444	Bathroom	1	2	Wall	Plaster	Intact	0.034 K	0.162 L	354		Neg
67669	4444	Bathroom	1	4	Window Sill	Wood	Poor	0.558 K	-0.221 L	354		Neg
67670	4444	Bathroom	1	4	Window Sash	Wood	Intact	3.554 K	-0.165 L	354		Pos

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67671	4444	Bathroom	1	4	Window Case	Wood	Intact	0.548 K	-0.315 L	354		Neg
67672	4444	Bathroom	1	4	Baseboard	Wood	Poor	-0.091 K	-0.125 L	354		Neg
67673	4444	Room #1	1	1	Wall	Plaster	Intact	0.006 K	0.195 L	354		Neg
67674	4444	Room #1	1	2	Closet Shelf	Wood	Intact	-0.046 K	0.143 L	354		Neg
67675	4444	Room #1	1	3	Wall	Plaster	Intact	0.008 K	0.210 L	354		Neg
67676	4444	Room #1	1	3	Window Case	Wood	Poor	-0.065 K	-0.275 L	354		Neg
67677	4444	Room #1	1	3	Door	Wood	Intact	1.099 K	-0.301 L	354		Incl
67678	4444	Room #1	1	3	Door	Wood	Intact	2.432 K	-0.561 L	354		Pos
67679	4444	Room #1	1	4	Wall	Wallboard	Intact	-0.229 K	0.121 L	354		Neg
67680	4444	Room #1	1	4	Window Sill	Wood	Poor	3.742 K	0.007 L	354		Pos
67681	4444	Room #1	1	4	Window Sash	Wood	Intact	3.159 K	0.538 L	354		Pos
67682	4444	Room #1	1	4	Window Case	Wood	Intact	2.588 K	-0.139 L	354		Pos
67683	4444	Room #1	1	4	Ceiling	Wallboard	Intact	0.433 K	-0.492 L	354		Neg
67684	4444	Bedroom	1	1	Window Sash	Wood	Poor	2.606 K	0.108 L	354		Pos
67685	4444	Bedroom	1	1	Window Well	Wood	Intact	1.412 K	0.817 L	354		Pos
67686	4444	Bedroom	1	1	Window Well	Wood	Intact	2.170 K	0.765 L	354		Pos
67687	4444	Bedroom	1	1	Window Sill	Wood	Poor	0.393 K	-0.559 L	354		Neg
67688	4444	Bedroom	1	1	Window Case	Wood	Intact	0.201 K	-0.215 L	354		Neg
67689	4444	Bedroom	1	1	Wall	Wallboard	Intact	0.412 K	0.312 L	354		Neg
67690	4444	Bedroom	1	3	Wall	Wallboard	Intact	3.002 K	-0.519 L	354		Pos
67691	4444	Bedroom	1	2	Wall	Wallboard	Intact	0.453 K	0.277 L	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67692	4444	Bedroom	1	4	Wall	Wallboard	Intact	0.460 K	0.250 L	354		Neg
67693	4444	Bedroom	1	4	Ceiling	Wallboard	Intact	0.125 K	-0.589 L	354		Neg
67694	4444	Bedroom	1	3	Door	Wood	Intact	-0.308 K	0.285 L	354		Neg
67695	4444	Bedroom	1	3	Door Case	Wood	Poor	-0.069 K	-0.929 L	354		Neg
67696	4444	Bedroom	1	3	Door Jamb	Wood	Intact	-0.024 K	-0.117 L	354		Neg
67697	4444	Bedroom	2	1	Window Sill	Wood	Poor	-0.317 K	-0.287 L	354		Neg
67698	4444	Bedroom	2	1	Window Case	Wood	Poor	0.594 K	-0.502 L	354		Neg
67699	4444	Bedroom	2	1	Window Sash	Wood	Poor	2.109 K	-0.506 L	354		Pos
67700	4444	Bedroom	2	1	Wall	Wallboard	Intact	0.397 K	0.251 L	354		Neg
67701	4444	Bedroom	2	2	Wall	Wallboard	Intact	-0.131 K	0.398 L	354		Neg
67702	4444	Bedroom	2	3	Door	Wood	Intact	-0.516 K	0.110 L	354		Neg
67703	4444	Bedroom	2	3	Door Case	Wood	Intact	0.346 K	0.272 L	354		Neg
67704	4444	Bedroom	2	4	Wall	Wallboard	Intact	0.429 K	0.258 L	354		Neg
67705	4444	Bathroom	1	1	Wall	Wallboard	Intact	-0.090 K	0.223 L	354		Neg
67706	4444	Bathroom	1	2	Door Case	Wood	Intact	0.169 K	-0.037 L	354		Neg
67707	4444	Bathroom	1	2	Door	Wood	Intact	-0.086 K	-0.049 L	354		Neg
67708	4444	Bathroom	1	3	Wall	Wallboard	Intact	0.156 K	0.249 L	354		Neg
67709	4444	Bathroom	1	3	Cornerboard	Wood	Intact	0.094 K	-0.020 L	354		Neg
67710	4444	Bathroom	1	4	Wall	Wallboard	Intact	0.366 K	0.149 L	354		Neg
67711	4444	Bathroom	1	4	Wall	Wallboard	Intact	-0.020 K	0.241 L	354		Neg
67712	4444	Bathroom	1	4	Ceiling	Wallboard	Intact	0.374 K	0.544 L	354		Neg

