

Tighe&Bond

Hart Magnet Elementary School Exterior Window Caulking

Hazardous Building Materials Assessment

Prepared For:

Stamford Mold Task Force

May 2019

Hazardous Building Materials Assessment Report Prepared for:

City of Stamford Mold Task Force Office of Administration, 10th Floor 888 Washington Avenue Stamford, CT 06901

Hazardous Building Materials Assessment Performed by:

R

Brian N. Sirowich Project Environmental Scientist 2 CTDPH Asbestos Inspector License #342

Hazardous Building Materials Assessment Report Reviewed and Approved By:

Kevin J. McCarthy Project Manager

t. C

James T. Olsen, PG, LEP Vice President

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Section 1 Introduction

Tighe & Bond, Inc. (Tighe & Bond) was retained by the Stamford Mold Task Force (the "Client") to complete a Hazardous Building Materials Assessment (the "Assessment") at Hart Magnet Elementary School located at 61 Adams Avenue in Stamford, Connecticut (the "site").

The Assessment was performed on March 22, 2019, by Mr. Brian N. Sirowich of Tighe & Bond, a Connecticut licensed asbestos inspector. Mr. Sirowich's license and accreditation are included as Appendix A of this report. The Assessment was performed due to proposed re-caulking of the window systems as part of the Mold Task Force work at the site.

1.1 Assessment Summary

The Assessment at the site was conducted with the understanding that the Client is scheduled to replace the window caulking at the site. Other exterior caulking (expansion joints, doors, vents, etc.) of the school building not scheduled for replacement were not included in this Assessment.

The site is an elementary school operated by the City of Stamford. The main school building footprint encompasses approximately 82,600 square feet. The original portion of the school was constructed circa 1914 with classroom and auditorium additions in the 1990's. The exterior of the building is constructed with brick masonry. Two types of caulking were identified that are associated with the window systems. White caulking was observed around the majority of the smaller windows and a red caulking was identified adjacent to the auditorium entrance. Photographs of the window systems and associated caulking are included in Appendix B.

The Assessment included a visual assessment of suspect hazardous building materials (asbestos and polychlorinated biphenyls [PCBs]), and physical bulk sampling of suspect asbestos and PCB-containing materials. Asbestos and PCB sample locations are depicted in Figures 1.1 and 1.2.

Section 2 Assessment Protocols

2.1 Asbestos-Containing Materials

Prior to any type of building demolition or renovation, a thorough investigation is required to identify and quantify asbestos containing materials (ACM) which may be impacted by the demolition or renovation activities. The survey is required by the United States Environmental Protection Agency (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations (Title 40 CFR, Part 61, Subpart M), State of Connecticut Department of Public Health (CTDPH) Standards for Asbestos Abatement (19a-332a-1 – 19a-332a-23) as well as applicable portions of the Occupational Safety and Health Administration (OSHA) CFR 1926.1101 asbestos in construction regulations.

The Assessment included a visual inspection to locate, as far as practical, suspect ACM associated with the window caulking. The majority of the Assessment involved visible and accessible materials along the exterior of the building.

Suspect materials were divided into "homogeneous materials", building materials which were determined by the inspector to be homogeneous based on their color, texture, and age. During the asbestos portion of the Assessment, the sample locations, types of material, quantities and asbestos content, were recorded in tabular form.

The EPA recommends collecting samples of suspect ACM in a manner sufficient to determine asbestos content. The EPA NESHAP regulation does not specifically identify a minimum number of samples to be collected for each homogeneous material, but the NESHAP regulation does recommend the use of sampling protocols outlined in the EPA Asbestos Hazard Emergency Response Act (AHERA) (Title 40 CFR, Part 763, Subpart E). Numbers of samples collected by Tighe & Bond at the site were based in part on the AHERA regulation.

Bulk material samples collected were logged on proper chain-of-custody forms for transport to EMSL Analytical Inc. (EMSL), of Wallingford, Connecticut, for analysis. EMSL is a Connecticut licensed and American Industrial Hygiene Association (AIHA)-accredited asbestos laboratory. Initial asbestos sample analysis was conducted using the EPA Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116) via Polarized Light Microscopy with Dispersion Staining (PLM/DS) in accordance with the accreditation of the National Institute of Standards and Technology (NIST). Additionally, in accordance with EPA guidance documents, non-friable organically bound materials (NOB) (e.g., expansion caulk) were further analyzed by Transmission Electron Microscopy (TEM) to confirm PLM analysis.

The EPA, OSHA, and the CTDPH define a material that contains greater than one percent (>1%) asbestos, utilizing PLM/DS, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos. Materials containing less than one percent (<1%) asbestos are regulated to a degree by OSHA related to work practices, worker exposure, and waste containerization.

2.2 Polychlorinated Biphenyl-Containing Building Materials

PCBs in building materials have received extensive attention over recent years by environmental regulators, consultants, and contractors, and PCBs are increasingly being identified in buildings that may undergo demolition or renovation. Buildings/structures that were constructed (or renovated) between the 1950s and the late 1970s have a greater potential to contain PCBs in certain building materials.

It is important to note that EPA regulations which govern the Toxic Substance Control Act (TSCA) requirements including PCBs and PCB Bulk Product Wastes require the proper disposal of PCB-containing building materials, however, there is no current regulatory requirement to sample for PCBs (local, state or federal) prior to renovation or demolition.

Regardless of the regulatory sampling requirements, many waste/recycling receiving facilities may request PCB sampling to be performed. If it is suspected that PCBs could be present, it is important to also mitigate potential human health and safety risk to abatement/demolition contractors and owners' potential liability associated with the proper recycling/disposal of certain generated demolition waste materials.

Two types of window caulk were determined to be present and tested by Tighe & Bond. These samples were submitted to Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut, a Connecticut-accredited laboratory, for analysis of PCBs utilizing the EPA 3540C Soxhlet Extraction and SW 846 8082 analytical method.

Source material sampling involved removal of the source materials using hand tools to submit in bulk form to determine PCB content. The sampling tools utilized during the sampling were properly decontaminated prior to sample collection and following the collection of each individual sample in accordance with EPA guidelines to prevent cross-contamination of samples.