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00

Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000.0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67713	4444	Hallway	1	1	Wall	Wallboard	Intact	-0.010 K	0.031 L	354		Neg
67714	4444	Hallway	1	2	Door Case	Wood	Intact	0.129 K	0.060 L	354		Neg
67715	4444	Hallway	1	2	Window Sash	Wood	Intact	3.221 K	0.296 L	354		Pos
67716	4444	Hallway	1	2	Window Case	Wood	Intact	0.447 K	-0.241 L	354		Neg
67717	4444	Hallway	1	2	Window Sill	Wood	Intact	0.396 K	0.122 L	354		Neg
67718	4444	Hallway	1	3	Wall	Wallboard	Intact	-0.407 K	0.176 L	354		Neg
67719	4444	Hallway	1	4	Wall	Wallboard	Intact	0.245 K	0.164 L	354		Neg
67720	4444	Bedroom	3	1	Wall	Wallboard	Intact	-0.043 K	0.227 L	354		Neg
67721	4444	Bedroom	3	1	Door Case	Wood	Intact	-0.005 K	0.227 L	354		Neg
67722	4444	Bedroom	3	2	Window Sash	Wood	Intact	2.785 K	0.420 L	354		Pos
67723	4444	Bedroom	3	2	Window Sill	Wood	Intact	0.503 K	-0.544 L	354		Neg
67724	4444	Bedroom	3	2	Window Case	Wood	Intact	0.584 K	-0.028 L	354		Neg
67725	4444	Bedroom	3	2	Wall	Wallboard	Intact	0.464 K	0.291 L	354		Neg
67726	4444	Bedroom	3	3	Wall	Wallboard	Intact	0.200 K	0.417 L	354		Neg
67727	4444	Bedroom	3	4	Wall	Wallboard	Intact	-0.423 K	0.016 L	354		Neg
67728	4444	Bedroom	4	1	Wall	Wallboard	Intact	-0.272 K	-0.265 L	354		Neg
67729	4444	Bedroom	4	1	Door Case	Wood	Intact	-0.031 K	0.163 L	354		Neg
67730	4444	Bedroom	4	1	Door	Wood	Intact	0.373 K	-0.054 L	354		Neg
67731	4444	Bedroom	4	2	Wall	Wallboard	Intact	2.361 K	-0.222 L	354		Pos
67732	4444	Bedroom	4	3	Wall	Wallboard	Intact	0.650 K	0.338 L	354		Neg
67733	4444	Bedroom	4	3	Window Sash	Wood	Poor	2.558 K	0.102 L	354		Pos