Presently, source materials containing PCBs at concentrations \geq 50 parts per million (ppm) or the equivalent units of milligrams per kilogram (mg/kg) are regulated by the EPA and characterized as PCB Bulk Product Waste. Source materials containing <50 ppm may be regulated by the EPA unless proven to be an Excluded PCB Product. The definition of an Excluded PCB Product includes those products or source of the products containing <50 ppm concentration of PCBs that were legally manufactured, processed, distributed in commerce, or used before October 1, 1984. Based on the Excluded PCB Product definition, materials installed after 1984 and determined to contain PCBs in concentrations >1 ppm are considered PCB Remediation Waste. Source materials determined to be Excluded PCB Product containing >1 ppm PCBs but < 50 ppm PCBs are regulated by the Connecticut Department of Energy and Environmental Protection (CTDEEP). Source materials containing <1 ppm PCBs are considered non-regulated by the EPA and CTDEEP.

Section 3 Findings

3.1 Asbestos-Containing Materials

Four homogeneous materials were identified during the Assessment and three samples of suspect ACM anticipated to be impacted by the proposed replacement were collected. Materials observed to be homogeneous throughout the site (i.e. window caulk) were sampled in accordance with EPA regulations and analyzed by PLM/DS. The NOB material determined to be non-asbestos by PLM/DS analysis was further analyzed by TEM to determine asbestos content.

The red and white window caulking sampled during this Assessment were found to be non-ACM

A complete list of suspect homogenous material, along with sample ID numbers, material description and location is provided in Table 1. Refer to Figure 1 indicating locations of suspect asbestos samples collected. The laboratory analytical report and chain-of-custody forms for asbestos sampling conducted by Tighe & Bond are in Appendix C.

Suspect materials encountered during renovation that are not identified in this report as being non-ACM should be assumed to be ACM until sample collection and laboratory analysis indicate otherwise.

3.2 PCB-Containing Building Materials

Ten of the eleven window caulk samples collected and analyzed were determined to be none detected with laboratory reporting limits < 1 ppm. One sample, 0322BS-C4A (Red Window Caulk) contained PCBs at a concentration of 0.73 ppm. As such, materials sampled were determined to be unregulated for PCBs.

Refer to Table 2 for a detailed list of window caulk sampled by Tighe & Bond for PCBs. Refer to Figure 1 indicating locations of suspect PCB samples collected.

Laboratory analytical reports for PCB samples collected by Tighe & Bond are provided in Appendix D.

Section 4 Hazardous Building Material Assessment Limitations

This report has been prepared on behalf of and for the exclusive use of the Client and is subject to and issued in accordance with the Agreement and the provisions thereof. Documents provided on this project shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party without the prior written consent of Tighe & Bond. Reuse of documents by Client or others without Tighe & Bond's written permission and mutual agreement shall be at the user's sole risk, without liability on Tighe & Bond's part and Client agrees to indemnify and hold Tighe & Bond harmless from all claims, damages, and expenses, including attorney's fees, arising out of such unauthorized use or reuse.

Tighe & Bond performed the HBMA in accordance with our Agreement (including any stated scope and schedule limitations) and used the degree of care and skill ordinarily exercised under similar circumstances by members of the profession practicing in the same or similar locality. The HBMA may not identify all regulated building materials as our scope may be limited to certain locations within an identified structure(s). Tighe & Bond performed the HBMA using reasonable methods to access and identify the presence of suspect materials. Therefore, additional suspect materials may be enclosed/hidden in inaccessible areas, including within the interior of walls, beneath slabs, above fixed ceilings or otherwise not readily accessible. Occupied buildings spaces, including the presence of tenant/building owner's materials may have restricted our access or observations of suspect materials. Tighe & Bond did not access or disassemble electrical/mechanical equipment. If applicable and to the extent feasible, we recommend supplemental evaluations following full building vacancy. Unless otherwise noted, sampling of building materials for polychlorinated biphenyls (PCBs) was not performed and the evaluation of the potential presence of mold was not completed.

If an Opinion of Probable Construction Costs (OPCC) is provided, Tighe & Bond has no control over the cost or availability of labor, equipment or materials, or over market conditions or the contractor's method of pricing, and that the opinion of probable costs is made on the basis of Tighe & Bond's professional judgment and experience is based on currently available information. Tighe & Bond makes no guarantee nor warranty, expressed or implied, that the actual costs of the construction work will not vary from the OPCC.

This report is not intended to be utilized as a bidding document or as a project specification document. This report was prepared for use by the building owner and project team (i.e. architect, construction manager, general contractor, demolition contractor, abatement contractor) for locating identified hazardous regulated building materials within the contracted limits of the scope of services.

J:\S\S2087 Stamford\033 Mold Remediation Consulting\Sites\Hart Magnet\WIndow_Caulk_Assessment_Reporting\Hart_Window_caulk_Assessment.docx

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TABLES

TABLE 1 SUMMARY OF SUSPECT ASBESTOS-CONTAINING MATERIALS HART MAGNET ELEMENTARY SCHOOL 61 ADAMS AVENUE STAMFORD, CONNECTICUT

| Sample # | Material Description | Color | Material Location | Approximate Quantity | Asbestos Result | Comment |
|------------|----------------------|-------|--|-------------------------|-----------------|---------|
| 0322BS-01A | White Window Caulk | White | Ground Floor Rear Exterior Window Special Ed Room 025 | NA | ND^1 | |
| 0322BS-01B | White Window Caulk | White | Ground Floor Side Exterior Window Special Ed Room 025 | NA | ND | |
| 0322BS-02A | White Window Caulk | White | First Floor Front Exterior Window Gym/Café Room 170 | NA | ND^1 | |
| 0322BS-02B | White Window Caulk | White | First Floor Front Exterior Window Small Group Instruction 172 | NA | ND | |
| 0322BS-03A | Red Window Caulk | Red | First Floor Front Window/Door System Vestibule 175 | NA | ND^1 | |
| 0322BS-03B | Red Window Caulk | Red | First Floor Front Window/Door System Vestibule 175 | NA | ND | |
| 0322BS-04A | White Window Caulk | White | Ground Floor Front Exterior Window Computer Room 016 | NA | ND^1 | |
| 0322BS-04B | White Window Caulk | White | Ground Floor Front Exterior Window Conference Room 112 | NA | ND | |
| LEGEND | | | | | | |