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00

Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67734	4444	Bedroom	4	3	Window Sill	Wood	Intact	3.987 K	-0.011 L	354		Pos
67735	4444	Bedroom	4	3	Window Case	Wood	Intact	1.571 K	-0.317 L	354		Pos
67736	4444	Bedroom	4	4	Wall	Wallboard	Intact	-0.051 K	0.647 L	354		Neg
67737	4444	Bedroom	4	4	Ceiling	Wallboard	Intact	0.580 K	0.297 L	354		Neg
67738	4444	Bedroom	4	1	Baseboard	Wood	Intact	-0.006 K	0.015 L	354		Neg
67739	4444	Stairway	1	2	Wall	Wallboard	Intact	0.407 K	0.402 L	354		Neg
67740	4444	Stairway	1	4	Wall	Wallboard	Intact	-0.375 K	0.163 L	354		Neg
67741	4444	Stairway	1	1	Ceiling	Wallboard	Intact	0.163 K	0.364 L	354		Neg
67742	4444	Stairway	1	1	Wall	Wallboard	Intact	-0.179 K	0.312 L	354		Neg
67743	4444	Stairway	1	4	Baseboard	Wood	Intact	-0.241 K	-0.081 L	354		Neg
67744	4444	Exterior	1	1	Door	Wood	Varnish	0.020 K	0.002 L	354		Neg
67745	4444	Exterior	1	1	Door Case	Wood	Poor	14.884 K	1.162 L	354		Pos
67746	4444	Exterior	1	1	Wall	Wood	Intact	11.499 K	1.125 L	354		Pos
67747	4444	Exterior	1	1	Window Sash	Wood	Intact	14.180 K	1.298 L	354		Pos
67748	4444	Exterior	1	1	Ceiling	Wood	Intact	12.358 K	1.578 L	354		Pos
67749	4444	Exterior	1	1	Door	Wood	Intact	0.412 K	0.008 L	354		Neg
67750	4444	Exterior	1	1	Shutters	Wood	Poor	-0.501 K	0.460 L	354		Neg
67751	4444	Exterior	1	1	Window Case	Wood	Poor	4.222 K	0.582 L	354		Pos
67752	4444	Exterior	1	1	Cellar Window	Wood	Poor	6.122 K	0.902 L	354		Pos
67753	4444	Exterior	1	1	Column	Wood	Intact	13.535 K	0.655 L	354		Pos
67754	4444	Exterior	1	1	Siding	Wood	Intact	1.595 K	0.130 L	354		Pos

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
67755	4444	Exterior	1	1	Bilco door	Thin Metal	Intact	-0.606 S	0.000 X	354		Neg
67756	4444	Exterior	1	2	Window Sash	Wood	Intact	0.453 K	0.660 L	354		Neg
67757	4444	Exterior	1	2	Window Case	Wood	Intact	3.310 K	0.953 L	354		Pos
67758	4444	Exterior	1	2	Window Sash	Wood	Poor	0.972 K	0.287 L	354		Incl
67759	4444	Exterior	1	2	Window Sash	Wood	Poor	3.012 K	0.133 L	354		Pos
67760	4444	Exterior	1	2	Cellar Window	Wood	Poor	8.902 K	0.988 L	354		Pos
67761	4444	Exterior	1	2	Siding	Wood	Intact	0.241 K	0.102 L	354		Neg
67762	4444	Exterior	1	2	Cornerboard	Wood	Intact	0.178 K	-0.069 L	354		Neg
67763	4444	Exterior	1	3	Siding	Wood	Intact	0.527 K	0.332 L	354		Neg
67764	4444	Exterior	1	3	Window Case	Wood	Intact	1.271 K	0.472 L	354		Pos
67765	4444	Exterior	1	3	Window Sash	Wood	Poor	1.645 K	0.056 L	354		Pos
67766	4444	Exterior	1	3	Door	Wood	Poor	11.118 K	1.299 L	354		Pos
67767	4444	Exterior	1	3	Threshold	Wood	Poor	9.716 K	-0.020 L	354		Pos
67768	4444	Exterior	1	3	Door Case	Wood	Intact	2.099 K	0.564 L	354		Pos
67769	4444	Exterior	1	4	Window Case	Wood	Intact	15.008 K	0.707 L	354		Pos
67770	4444	Exterior	1	4	Window Sash	Wood	Poor	12.349 K	1.568 L	354		Pos
67771	4444	Exterior	1	4	Window Sill	Wood	Intact	6.482 K	0.990 L	354		Pos
67772	4444	Exterior	1	4	Siding	Wood	Intact	6.168 K	-0.223 L	354		Pos
67773	4444	Exterior	1	4	Shutters	Wood	Poor	-0.923 K	-0.010 L	354		Neg
67774	4444	Exterior	1	4	Cellar Window	Wood	Intact	10.683 K	2.071 L	354		Pos
67775	4444	Exterior	1	4	Column	Wood	Intact	1.093 K	0.097 L	354		Incl

XRF Results

Customer: LEADSAFE, INC.