SURVEY PERFORMED BY: BRIAN N SIROWICH

ND = NONE DETECTED

¹ - CONFIRMATORY ANALYSIS VIA TEM NOB

NA = NOT APPLICABLE

State License #:000342

Tighe&Bond

Engineers | Environmental Specialists

TABLE 2 SUMMARY OF SUSPECT PCB-CONTAINING BUILDING MATERIALS HART MAGNET ELEMENTARY SCHOOL 61 ADAMS AVENUE STAMFORD, CONNECTICUTT



| Sample # | Material Description | Material Location | Substrate PCB Results (PPM) | | Comments |
|------------|----------------------|--|--------------------------------|---------|---|
| 0322BS-C1A | White Window Caulk | Original - Rear Window Special Ed Rm 025 | Concrete | ND<0.5 | |
| 0322BS-C1B | White Window Caulk | Original - Rear Window Pre-K Rm 029 | Brick | ND<0.33 | |
| 0322BS-C1C | White Window Caulk | Original - Side Window Special Ed Rm 025 | Concrete | ND<0.32 | |
| 0322BS-C1D | White Window Caulk | Original - Side Window Drama Rm 040 | Brick | ND<0.8 | |
| 0322BS-C2A | White Window Caulk | Auditorium Addition Gym/Cafe Rm 170 | Concrete | ND<0.78 | |
| 0322BS-C2B | White Window Caulk | Auditorium Addition Front Window Small Group Instruction Rm 172 | Concrete | ND<0.8 | |
| 0322BS-C3A | Red Window Caulk | Auditorium Addition Front Vestibule Window | Brick | 0.73 | Lab Report identified this sample as Sample ID 0322BS-C2C |
| 0322BS-C4A | White Window Caulk | 94/96 Addition Front Computer Room 016 | Brick | ND<0.33 | |
| 0322BS-C4B | White Window Caulk | 94/96 Addition Front Conference Room 112 | Brick | ND<0.78 | |
| 0322BS-C4C | White Window Caulk | 94/96 Addition Rear HC Kindergarten Room 007 | Concrete | ND<0.77 | |
| 0322BS-C4D | White Window Caulk | 94/96 Addition Front Computer Room 016 | Concrete | ND<0.78 | |
| LEGEND | | | | | |

SURVEY PERFORMED BY: BRIAN N SIROWICH

PPM = PARTS PER MILLION

ND= NONE DETECTED

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FIGURES



LEGEND

= NON-ASBESTOS CONTAINING EXTERIOR SAMPLE LOCATION

● = PCB SOURCE SAMPLE LOCATIONS



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APPENDIX A

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT THE INDIVIDUAL NAMED BELOW IS CERTIFIED BY THIS DEPARTMENT AS A ASBESTOS CONSULTANT-INSPECTOR CERTIFICATE NO. 000342 BRIAN N. SIROWICH CURRENT THROUGH 11/30/19 VALIDATION NO. 03-721939 und SIGNATURE

Big Apple Occupational Safety Inc 505 Eighth Avenue, #2305, New York, NY 10018

(212) 564-7656

This Is To Certify That

Brian Sirowich SS#: XXX-XX-XXX #SS

has successfully completed the New York State Department of Health approved course entitled This course meets requirements of TSCA Title II

Inspector Refresher

(The official record of successful completion is the DOH 2832 Certificate of completion New York State Department of Health Certificate of Asbestos Safety Training)

Course Date: 10/05/2018

Expiration Date: 10/05/2019

Examination Date: 10/05/2018

Certificate Number: 822184

Examination Grade: 48%



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APPENDIX B

Appendix B - Photographic Log



033F

Job Number: 28-2087-

Client: Stamford Mold Task Force

Site: Hart Magnet Elementary School



| Photograph No.: 2 | Date: 3/22/19 | Direction Taken: — | | | | | |
|---|---------------|--------------------|--|--|--|--|--|
| Description: Original Building—Exterior White Window Caulking | | | | | | | |
| | | | | | | | |

Appendix B - Photographic Log



Site: Hart Magnet Elementary School





Photograph No.: 3 **Date:** 3/22/19



Job Number: 28-2087-033F

Appendix B - Photographic Log

Client: Stamford Mold Task Force

Site: Hart Magnet Elementary School

| Photograph No.: 5 | Date: 3/22/19 | Direction Taken: — |
|-----------------------|----------------------|---------------------|
| Description: Building | Addition—Exterior Wh | ite Window Caulking |
| | | |







Job Number: 28-2087-033F

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APPENDIX C

| EMSL | EMSL Analytical, Inc. 29 North Plains Highway, Unit # 4 Wallingford, CT 06492 Tel/Fax: (203) 284-5948 / (203) 284-5978 http://www.EMSL.com / wallingfordlab@emsl.com | EMSL Order: Customer ID: Customer PO: Project ID: | 241901508 TIGH62 |
|------------|---|--|---------------------|
| Attention: | Kevin McCarthy | Phone: | (203) 641-2782 |
| | Tighe & Bond | Fax: | (860) 704-4775 |
| | 213 Court Street | Received Date: | 03/27/2019 3:00 PM |
| | Suite 1100 | Analysis Date: | 04/03/2019 |
| | Middletown, CT 06457 | Collected Date: | 03/22/2019 |
| Project: | 28-2087-033F/ HART ELEMENTARY SCHOOL WINDOW CAULK STAMFORD, CONNECTICUT | KING REPLACEMENT, 61 A | DAMS AVE, |

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

| | | <u>Non-Asbestos</u> | | | Asbestos | |
|------------------------------|---|-------------------------------------|-----------|--------------------------|---------------|--|
| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Туре | |
| 0322BS-01A 241901508-0001 | Ground floor rear exterior window Special Ed room 025 - white window caulk | Gray Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-01B 241901508-0002 | Ground floor rear exterior window Special Ed room 025 - white window caulk | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-02A 241901508-0003 | First floor front exterior window gym/café room 170 - white window caulk | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-02B 241901508-0004 | First floor front exterior window gym/café room 170 - white window caulk | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-03A 241901508-0005 | First floor front window/door system vestibule 175 - red window caulk | Red Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-03B 241901508-0006 | First floor front window/door system vestibule 175 - red window caulk | Red Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-04A 241901508-0007 | Ground floor front exterior window computer room 016 - white window caulk | Tan Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |
| 0322BS-04B 241901508-0008 | Ground floor front exterior window computer room 112 - white window caulk | White Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected | |

Analyst(s)

Kelsey Witik (4) Quetcy Castro Romero (4)

Almedina Hodzic, Asbestos Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations . Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

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

Initial report from: 04/03/2019 16:47:47



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

EMSL Order: 241901508 Customer ID: TIGH62 Customer PO: Project ID:

| Attention: | Kevin McCarthy | Phone: | (203) 641-2782 |
|------------|---|-------------------------|--------------------------|
| | Tighe & Bond | Fax: | (860) 704-4775 |
| | 213 Court Street | Received Date: | 03/27/2019 3:00 PM |
| | Suite 1100 | Analysis Date: | 04/10/2019 |
| | Middletown, CT 06457 | Collected Date: | 03/22/2019 |
| Project: | 28-2087-033F/ HART ELEMENTARY SCHOOL WINDOW CAU | LKING REPLACEMENT, 61 A | ADAMS AVE, STAMFORD, COM |

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

| Sample ID | Description | Appearance | % Matrix Material | % Non-Asbestos Fibers | Asbestos Types |
|------------------------------|--|------------------------------------|-------------------|-----------------------|----------------------|
| 0322BS-01A 241901508-0001 | Ground floor rear exterior window Special Ed room 025 - white window caulk | Gray Non-Fibrous Homogeneous | 100.0 Other | None | No Asbestos Detected |
| 0322BS-02A 241901508-0003 | First floor front exterior window gym/café room 170 - white window caulk | Tan Non-Fibrous Homogeneous | 100.0 Other | None | No Asbestos Detected |
| 0322BS-03A 241901508-0005 | First floor front window/door system vestibule 175 - red window caulk | Red Non-Fibrous Homogeneous | 100.0 Other | None | No Asbestos Detected |
| 0322BS-04A 241901508-0007 | Ground floor front exterior window computer room 016 - white window caulk | Tan Non-Fibrous Homogeneous | 100.0 Other | None | No Asbestos Detected |

Analyst(s)

Almedina Hodzic (4)

Almedina Hodzic, Asbestos Laboratory Manager or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. 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

Initial report from: 04/10/2019 11:42:22





24190/508

213 Court Street, Suite 1100, Middletown, CT 06457

Phone 860-704-4760

SAMPLE LOG FOR ASBESTOS BULKS

Page 1 of 2

Project Name: HART Elementary School Window Caulking Replacement

Project No. _____28-2087-033F___

Building: 61 Adams Ave, Stamford, Connecticut

Project Manager: McCarthy, K

| Sample ID | Sample Location | Material |
|--|--|--|
| *0322BS-01A | Ground Floor Rear Exterior Window Special Ed Room 025 | White Window Caulk |
| 0322BS-01B | Ground Floor Side Exterior Window Special Ed Room 025 | White Window Caulk |
| *0322BS-02A | First Floor Front Exterior Window Gym/Café Room 170 | White Window Caulk |
| 0322BS-02B | First Floor Front Exterior Window Small Group Instruction 172 | White Window Caulk |
| *0322BS-03A | First Floor Front Window/Door System Vestibule 175 | Red Window Caulk |
| 0322BS-03B | First Floor Front Window/Door System Vestibule 175 | Red Window Caulk |
| *0322BS-04A | Ground Floor Front Exterior Window Computer Room 016 | White Window Caulk |
| 0322BS-04B | Ground Floor Front Exterior Window Conference Room 112 | White Window Caulk |
| | | |
| | | |
| | | |
| | | |
| | | |
| Analysis Method: 🛛 P | LM Other | Turnaround Time <u>1 Week</u> |
| Based on the turnarou Please call the office if | nd time indicated above, analyses are due to Tighe & analyses will be late at 860-704-4760. | Bond, Inc. on or before this date:4/4/2019 |
| Email Results to: | bsirowich@tighebond.com Do Not Mail | Hard Copy Report Total # of Samples:8 |
| Special Instructions layer samples unless in sample above by TEM | : <u>Stop analysis on first positive sample in each homo</u> ndicated. Do Not Point Count. If NOB group sample re NOB, per group, as noted by asterisk and bold front. | geneous set of samples unless otherwise noted. Do not esults are 0% - < 1% by PLM, analyze only "A" group |
| Samples collected by | Brian Sirowich Date: | 3/22/19 Time: |
| Samples [Sent by] [| | N19 15'.00 |
| Shipped To: Shipped To: | SL State Other | W& |
| Method of Shipment | Fed Ex Other | |

J:\\$\\$2087 Stamford\033 Mold Remediation Consulting\Sites\Hart Magnet\Laboratory Results\Asbestos\Asbestos_Bulk_Chain_HART_BNS_2019-0327.doc

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Appendix D



Monday, April 01, 2019

Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT SDG ID: GCC76597 Sample ID#s: CC76597 - CC76600

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

XI: De

Phyllis/Shiller Laboratory Director

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #M-CT007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530 RI Lab Registration #63 UT Lab Registration #CT00007 VT Lab Registration #VT11301



Sample Id Cross Reference

April 01, 2019

SDG I.D.: GCC76597

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT

| Client Id | Lab Id | Matrix | |
|------------|---------|--------|--|
| 0322BS-C1A | CC76597 | CAULK | |
| 0322BS-C1B | CC76598 | CAULK | |
| 0322BS-C1C | CC76599 | CAULK | |
| 0322BS-C1D | CC76600 | CAULK | |



| Ana | lysis | Report |
|-----|-------|--------|
|-----|-------|--------|

April 01, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Information | | Custody Inform | Date | <u>Time</u> | |
|--------------------|--------------|----------------|----------------|-------------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000705 |

Laboratory Data

SDG ID: GCC76597 Phoenix ID: CC76597

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C1A |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|---------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/S | BSW3540C |
| PCB (Soxhlet SW3540C |) | | | | | | |
| PCB-1016 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1221 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1232 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1242 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1248 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1254 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1260 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1262 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1268 | ND | 500 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 48 | | % | 2 | 03/30/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 51 | | % | 2 | 03/30/19 | SC | 30 - 150 % |
| % TCMX | 45 | | % | 2 | 03/30/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 60 | | % | 2 | 03/30/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C1A

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director April 01, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis F | Report |
|------------|--------|
|------------|--------|

April 01, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Information | | Custody Inform | Date | Time | |
|--------------------|--------------|----------------|----------------|----------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000705 |

Laboratory Data

SDG ID: GCC76597 Phoenix ID: CC76598

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C1B |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|----------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/SI | BSW3540C |
| PCB (Soxhlet SW3540C |) | | | | | | |
| PCB-1016 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1221 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1232 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1242 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1248 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1254 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1260 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1262 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1268 | ND | 330 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 43 | | % | 2 | 03/29/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 41 | | % | 2 | 03/29/19 | SC | 30 - 150 % |
| % TCMX | 38 | | % | 2 | 03/29/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 44 | | % | 2 | 03/29/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C1B

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director April 01, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis | Report |
|----------|--------|
|----------|--------|

April 01, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Information | | Custody Inform | Date | Time | |
|--------------------|--------------|----------------|----------------|----------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000705 |

Laboratory Data

SDG ID: GCC76597 Phoenix ID: CC76599

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C1C |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|----------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/SI | 3 SW3540C |
| PCB (Soxhlet SW3540C) | | | | | | | |
| PCB-1016 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1221 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1232 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1242 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1248 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1254 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1260 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1262 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| PCB-1268 | ND | 320 | ug/Kg | 2 | 03/29/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 52 | | % | 2 | 03/29/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 46 | | % | 2 | 03/29/19 | SC | 30 - 150 % |
| % TCMX | 40 | | % | 2 | 03/29/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 56 | | % | 2 | 03/29/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C1C

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

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Phyllis Shiller, Laboratory Director April 01, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis | Report |
|----------|--------|
|----------|--------|

April 01, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Informa | ation | Custody Inform | nation | Date | <u>Time</u> |
|----------------|--------------|----------------|----------------|----------|-------------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000705 |

Laboratory Data

SDG ID: GCC76597 Phoenix ID: CC76600

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C1D |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|----------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/SI | 3 SW3540C |
| PCB (Soxhlet SW3540C) |) | | | | | | |
| PCB-1016 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1221 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1232 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1242 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1248 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1254 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1260 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1262 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1268 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 67 | | % | 5 | 03/30/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 63 | | % | 5 | 03/30/19 | SC | 30 - 150 % |
| % TCMX | 77 | | % | 5 | 03/30/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 77 | | % | 5 | 03/30/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C1D

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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Phyllis Shiller, Laboratory Director April 01, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045

Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 01, 2019

QA/QC Data

SDG I.D.: GCC76597

| Parameter | Blank | Blk RL | | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|--|--------|-------------|----------------|------------|-----------|------------|---------|----------|-----------|--------------------|--------------------|--|
| QA/QC Batch 472241 (ug/Kg), (| 2C Sam | ple No: CC7 | 76597 10X (CC7 | 6597, CC76 | 6598, C | C76599 | , CC76 | 5600) | | | | |
| Polychlorinated Biphenyls | 5 | | | | | | | | | | | |
| PCB-1016 | ND | 170 | | 86 | 82 | 4.8 | | | | 40 - 140 | 30 | |
| PCB-1221 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1232 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1242 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1248 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1254 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1260 | ND | 170 | | 91 | 88 | 3.4 | | | | 40 - 140 | 30 | |
| PCB-1262 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1268 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| % DCBP (Surrogate Rec) | 101 | % | | 95 | 91 | 4.3 | | | | 30 - 150 | 30 | |
| % DCBP (Surrogate Rec) (Confirm | 108 | % | | 102 | 98 | 4.0 | | | | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) | 94 | % | | 86 | 77 | 11.0 | | | | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) (Confirm Comment: | 99 | % | | 93 | 83 | 11.4 | | | | 30 - 150 | 30 | |

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director April 01, 2019

| Monday, Apr | ril 01, 2019 | | Sample Criteria | Exceedances Report | | | | |
|-------------|--------------|-----------------|-----------------|--------------------|----|----------|----------|----------|
| Criteria: | None | | eccr | 6597 - TIGHE | | | | |
| State: | СТ | | 0007 | | | | RI | Analysis |
| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | Criteria | Units |
| | | | | | | | | |

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



NY # 11301

Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Comments

April 01, 2019

SDG I.D.: GCC76597

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

| Ydo' | |
|--------|--|
| CUSI | |
| N OF | |
| CHAI | |
| SAMPLE | |
| SOURCE | |
| PCB | |

Tighe&Bond WUAPIJ

| Project Number: | 28-2087-033F Date: 3/27/2019 |
|-------------------------|--|
| Project Name: | SMTF – Hart Magnet _ Recaulking Project Page: 1 of 1 |
| Site Address: | 61 Adams Ave, Stamford, CT |
| Project Manager: | Kevin McCarthy |

| Sample ID | Sample Location | Material | Substrate | Date Collected | Time Collected | Notes |
|------------|--|-------------------|-----------|-------------------|-------------------|--------|
| 0322BS-C1A | Original - Rear Window Special Ed 025 | White Widow Caulk | Concrete | 3/22/2019 | AM | 7020L |
| 0322BS-C1B | Original - Rear Window Pre-K 029 | White Widow Caulk | Brick | 3/22/2019 | AM | 7 w598 |
| 0322BS-C1C | Original - Side Window Caulk Special Ed 025 | White Widow Caulk | Concrete | 3/22/2019 | AM | 7 N599 |
| 0322BS-C1D | Original - Side Window Caulk Drama 040 | White Widow Caulk | Brick | 3/22/2019 | AM | 002705 |
| | | | | | | |
| | | | | | | |
| | | | | | - | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Turnaround Time: 5 day | Reporting Limit: <1 ppm | | Time:J Dat $3-3877$ Time:J Dat $2/28/19$ Time:J Dat $D/28/19$ Time:J DatTime: | |
|---|--------------------------|------------------------------|--|--|
| lethod 3500B/3540C (extraction), EPA Method 8082 (analysis) Laboratory: Phoenix | kmccarthy@tighebond.com | | B. Sirowich Date: 3/22/2019 | |
| Analysis Method: EPA M | Email PDF of Results to: | Special Instructions: | Samples Collected By: Relinquished [By][To]:[Relinquished [By][To]:[Relinquished [By][To]:[| |

Fax 860.704.4775

•

Tel 860.704.4760

•

213 Court Street

• Middletown, CT 06457



Tuesday, April 02, 2019

Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

Project ID:SMTF- HART MAGNET- RECAULKING PROJECTSDG ID:GCC76601Sample ID#s: CC76601 - CC76603

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

XI: De

Phyllis/Shiller Laboratory Director

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #M-CT007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530 RI Lab Registration #63 UT Lab Registration #CT00007 VT Lab Registration #VT11301



Sample Id Cross Reference

April 02, 2019

SDG I.D.: GCC76601

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT

| Client Id | Lab Id | Matrix | |
|------------|---------|--------|--|
| 0322BS-C2A | CC76601 | CAULK | |
| 0322BS-C2B | CC76602 | CAULK | |
| 0322BS-C2C | CC76603 | CAULK | |



| Analysis | Report |
|----------|--------|
|----------|--------|

April 02, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Informa | ation | Custody Inform | nation | Date | | |
|----------------|--------------|----------------|----------------|----------|--------|--|
| Matrix: CAULK | | Collected by: | KM | 03/22/19 | | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 | |
| Rush Request: | Standard | Analyzed by: | see "By" below | | | |
| P.O.#: | 28-2087-033F | | | | 000700 | |

Laboratory Data

SDG ID: GCC76601 Phoenix ID: CC76601

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C2A |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|---------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/S | B SW3540C |
| PCB (Soxhlet SW3540C |) | | | | | | |
| PCB-1016 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1221 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1232 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1242 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1248 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1254 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1260 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1262 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| PCB-1268 | ND | 780 | ug/Kg | 5 | 03/29/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 37 | | % | 5 | 03/29/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 35 | | % | 5 | 03/29/19 | SC | 30 - 150 % |
| % TCMX | 43 | | % | 5 | 03/29/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 38 | | % | 5 | 03/29/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C2A

| | | RL/ | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis | Report |
|----------|--------|
|----------|--------|

April 02, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Informa | ation_ | Custody Inform | nation | Date | Time |
|----------------|--------------|----------------|----------------|----------|--------|
| Matrix: CAULK | | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000700 |

Laboratory Data

SDG ID: GCC76601 Phoenix ID: CC76602

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C2B |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|---------|----------------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/S | _B SW3540C |
| PCB (Soxhlet SW3540C |) | | | | | | |
| PCB-1016 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1221 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1232 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1242 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1248 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1254 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1260 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1262 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| PCB-1268 | ND | 800 | ug/Kg | 5 | 03/30/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 54 | | % | 5 | 03/30/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 48 | | % | 5 | 03/30/19 | SC | 30 - 150 % |
| % TCMX | 65 | | % | 5 | 03/30/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 57 | | % | 5 | 03/30/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C2B

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis | Report |
|----------|--------|
|----------|--------|

April 02, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Informa | ation | Custody Inform | nation | Date | Time |
|----------------|--------------|----------------|----------------|----------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000700 |

Laboratory Data

SDG ID: GCC76601 Phoenix ID: CC76603

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C2C |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|----------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/SI | BSW3540C |
| PCB (Soxhlet SW3540C) | <u>)</u> | | | | | | |
| PCB-1016 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1221 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1232 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1242 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1248 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1254 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1260 | 730 | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1262 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| PCB-1268 | ND | 330 | ug/Kg | 2 | 04/01/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 61 | | % | 2 | 04/01/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 67 | | % | 2 | 04/01/19 | SC | 30 - 150 % |
| % TCMX | 62 | | % | 2 | 04/01/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 65 | | % | 2 | 04/01/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C2C

| | | RL/ | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045

Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 02, 2019

QA/QC Data

SDG I.D.: GCC76601

| Parameter | Blank | Blk RL | | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|--|--------|--------------|-----------------|----------|-----------|------------|---------|----------|-----------|--------------------|--------------------|--|
| QA/QC Batch 472241 (ug/Kg), (| 2C Sam | ple No: CC76 | 597 10X (CC7660 | 1, CC7 | 6602, C | C76603 |) | | | | | |
| Polychlorinated Biphenyls | 5 | | | | | | | | | | | |
| PCB-1016 | ND | 170 | | 86 | 82 | 4.8 | | | | 40 - 140 | 30 | |
| PCB-1221 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1232 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1242 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1248 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1254 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1260 | ND | 170 | | 91 | 88 | 3.4 | | | | 40 - 140 | 30 | |
| PCB-1262 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| PCB-1268 | ND | 170 | | | | | | | | 40 - 140 | 30 | |
| % DCBP (Surrogate Rec) | 101 | % | | 95 | 91 | 4.3 | | | | 30 - 150 | 30 | |
| % DCBP (Surrogate Rec) (Confirm | 108 | % | | 102 | 98 | 4.0 | | | | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) | 94 | % | | 86 | 77 | 11.0 | | | | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) (Confirm Comment: | 99 | % | | 93 | 83 | 11.4 | | | | 30 - 150 | 30 | |

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director April 02, 2019

| Tuesday, Ap | oril 02, 2019 | | Sample Criteria | Exceedances Report | | | | |
|-------------|---------------|-----------------|-----------------|--------------------|----|----------|----------|----------|
| | | | | | | | | |
| State: | СТ | | 666 | | | | RI | Analysis |
| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | Criteria | Units |
| | | | | | | | | |

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.





Analysis Comments

April 02, 2019

SDG I.D.: GCC76601

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Luboa Date: 3/27/2019 70005 10997 Notes MC1910M Time: 1250 Time: f 5 5 Reporting Limit: <1 ppm Page: 1 of 1 Turnaround Time: 5 day Time: Collected Time AΑ AΜ A] Dat 7-28-19 Time: 3/22/2019 3/22/2019 3/22/2019 6 Collected Date] Dat 3/28 **Tighe**&**Bond** .] Dat Substrate Concrete Concrete Brick EPA Method 3500B/3540C (extraction), EPA Method 8082 (analysis) Laboratory: Phoenix White Window Caulk White Window Caulk Date: 3/22/2019 0 Red Window Caulk Material PCB SOURCE SAMPLE CHAIN OF CUSTODY SMTF – Hart Magnet - Recaulking Project Auditorium Addition Front Vestibule Window Auditorium Addition Front Window Gym/Café 170 Auditorium Addition Front Window Small Group Instruction 172 kmccarthy@tighebond.com Sample Location 61 Adams Ave, Stamford, CT B. Sirowich Project Manager: Kevin McCarthy 28-2087-033F **Email PDF of Results to:** Relinquished [By][To]:[Relinquished [By][To]:[Relinquished [By][To]:[Samples Collected By: **Special Instructions:** 0322BS-C2A 0322BS-C2B 0322BS-C3A Sample ID **Project Number: Analysis Method: Project Name:** Site Address:

Fax 860.704.4775 • Tel 860.704.4760 • Middletown, CT 06457 • 213 Court Street



Tuesday, April 02, 2019

Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

Project ID:SMTF- HART MAGNET- RECAULKING PROJECTSDG ID:GCC76604Sample ID#s: CC76604 - CC76607

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

XI: De

Phyllis/Shiller Laboratory Director

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #M-CT007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530 RI Lab Registration #63 UT Lab Registration #CT00007 VT Lab Registration #VT11301



Sample Id Cross Reference

April 02, 2019

SDG I.D.: GCC76604

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT

| Client Id | Lab Id | Matrix | |
|------------|---------|--------|--|
| 0322BS-C4A | CC76604 | CAULK | |
| 0322BS-C4B | CC76605 | CAULK | |
| 0322BS-C4C | CC76606 | CAULK | |
| 0322BS-C4D | CC76607 | CAULK | |



| Analysis | Report |
|----------|--------|
|----------|--------|

April 02, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Informa | ation | Custody Inforn | nation | <u>Date</u> |
|----------------|--------------|----------------|----------------|-------------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 |
| Rush Request: | Standard | Analyzed by: | see "By" below | |
| P.O.#: | 28-2087-033F | | | |

Laboratory Data

SDG ID: GCC76604 Phoenix ID: CC76604

<u>Time</u>

12:50

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C4A |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|----------|------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/SI | BSW3540C |
| PCB (Soxhlet SW3540C) | <u>)</u> | | | | | | |
| PCB-1016 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1221 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1232 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1242 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1248 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1254 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1260 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1262 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| PCB-1268 | ND | 330 | ug/Kg | 2 | 03/30/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 53 | | % | 2 | 03/30/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 47 | | % | 2 | 03/30/19 | SC | 30 - 150 % |
| % TCMX | 41 | | % | 2 | 03/30/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 52 | | % | 2 | 03/30/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C4A

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis Report | |
|-----------------|--|
| April 02, 2019 | |

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Information | | Custody Inform | Custody Information | | |
|--------------------|--------------|----------------|---------------------|----------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | 1 - 1 | | | 000766 |

Laboratory Data

SDG ID: GCC76604 Phoenix ID: CC76605

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C4B |

| | | RL/ | | | | | | |
|--------------------------|------------|-----|-------|----------|-----------|---------|------------|---|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference | |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/S | BSW3540C | |
| PCB (Soxhlet SW3540 | <u>)C)</u> | | | | | | | |
| PCB-1016 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1221 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1232 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1242 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1248 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1254 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1260 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1262 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| PCB-1268 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A | |
| QA/QC Surrogates | | | | | | | | |
| % DCBP | 55 | | % | 5 | 04/01/19 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 151 | | % | 5 | 04/01/19 | SC | 30 - 150 % | 3 |
| % TCMX | 57 | | % | 5 | 04/01/19 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 51 | | % | 5 | 04/01/19 | SC | 30 - 150 % | |

| Project ID: SMTF- HART MAGNET- RECAULKING PROJECT | | | | | | oeni | (I.D.: CC76605 | 5 |
|---|-----------|-----|-------|----------|-----------|------|----------------|---|
| Client ID: 0 | 322BS-C4B | | | | | | | |
| | | RL/ | | | | | | |
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

PCB Comment:

Due to matrix interference from non target compounds in the sample, surrogate could not be reported.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis | Report |
|----------|--------|
|----------|--------|

April 02, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Information | | Custody Inform | Date | <u>Time</u> | |
|--------------------|--------------|----------------|----------------|-------------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000700 |

Laboratory Data

SDG ID: GCC76604 Phoenix ID: CC76606

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C4C |

| | | RL/ | | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|---------|----------------------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference | |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/S | _B SW3540C | |
| PCB (Soxhlet SW3540 | <u>()</u> | | | | | | | |
| PCB-1016 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1221 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1232 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1242 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1248 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1254 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1260 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1262 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| PCB-1268 | ND | 770 | ug/Kg | 5 | 03/29/19 | SC | SW8082A | |
| QA/QC Surrogates | | | | | | | | |
| % DCBP | 37 | | % | 5 | 03/29/19 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 33 | | % | 5 | 03/29/19 | SC | 30 - 150 % | |
| % TCMX | 45 | | % | 5 | 03/29/19 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 39 | | % | 5 | 03/29/19 | SC | 30 - 150 % | |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C4C

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

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Comments:

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



| Analysis | Report |
|----------|--------|
|----------|--------|

April 02, 2019

FOR: Attn: Kevin McCarthy Tighe & Bond 213 Court St, Suite 1100 Middletown, CT 06457

| Sample Information | | Custody Inform | Date | Time | |
|--------------------|--------------|----------------|----------------|----------|--------|
| Matrix: | CAULK | Collected by: | KM | 03/22/19 | |
| Location Code: | TIGHE | Received by: | CP | 03/28/19 | 12:50 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 28-2087-033F | | | | 000700 |

Laboratory Data

SDG ID: GCC76604 Phoenix ID: CC76607

| Project ID: | SMTF- HART MAGNET- RECAULKING PROJECT |
|-------------|---------------------------------------|
| Client ID: | 0322BS-C4D |

| | | RL/ | | | | | |
|--------------------------|-----------|-----|-------|----------|-----------|---------|----------------------|
| Parameter | Result | PQL | Units | Dilution | Date/Time | Ву | Reference |
| Caulk Extraction for PCB | Completed | | | | 03/28/19 | BX/KL/S | _B SW3540C |
| PCB (Soxhlet SW3540C | ;) | | | | | | |
| PCB-1016 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1221 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1232 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1242 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1248 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1254 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1260 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1262 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| PCB-1268 | ND | 780 | ug/Kg | 5 | 04/01/19 | SC | SW8082A |
| QA/QC Surrogates | | | | | | | |
| % DCBP | 121 | | % | 5 | 04/01/19 | SC | 30 - 150 % |
| % DCBP (Confirmation) | 57 | | % | 5 | 04/01/19 | SC | 30 - 150 % |
| % TCMX | 51 | | % | 5 | 04/01/19 | SC | 30 - 150 % |
| % TCMX (Confirmation) | 56 | | % | 5 | 04/01/19 | SC | 30 - 150 % |

Project ID: SMTF- HART MAGNET- RECAULKING PROJECT Client ID: 0322BS-C4D

| | | RL/ | | | | | | |
|-----------|--------|-----|-------|----------|-----------|----|-----------|--|
| Parameter | Result | PQL | Units | Dilution | Date/Time | By | Reference | |

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

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Phyllis Shiller, Laboratory Director April 02, 2019 Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045

Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

April 02, 2019

QA/QC Data

SDG I.D.: GCC76604

| Parameter | Blank | Blk RL | | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits |
|--|--------|------------|---------------|------------|-----------|------------|---------|----------|-----------|--------------------|--------------------|
| QA/QC Batch 472241 (ug/Kg), (| 2C Sam | ple No: CC | 76597 10X (CC | 76604, CC7 | 6605, C | C76606 | , CC76 | 6607) | | | |
| Polychlorinated Biphenyls | 5 | | | | | | | | | | |
| PCB-1016 | ND | 170 | | 86 | 82 | 4.8 | | | | 40 - 140 | 30 |
| PCB-1221 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| PCB-1232 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| PCB-1242 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| PCB-1248 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| PCB-1254 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| PCB-1260 | ND | 170 | | 91 | 88 | 3.4 | | | | 40 - 140 | 30 |
| PCB-1262 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| PCB-1268 | ND | 170 | | | | | | | | 40 - 140 | 30 |
| % DCBP (Surrogate Rec) | 101 | % | | 95 | 91 | 4.3 | | | | 30 - 150 | 30 |
| % DCBP (Surrogate Rec) (Confirm | 108 | % | | 102 | 98 | 4.0 | | | | 30 - 150 | 30 |
| % TCMX (Surrogate Rec) | 94 | % | | 86 | 77 | 11.0 | | | | 30 - 150 | 30 |
| % TCMX (Surrogate Rec) (Confirm Comment: | 99 | % | | 93 | 83 | 11.4 | | | | 30 - 150 | 30 |

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director April 02, 2019

| Tuesday, Ap | esday, April 02, 2019 Sample Criteria Exceedances Report | | | | | | | | |
|-------------|--|-----------------|----------------|--------|----|----------|----------|----------|--|
| Criteria: | None | | Genipic Ontona | | | | | | |
| State: | СТ | | 8007 | | | | RI | Analysis | |
| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | Criteria | Units | |
| | | | | | | | | | |

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



NY # 11301

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Analysis Comments

April 02, 2019

SDG I.D.: GCC76604

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

10000 L 9000L Date: 3/27/2019 LONAL Jelog Notes 5.2 1260 Reporting Limit: <1 ppm Page: 1 of 1 Turnaround Time: 5 day d'N Time: / Time: Time: Collected Time AΜ AΜ AΑ AM rime: Date Collected 3/22/2019 3/22/2019 3/22/2019 3/22/2019] Dat 3-28 6 Tighe&Bond] Dat 3/7%] Dat Substrate Concrete Concrete Brick Brick EPA Method 3500B/3540C (extraction), EPA Method 8082 (analysis) Laboratory: <u>Phoenix</u> White Window Caulk White Window Caulk White Window Caulk White Window Caulk Date: 3/22/2019 Material PCB SOURCE SAMPLE CHAIN OF CUSTODY SMTF – Hart Magnet - Recaulking Project 94/96 Addition Rear Kindergarten Room 014 94/96 Addition Front Conference Room 112 94/96 Addition Front Computer Room 016 kmccarthy@tighebond.com Sample Location 61 Adams Ave, Stamford, CT 94/96 Addition Rear HC Kindergarten Room 007 B. Sirowich Project Manager: Kevin McCarthy 28-2087-033F Ø Ø **Email PDF of Results to:** Relinquished [By][To]:[Relinquished [By][To]:[Relinquished [By][To]:[Samples Collected By: Special Instructions: 0322BS-C4A 0322BS-C4B 0322BS-C4C 0322BS-C4D **Project Number:** Sample ID **Analysis Method:** Project Name: Site Address:

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