Project Name: Delta Environmental
12/07/00

Site Name: Mystic Education Center
Rainbow House Group Home

Action Level 1.000 Lab 1.000 0

Total Assays Reported 171

#	Site	Room Tested	#	Wall	Component	Substrate	Paint Condition	K-Shell mg/cm2	L-Shell mg/cm2	Map #	Lab	Result
6776	444	Exterior	1	4	Column	Wood	Intact	12.018 K	1.073 L	354		Pos
6777	444	Exterior	1	4	Door	Wood	Intact	1.711 K	0.326 L	354		Pos
6778	444	Calibration	*	*	*	*	*	1.084 K	0.867 L	354		Incl

APPENDIX N

Laboratory Analytical Report Floor System Samples Analyzed for Mercury



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

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

Attn:

Jamie Roche
Loureiro Engineering Associates, Inc.
100 Northwest Drive

2/8/2013

Plainville, CT 06062

Phone: (860) 747-6181

Fax: (860) 747-8822

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 1/30/2013. The results are tabulated on the attached data pages for the following client designated project:

Oral School Mystic Pratt Bldg Gym & Weight Rm 18HM3.01

The reference number for these samples is EMSL Order #011300344. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director



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

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

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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

<http://www.emsl.com>jsmith@emsl.com

EMSL Order: 011300344

CustomerID: LOUR62

CustomerPO:

ProjectID:

Attn: **Jamie Roche**
Loureiro Engineering Associates, Inc.
100 Northwest Drive

Phone: (860) 747-6181
Fax: (860) 747-8822
Received: 01/30/13 9:40 AM
Collected: 1/28/2013

Plainville, CT 06062

Project: Oral School Mystic Pratt Bldg Gym & Weight Rm 18HM3.01

Analytical Results

Client Sample Description Gym - 1 **Collected:** 1/28/2013 **Lab ID:** 0001

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
7471B	Mercury	412	23	mg/Kg	1/31/2013	JS	1/31/2013	JS

Client Sample Description Weight Rm - 2 **Collected:** 1/28/2013 **Lab ID:** 0002

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
7471B	Mercury	340	23	mg/Kg	1/31/2013	JS	1/31/2013	JS

Definitions:

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

RL - Reporting Limit



Environmental Chemistry Chain of Custody

EMSL Order Number (Lab Use Only):

011300344

Corporate - Cinnaminson, NJ
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Report To Contact Name: JAMIE ROCHE			Bill To Company: LOUREIRO			Sampled By (Signature):		
Company Name: LOUREIRO			Attention To: JAMIE ROCHE			Number of Samples in Shipment: 2		
Address 1: 100 NORTHWEST DR			Address 1: 100 NORTHWEST DR			Date of Shipment: 1/29/13		
Address 2: PLAINVILLE, CT 06062			Address 2: PLAINVILLE, CT 06062			U.S. State where Samples Collected: CT		
Phone : 860-747-6181 Fax :			Phone : 860-747-6181 Fax :			Purchase Order: BA 203		
Email Results To: JAROCHE@LOUREIRO.COM			Project Name: Ocas School Mystic Prnt Bldg Gym + Weight Rm			Comments: 8HMR.O		

Standard Turnaround Time: ☒ 2 Weeks The following TAT's are subject to lab approval: ☐ 1 Week ☐ 4 Days ☐ 3 Days ☐ 2 Days ☐ 1 Day

Failure to complete will hinder processing of samples

Client Sample ID	Comp	Grab	Date/Time	Matrix	Preservative	List Test(s) Needed					Comments	
						W=Water	S=Soil	A=Air	SL=Sludge	O=Other		
Gym - 1	X		1/28/13	S	Hg							
Weight Rm - 2	X		1/28/13	S								

Released By (Signature)	Date & Time	Received By	Date & Time
[Signature]	1/29/13 5:18 pm	Danni Albert	1/30/13 9:40 AM

Please indicate reporting requirements: ☐ Results Only ☐ Results and QC ☐ Reduced Deliverables ☐ Disk Deliverable ☐ Other _____

Comments/Special Instructions: