

## SITE INVESTIGATION REPORT ADDENDUM

## ROBIN RUG MANUFACTURING FACILITY 125 THAMES STREET BRISTOL, RHODE ISLAND

MAIN MILL PARCELS – Lots 10-42, 10-60, 10-61, 10-62 and 10-73 PARKING LOT PARCELS – Lots 10-32,10-41, 10-43, 10-44, 10-49, 10-50, 10-68, 10-74 and 10-76 RIDEM Site File No. SR-02-2085

**Prepared For:** 

Brady Sullivan Properties, LLC 670 N. Commercial Street, Suite #303 Manchester, New Hampshire 03101

BY: NOBIS GROUP® 18 CHENELL DRIVE CONCORD, NH 03301

(603) 224-4182

Bettina E. Eames, P.G. beames@nobis-group.com

Nobis Project No. 095560.261 August 1, 2022



August 1, 2022 File No. 095560.261

Ms. Michelle McLarney Rhode Island Department of Environmental Management Office of Land Revitalization & Sustainable Materials Management Site Remediation Program 235 Promenade Street Providence, Rhode Island 02908-5767 Submitted - Hard Copy via USPS regular mail and to RIDEM Sharepoint Page

Re: Site Investigation Report Addendum Robin Rug Manufacturing Facility 125 Thames Street, Bristol, Rhode Island Main Mill Parcels – Lots 10-42, 10-60, 10-61, 10-62 and 10-73 Parking Lot Parcels – Lots 10-32, 10-41, 10-43, 10-44, 10-49, 10-50, 10-68, 10-74 and 10-76 RIDEM File No. SR-02-2085

Dear Ms. McLarney:

Nobis Engineering, Inc. d/b/a Nobis Group<sup>®</sup> (Nobis), on behalf of Brady Sullivan Properties (Brady Sullivan) is submitting the enclosed Site Investigation Report (SIR) Addendum for the Robin Rug Manufacturing Facility located at 125 Thames Street in Bristol , Rhode Island ("the Site"). The Site consists of five parcels west of Thames Street (referred to as the "Main Mill Parcels") consisting of  $\pm 2.9$  acres of land and nine parcels east of Thames Street (referred to as the "parking Lot Parcels") consisting of  $\pm 0.338$  acres of land (total = 14 parcels). The Site is located along Bristol Harbor just west of the downtown area and is shown on Figure 1.

#### **BACKGROUND AND RELEASE NOTIFICATION**

On May 3, 2022, Nobis, on behalf of Brady Sullivan (as Bona Fide Prospective Purchaser) submitted a Hazardous Materials Release Notification Form to the Rhode Island Department of Environmental Management (RIDEM) to report the release of oil (petroleum) and hazardous materials, including primarily polyaromatic nuclear hydrocarbons (PAHs) and metals (arsenic and lead) to soil. Concentration in soil exceeded the Rhode Island Residential direct contact criteria



(RDEC) and/or the industrial/commercial DEC (or ICDEC). The conditions in soil were discovered during performance of an ASTM Phase I Environmental Site Assessment (Phase I ESA) and a Phase II Limited Subsurface Investigation (Phase II) at the Site in 2021 as part of due diligence pre-purchase activities. In response to the release notification, the RIDEM issued the site number SR-02-2085 to the release and a Voluntary Cleanup Letter (VCL) dated May 13, 2022 to Brady Sullivan (Bona Fide Prospective Purchaser and also the Performing Party) outlining subsequent requirements for reporting, investigation and remediation in accordance with RIDEM's Office of Land Revitalization and Sustainable Materials Management regulations under 250-RICR-140-30-1, *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases* (aka the Remediation Regulations).

#### PREVIOUS SITE INVESTIGATIONS AND REPORT SUBMITTALS

Nobis has prepared this SIR submittal to satisfy the requirements of the *Remediation Regulations Subsection 1.8 –Site Investigation Report* as part of the VCL process. As previously communicated to RIDEM, Nobis completed an ASTM Phase I Environmental Site Assessment (ESA) in April 2021 and a Phase II Site Investigation (Phase II) at the Site in August 2021 for Brady Sullivan as part of due diligence prior to purchase of the Site. Previously in July 2005, GZA GeoEnvironmental conducted a Phase I and II Site Investigation at the site for another party. Copies of reports summarizing these past investigations have been submitted electronically to RIDEM via upload to the Sharepoint Page for the site "SR-02-2085" concurrently with this submittal.

#### SIR ADDENDUM - CHECKLIST AND SUPPLEMENTARY INFORMATION

In Nobis's opinion, the previous 2005 GZA and 2021 Nobis Phase I and II investigations satisfy the requirements and objectives of an SIR. These reports were used for reference to demonstrate that the content requirements as listed in the *SIR Checklist* have been met. The enclosed SIR Addendum submittal includes:

• <u>Appendix A – SIR Checklist.</u> Completed in accordance with Section 1.8.8 of the Remediation Regulations and cross-referencing to specific sections and pages of the 2005 GZA Phase I/II report and/or 2021 Phase I or Phase II reports, including those items in the checklist requiring further discussion or explanation.



- <u>Appendix B Release Notification Submittal.</u> This submittal was prepared by Nobis on behalf of Brady Sullivan and was previously submitted to RIDEM on May 3, 2022.
- <u>Appendix C Remedial Alternatives Evaluation</u>. An evaluation of a minimum of two (2) remedial alternatives (as per Section 1.8.4 of the Checklist), including a recommendation and preferred alternative(s) for the Main Mill Parcels and the Parking Lot Parcels.
- <u>Appendix D Property Survey Plan and Redevelopment Project Master Plan.</u> The plan entitled "Boundary and Topographic Survey Plan Bristol Yarn Mill" dated August 18, 2021 prepared by Control Point Associates (Registered Land Surveyor) depicts current conditions. Shown on the Control Point Survey plan are the current building footprint, paved areas and unpaved/landscaped areas. The second plan entitled "Master Plan Bristol Yarn Mill" dated April 13, 2021 prepared by Fuss & O'Neill depicts the proposed redevelopment plan, including changes to the current building footprint, planned demolition of the Annex Building, proposed new Riverwalk Structure, proposed new/improved paved areas and unpaved/landscaped areas.

#### CERTIFICATION

As required per the RIDEM Remediation Regulations and as listed under Section 1.85. of the SIR Checklist, this SIR submittal been certified by a representative of Nobis and by Brady Sullivan. Certification Statements for the SIR are provided in Appendix E.

#### STATUS OF PROPERTY ACQUISITION AND REDEVELOPMENT PROJECT

Additional subsurface site investigation activities are planned to be done to delineate the extent of lead in shallow subsurface soil (0 to 3.5 fbg) around TP-7 on parking lot Parcel 10-76. However, this soil delineation/investigation effort will be conducted in the future in conjunction with new park lot construction. The new parking lot upgrade will include new asphalt cap, curbing with perimeter landscaping and stormwater management features. This work will likely require soil management (off-site disposal) and thus further delineation of lead in shallow soils will be incorporated into the Remedial Action Work Plan (RAWP) and conducted at the time of new parking lot construction. Brady Sullivan is aware that prior public notice (to abutters) will be required prior to initiation of these activities. As of this writing, Brady Sullivan has not yet purchased the Site and final property acquisition is still in progress. Brady Sullivan is actively



seeking all project approvals (planning, zoning, environmental, etc.) and anticipates tentative acquisition of the property on or about December 31, 2022.

We anticipate that this submittal satisfies the requirements of the SIR and will be approved by RIDEM. If you require any further information, please feel free to contact Ms. Bettina E. Eames at 603-224-4182 or Mr. Chris Reynolds, PE of Brady Sullivan Properties at 508-728-9208.

Sincerely,

NOBIS GROUP®

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Bettina E. Eames, PG Senior Project Manager

la Alua

Clarence "Tim" Andrews, PG | Associate Director of State & Municipal Services

Attachments:

Figure 1 – Site Locus Map

Appendix A - SIR Checklist

Appendix B Release Notification Submittal

Appendix C - Remedial Alternatives Evaluation

Appendix D Property Survey Plan and Master Plan (Current and Proposed Future Conditions)

Appendix E Certification

c: File No. 095560.261 (w/attach.)

F I G U R E S



A P P E N D I X A

## Section 1.20 of the "Remediation Regulations" Site Investigation Report (SIR) Checklist

(The following information shall be completed and submitted with the SIR)

Contact Name:	Bettina Eames, PG - Nobis Group (Consultant for Brady Sullivan Properties LLC)
Contact Address:	18 Chenell Drive, Concord, NH 03301
Contact Telephone:	603-513-7328
Site Name:	Robin Rug Manufacturing SR-02-2085
Site Address:	125 Thames Street, Bristol, RI

OFFICE USE ONLY

SITE INVESTIGATION REPORT (SIR) SITE: PROJECT CODE: SIR SUBMITTAL DATE: CHECKLIST SUBMITTAL DATE:

**DIRECTIONS:** The box to the left of each item listed below is for the administrative review of the SIR submission and is for **RIDEM USE ONLY**. Under each item listed below, cross-reference the specific sections and pages in the SIR that provide detailed information that addresses each stated requirement. Failure to include cross-references may delay review and approval. If an item is not applicable, simply state that it is not applicable and provide an explanation in the SIR.

1.8.3(A)(1) List specific objectives of the SIR related to characterization of the Release, impacts of the Release and remedy.

See 2021 Nobis Phase I ESA Sections 1.1, 1.2, 7.0, and 8.0 and 2021 Nobis Phase II Report, Sections 1.1, 2.0, 3.0, and 5.0.

1.8.3(A)(2) Include information reported in the Notification of Release. A copy of the Release notification form should be included in the SIR. Include information relating to short-term response, if applicable.

See Appendix B of this submittal and Section 4.4 of the 2021 Nobis Phase II report.

1.8.3(A)(3) Include documentation of any past incidents or Releases.

See 2005 GZA Phase I/II Report Sections 6.20.2 and 10.00 (Site Regulatory Review) and 2021 Nobis Phase I ESA Report- Sections 6.1, 7.0 and 8.0.

1.8.3(A)(4) Include list of prior property Owners and Operators, as well as sequencing of property transfers and time periods of occupancy.

See 2002 GZA Phase I/II Report - Sections 4.10, 4.40, and Table 1.

1.8.3(A)(5) Include previously existing environmental information which characterizes the Contaminated-
Site and all information that led to the discovery of the Contaminated-Site.

## See 2005 GZA Phase I/II Report - Sections 6.10 and 6.20 and the 2021 Nobis Phase II Report-Section 1.4.

1.8.3(A)(6) Include current uses and zoning of the Contaminated-Site, including brief statements of operations, processes employed, waste generated, Hazardous Materials handled, and any residential activities on the site, if applicable. (This section should be linked to the specific objectives section demonstrating how the compounds of concern in the investigation are those that are used or may have been used on the site or are those that may have impacted the site from an off-site source.)

See 2005 GZA Phase I/II Report - Sections 6.10 and 6.20 and 2021 Nobis Phase I Report - Sections 2.3, 2.4, 5.3, and 5.4.

☐ 1.8.3(A)(7) Include a locus map showing the location of the site using US Geological Survey 7.5-min quadrangle map or a copy of a section of that USGS map.

#### See Figure 1 of this SIR Addendum.

1.8.3(A)(8) Include a site plan, to scale, showing: See 2021 Nobis Phase II Figure 2 and 2021 Nobis Phase I ESA Appendix F-2 Sanborn Maps

Buildings (See also Appendix D - Property Survey Plan and Master Plan)
Activities
Structures
North Arrow
Wells
UIC Systems, septic tanks, UST, piping and other underground structures – See
Cistern on Figure 2 Site Plan (2021 Nobis Phase II Report)
Outdoor Hazardous Materials storage and handling areas - (See 2021 Nobis
Phase II - App F-2 - Historical Fire Insurance Maps)
Extent of paved areas (See also Appendix D - Property Survey Plan and Master Plan)
Location of environmental samples previously taken with analytical results
Waste management and disposal areas
Property Lines

1.8.3(A)(9)	Include a general	characterization	of the	property	surrounding th	e area	including,	but not
limited to:								

	Location and distance to any surface water bodies within 500 ft of the site. Bristol Harbor borders the western boundary of the mill buildings					
	Location and distance to any Environmentally Sensitive Areas within 500 ft of the site. There are no Environmentally Sensitive Areas within 500 ft. of the site.					
	Actual sources of potable water for all properties immediately abutting the site. <b>The Site and surrounding properties are serviced by municipal water.</b>					
	Location and distance to all public water supplies, which have been active within the previous 2 years and within one mile of the site. There are no public water supplies within one mile of the site. See 2021 Nobis Phase I Report - Appendix F-6, EDR Report Physical Settings Map.					
	Determination as to whether the Release impacts any off-site area utilized for residential or industrial/commercial property or both.					
	Release is limited to soil only - no groundwater impacts identified. No known off-site areas impacted.					
	Determination of the underlying groundwater classification and if the classification is GB, the distance to the nearest GA area					
	Groundwater is classified as GB, See 2005 GZA Phase I/II - Section 10.0 and 2021 Nobis Phase II - Section 4.2. The nearest GA area is approximately 1-mi away.					
1.8.3(A)(10) in In	Include classifications of surface and ground water at and surrounding the site that could be apacted by a Release. Apacts to groundwater have not been identified based previous investigations.					
□ 1.8.3(A)(11)	Include a description of the contamination from the Release, including:					
	Free liquids on the surface - Not observed/encountered. See 2005 GZA Phase I/II and 2021 Nobis Phase I and II.					
	LNAPL and DNAPL - Not observed/encountered. See 2005 GZA Phase I/II and 2021 Nobis					
	Phase I and II					
	Concentrations of Hazardous Substances which can be shown to present an actual or potential threat to human health and any concentrations in excess of any of the remedial objectives (reference Section 1.13) – See 2021 Nobis Phase II Table 8 and Release Notification					
	Impact to Environmentally Sensitive Areas – None Observed.					
	Contamination of man-made structures Odors or stained soil Some soil staining observed within fill materials in test pits. Please reference Appendix E of the 2021 Nobis Phase II report.					

	Stressed vegetation Not observed.
	Presence of excavated or stockpiled material and an estimate of its total volume <b>None observed.</b>
	Environmental sampling locations, procedures and copies of the results of any analytical testing at the site See 2005 GZA Phase I/II - Sections 9.00 and 10.00 and Appendix G and 2021 Nobis Phase I & II Report Sections 2.0 and 3.0 and Appendix F.
	List of Hazardous Substances at the site See Appendix B Release Notification of this submittal - Table 8
	Discuss if the contamination falls outside of the jurisdiction of the Remediation Regulations, including but not limited to USTs, UICs, and wetlands. <b>Contamination does not fall outside of the Remediation Regulations.</b>
1.8.3(A)(12) n	Include the concentration gradients of Hazardous Substances throughout the site for each nedia impacted by the Release.
F r n c t	Release condition in soil is not attributed to a previously reported known spill or elease but rather to long-time (100+ years) of industrial use (textile mill). Therefore, to concentration gradient (in either soil or groundwater) has been established or is onsidered to be present. Concentrations of hazardous substances in soil are assumed to be random and heterogenous across the site.
1.8.3(A)(13) c 1	Include the methodology and results of any investigation conducted to determine background oncentrations of Hazardous Substances identified at the Contaminated-Site (see Section .13).
A B	An investigation to determine background concentrations was not performed. See also Appendix 3 - Release Notification Submittal.
1.8.3(A)(14) in in	Include a listing and evaluation of the site specific hydrogeological properties which could nfluence the migration of Hazardous Substances throughout and away from the site, ncluding but not limited to, where appropriate:
	Depth to GW
	Shallow (< 10 fbg) and tidally-influenced. See 2021 Nobis Phase II Report Section 3.2 and Table 2.
	Presence and effects of both the natural and man-made barriers to and conduits for contaminant migration
	Buildings, pavement, and vegetation are natural and man-made barriers that prevent migration of impacted soil.
	Characterization of bedrock
	Not Applicable. See 2021 Nobis Phase I Report Section 2.7.
	Groundwater contours, flow rates and gradients throughout the site – See Figure 3 of the 2021 Phase II report.

1.8.3(A)(15	5) Include a characterization of the topography, surface water and run-off flow patterns, including the flooding potential, of the site.
	See GZA Phase I/II Report – Sections 3.10, 3.20, 3.30 and 3.40 and 2021 Nobis Phase I Report – Section 2.7 and Appendix E.
1.8.3(A)(16	6) Include the potential for Hazardous Substances from the site to volatilize and any and all potential impacts of the volatilization to structures within the site.
	See 2021 Nobis Phase I Report - Section 8.0- Vapor Encroachment Screening and 2021 Nobis Phase II Report - Sections 4.3 and 5.0.
1.8.3(A)(17	7) Include the potential for entrainment of Hazardous Substances from the site by wind or erosion actions.
	Potential for entrainment of Hazardous Substances from the site by wind or erosion is low or De Minimis due to soils being predominantly covered by buildings and/or pavement.
1.8.3(A)(18	3) Include detailed protocols for all fate and transport models used in the Site Investigation.
	Fate and transport models (as related to groundwater and subslab soil gas/vapor intrusion) were not used as these risk exposure pathways were incomplete.
1.8.3(A)(19	P) Include a complete list of all samples taken, the location of all samples, parameters tested for and analytical methods used during the Site Investigation. (Be sure to include the samples locations and analytical results on a site figure).
	See 2005 GZA Phase I/II Report - Section 9.00 and Appendix G and 2021 Nobis Phase II Report - Section 2.0, Tables 1 through 8, Figure 2 (Site Plan) and Appendix F (Lab Data Reports).
1.8.3(A)(20	) Include construction plans and development procedures for all monitoring wells. Well construction shall be consistent with the requirements of the Groundwater Quality Rules.
	See 2021 Nobis Phase II Report - Section 2.3 (Groundwater Monitoring Well Installation and Development) and Appendix D (Soil Boring/Well Logs).
1.8.3(A)(21	1) Include procedures for the handling, storage and disposal of wastes derived from and during the investigation.
T	here was no investigation derived waste produced during 2021 Nobis Phase II site investigation.
1.8.3(A)(22 analytical p	<ul> <li>Include a quality assurance and quality control evaluation summary report for sample handling and rocedures, including, but not limited to, chain-of-custody procedures and sample preservation techniques.</li> <li>2021 Nobis Phase II - Samples were collected and submitted on ice following proper protocol and chain of custody procedures. See 2005 GZA Phase I/II Report Appendix G and the 2021 Nobis Phase II Report - Appendix F for analytical quality assurance and control summaries.</li> </ul>
1.8.3(A)(23	3) Include any other site-specific factor, that the Director believes, is necessary to make an accurate decision as to the appropriate Remedial Action to be taken at the site.
Site Investiga	Site history information indicates that operations at the site have taken place for many years and there are several historical sources of contamination with little documentation. Groundwater has been demonstrated to not be impacted by contamination at the site and areas of soil impacts are covered mostly by buildings and/or pavement and are therefore are only "potentially accessible". Direct contact with contaminated soils is low or unlikely unless ution Report (SIR) Checklist Updated May 2020

#### disturbed or uncovered during excavation or construction-related activities.

- 1.8.4 Include Remedial Alternatives. The Site Investigation Report shall contain a minimum of **TWO** (2) remedial alternatives other than no action/natural attenuation alternative, unless this requirement is waived by the Department. It should be clear which of these alternatives is most preferable. All alternatives shall be supported by relevant data contained in the Site Investigation Report and consistent with the current and reasonably forseeable land usage, and documentation of the following:
  - Compliance with Section 1.9 (RISK MANAGEMENT);
  - Technical feasibility of the preferred remedial alternative;
  - Compliance with federal, state and local laws or other public concerns; and
  - The ability of the Performing Party to perform the preferred remedial alternative.

#### See Appendix C of this SIR Addendum.

1.8.5 **Certification Requirements:** The Site Investigation Report and all associated progress reports shall include the following statements signed by an authorized representative of the party specified:

- A statement signed by an authorized representative of the Person who prepared the Site Investigation Report certifying the completeness and accuracy of the information contained in that report to the best of their knowledge; and
- A statement signed by the Performing Party responsible for the submittal of the Site Investigation Report certifying that the report is a complete and accurate representation of the site and the Release and contains all known facts surrounding the Release to the best of their knowledge.

#### See Appendix E of this SIR Addendum.

1.8.6 **Progress Reports:** If the Site Investigation is not complete, include a schedule for the submission of periodic progress reports on the status of the investigation and interim reports on any milestones achieved in the project.

See cover letter of this SIR Addendum regarding schedule for supplemental site investigation for lead in soil around TP-7 on Parking Lot Parcel 10-76.

**Public Involvement and Notice:** Be prepared to implement public notice requirements per Sections 1.8.7 and 1.8.9 of the Remediation Regulations when the Department deems the Site Investigation Report to be complete.

Indicate if the site falls within an Environmental Justice (EJ) area and, if applicable, include all EJ public notice documentation issued, and the list of recipients.

#### The site does not fall within an Environmental Justice Area.

A P P E N D I X B



May 3, 2022 File No. 095560.26

Ms. Kelly Owens, Supervisor Rhode Island Department of Environmental Management Office of Land Revitalization & Sustainable Materials Management Site Remediation Program 235 Promenade Street Providence, Rhode Island 02908-5767 Submitted via email - DEM.OWMSiteRemNor@dem.ri.gov

### Re: Notification of Hazardous Material Release Robin Rug Manufacturing 125 Thames Street, Bristol, Rhode Island

Dear Ms. Owens :

Nobis Engineering, Inc. d/b/a Nobis Group (Nobis), on behalf of Brady Sullivan Properties (our client) is submitting the enclosed Hazardous Material Release Notification Form for the Robin Rug Manufacturing located at 125 Thames Street in Bristol. This notification is being submitted in accordance with the RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (250-RICR-140-30-1) *Subsection 1.6.1 – Notification of a Release.* If you require any further information, please feel free to contact the undersigned at 603-224-4182 or Mr. Chris Reynolds of Brady Sullivan.

Sincerely,

NOBIS GROUP®

Bettina E. Eames, PG Senior Project Manager

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Clarence "Tim" Andrews, PG | Associate Director of State & Municipal Services

Attachment – Release Notification Form and Supporting Information c: File No. 096660.26 (w/attach.)

> Nobis Group® 18 Chenell Drive Concord, NH 03301 T (603) 224-4182

www.nobis-group.com

### Office of Land Revitalization & Sustainable Materials Management Site Remediation Section

## HAZARDOUS MATERIAL RELEASE NOTIFICATION FORM

#### THIS FORM IS NOT TO BE USED TO REPORT AN IMMINENT HAZARD

#### 1. Notifier Information:

Name:			
Address:			
Phone:			
Email:			
Status:	Х	Environmental Professional	Secured Creditor
		Owner	Voluntary
		Operator	

If Environmental Professional is selected, please supply the follow information for your client below:

	Name:						
	Address:						
	Phone:						
	Email:						
	Status:	Owner			Secured Creditor		
		Operator			Voluntary		
				Х	(Prospective Purchaser)		
Pro	Property Information:						
	Name of Site:						
	Site Address:						
	Plat/Lot Numbers:						
	Approximate Acreage of Property:						
	Latitude/Longitude:						
	Site Land Usage Type	e:	Residential		Industrial/Commercial		
	Location of Release (Attach site sketch as necessary):						

#### 3. Release Information:

2.

Date of Discovery:

Source:

Release Media:

Hazardous Materials and Concentrations (Attach certificates of analysis as necessary):

Extent of Contamination:

Approximate acreage of Contaminated Area:

#### 4. **Resource Information:**

ource information:	(current)	(future	use is residential apartment/condo)
Site Land Usage:	Industrial/Commercial		Residential
Adjacent Land Usage:	Industrial/Commercial		Residential
Site Groundwater Class:	GA/GAA		GB
Adjacent Groundwater Class: (if different than site groundwater classification v	GA/GAA within 500 feet)		GB
Nearest Surface Water or Wetland:	Less Than 500 Feet		Greater Than 500 Feet
Potential for adverse impact?	Yes	No	

#### 5. Potentially Responsible Parties:

Name:			
Address:			
Status:	Owner	Operator	Other:
Name:			
Address:			
Status:	Owner	Operator	Other:

#### 6. Measures taken or proposed to be taken in response to Release:

Check all that apply:	Site Investigation	Short-Term/Emergency
	EXPRESS Policy	Dig & Haul Policy

#### 7. Other significant remarks about Release (Will a background determination be made?)

Signature: Betting Comment

Date: \_\_\_\_\_

Title:

#### 2 Property Information

#### Site Description

The subject property is comprised of 14 parcels (collectively referred to as the "subject property") totaling approximately 3.47± acres of land and includes industrial, commercial, residential, parking lot and undeveloped land use. The location of the subject property is shown on **Figure 1** - **Locus Map**. Pertinent site features are shown on **Figure 2** – **Site Plan**. Groundwater flow directions are shown on **Figure 3**. The subject property includes the Main Mill Building property (5 parcels) and 8 parcels located on adjacent Thames Street. These parcels are identified on the Town of Bristol Tax Map 10 as follows:

- **Robin Rug Mill Building Property** includes parcels 10-42, 10-60, 10-61, 10-62, and 10-73. Robin Rug is a braided rug manufacturing facility. The building is made up of several interconnected buildings with industrial and commercial use.
- **Mill Parking Lots** located on Thames Street east of the Mill Building and includes parcels 10-41, 10-44 and 10-68. These parcels are used as a parking lot for the mill.
- Lot 10-32 located at the corner of Church and Thames Street is a seasonal parking lot rented from the property owner by the Town of Bristol.
- Lots 10-76, 10-43, and 10-74 located between Hope Street and Thames Street and consists of a gravel parking lot.
- Lot 10-49 located at 60 Thames Street. This property is a single-family residence.
- Lot 10-50 located at 70 Thames Street. This property is a two-family residence.

The subject property is located along the waterfront of Bristol Harbor within the Town's Waterfront Planned Unit Development zone. The subject property is abutted by mostly residential properties (some commercial properties) to the north and east, by the Bristol Elks lodge to the southwest, and by the Maritime Welcome Center (former armory and community center) to the northwest. The parcels located east of Thames Street are in the Downtown and Residential R-6 zones.

#### Site Land Usage Type:

Currently, the subject property consists of parcels which are used for both residential (Lots 10-49 and 10-50 at 60 and 70 Thames Street, respectively) and industrial/commercial purposes (Main Mill parcel and parking lot parcels). In the future, the Main Mill parcel is proposed to be used for residential purposes (condominiums) upon development.

#### **3** Release Information

#### Source/Site History

The two main Mill parcels (Lots 10-42 and 10-60) were originally developed as a textile mill producing cottons and yarns, including operation of a dye house, in the late 1800s though the mid-1900s. Circa 1975, Robin Rug purchased the property and operated the mill to produce braided rugs. Residential properties at 60 and 70 Thames Street were historically residential and used as single or double-family homes. Prior to the 1960s, green houses were reportedly present on Lots 10-43 and 10-76. The Mill paved and gravel parking lots have historically been undeveloped, while the Church and Thames Parking Lot (Lot 10-32) appears to have previously been developed as a residence, a store and boarding house.

#### <u>Release Media</u>

In 2021, Nobis Group<sup>®</sup> (Nobis) conducted a limited Phase II site investigation on behalf of Brady Sullivan Properties for a perspective purchase of the site. The limited Phase II included subsurface drilling, well survey and groundwater sampling and chemical analysis of soil, groundwater, soil vapor and building materials. Samples were analyzed for a combination of analytes, including VOCs, PAHs, TPH and/or metals. Building materials were sampled for PCBs. Media requiring reporting to the Rhode Island Department of Environmental Management (RIDEM) was identified to include <u>Soil only</u>. A summary of the findings of the limited Phase II, were as follows:

• Subsurface soil consists of fill overlying native marine deposits consisting of alternating layers of sand, silt, and clay. Fill consists of fine to coarse sand with debris consisting of crushed stone/rock, concrete, brick, ash, slag, glass, plastic, and wire fragments. Fill is present in several area of the site, including west of the main mill, the central northern

interior (SB-6/SB-7 area) and in the parking lots parcels east of Thames Street. Fill ranged in thickness from approximately 3 to 8 feet. The greatest amount of fill (≈8 feet) was encountered in TP-6 on Lot 10-43.

- Except for one reading (65 ppmv in TP-6), PID readings of TVOCs in soil were generally low and less than 1 ppmv in most locations. Petroleum odors were encountered at the groundwater table at 8 fbg in TP-6 only. No dark brown or black-stained soils were encountered in the subsurface. No sheen or free product was encountered in groundwater monitoring locations.
- A UST, which was suspected to exist based upon GPR, was not encountered during test pit explorations at TP-7 on Lot 10-76. The past and/or current use of the two unknown metal pipes in this location remains unclear. Lead was detected at 4,600 mg/kg in TP-7 at depth of 0 to 3.5 feet and is suspected to be related to the presence of ash.
- In soil, contaminants detected included primarily PAHs, TPH and metals (primarily arsenic and lead). The contaminants may be related to the presence of anthropogenic fill (placed by man) or pyrogenic fill (burn residue or produced by fire) and/or possibly by undocumented releases from historic mill activities and operations. Other contaminants such as VOCs, pesticides, PCBs, cyanide, and hexavalent chromium were low and/or not detected. Several constituents detected in soil exceed the Rhode Island Residential DEC and/or the Industrial/Commercial DEC. Exceedance of the DECs indicates that a potential increased risk to human health exists via the direct contact pathway. See Table 8 attached.
- In groundwater, VOCs and TPH were not detected in groundwater monitoring wells located on the Main Mill Building parcels (Lots 10-42 and 10-60) and or in NB-3 installed on parking lot parcel Lot 10-43. PAHs were detected at low concentrations in GZA-3 primarily located on the downgradient site of the subject property. Based upon the groundwater sampling data, groundwater quality does not appear significantly negatively impacted and is consistent with groundwater quality in GB areas.
- In subslab soil vapor, VOCs are present at varying concentrations. VOCs reported include various types of gasoline related compounds and several CVOCs. Total VOC vapor

concentrations (772.05 ug/m3) in SG-4 located beneath Mill Bldg#7 was much higher than in other locations. Most of the total VOC concentration in SG-4 soil vapor consisted of trichlorofluoromethane (Freon 11) and PCE. The State of Rhode Island does not have a stand-alone guidance dedicated to vapor intrusion and/or standards (like CTDEEP) or vapor screening values (like MassDEP). For comparison only, the PCE concentration of 260 ug/m3 in SG-4 exceeds the MassDEP Subslab Soil Gas Screening Value for Residential Use. Per MassDEP guidance, this exceedance indicates that the vapor intrusion pathway may be of concern under future residential use conditions. However, the PCE soil vapor detection was in only 1 of 4 sample locations and was in portion of the main mill building proposed as open-air garage space (below first residential living floor). Additionally, PCE was not detected in either soil or groundwater and thus the presence of PCE in soil vapor may be indicative of background conditions and from an unknown off-site source. Thus, this single PCE soil vapor detection beneath the subslab is not considered to have an impact on proposed future use.

• In wipe samples, low to trace levels of PCBs are present. Wipe samples indicated that low level PCBs are associated with some elevator oils and in some stained concrete surfaces (from past spills) in the basement. Total PCB wipe concentrations were less than 1 ug/100 cm2 which is below the reporting notification threshold per State of Rhode Island and federal (TSCA) requirement of 10 ug/100 cm2.

T A B L E S

Location	Sample Number	Sample Depth (ft)	PID Reading (ppmV)
SB-1	-	0 to 4	No readings collected
SB-2	S-1	5 to 7	1.7
SB-2	S-1	7 to 10	3.7
SB-2	S-2	10 to 11	3.8
SB-2	S-2	12 to 13	12
SB-2	s-2	15	<1
00 -	0 -	15	~1
SB-3	S-1	5 to 7	3.0
sB-3	S-1	7 to 10	4.5
SB-3	S-2	10 to 12	1.0
SB-3	S-2	12 to 15	2.4
SB-4	S-1	0 to 4	3.0
SB-4	S-1	4 to 5	7.3
SB-4	S-2	5 to 9	<1
SB-4	S-2	9 to 10	<1
SB-4	S-3	10 to 13	<1
SB-4	S-3	13 to 15	<1
SB-5	S-1	0 to 3	8.9
SB-5	S-1	3 to 5	<1
SB-5	S-2	5 to 7	7.6
SB-5	S-2	7 to 9	1.6
SB-5	S-2	9 to 10	14.5
SB-5	S-3	10 to 15	<1
SB-6		0 to 1	<1
SB-6		1 to 2	<1
SB-7		0 to 2.5	2.3
SB-8	S-1	0 to 4	8.0
SB-8	S-1	4 to 5	<1
SB-8	S-2	5 to 8	<1
SB-8	S-2	8 to 10	<1
SB-8	S-3	10 to 12	3.7
SB-8	S-3	12 to 15	<1
SB-9	S-1	0 to 3	<1
SB-9	S-1	3 to 5	<1
SB-9	S-2	5 to 7	<1
SB-9	S-2	7 to 9	<1
SB-9	S-2	9 to 10	<1
SB-9	S-3	10 to 13	<1
SB-9	S-3	13 to 15	<1
		-	

Location	Sample Number	Sample Depth (ft)	PID Reading (ppmV)
SB-10	S-1	0 to 5	4.3
SB-10	S-2	5 to 7	26
SB-10	S-2	7 to 9	1.1
SB-10	S-2	9 to 10	16.4
SB-10	S-3	10 to 13	3.8
SB-10	S-3	13 to 15	14.5
SB-11	S-1	0 to 3	<1
SB-11	S-1	3 to 5	<1
SB-11	S-2	5 to 7	<1
SB-11	S-2	7 to 10	<1
SB-11	S-3	10 to 11	<1
SB-11	S-3	11 to 15	<1
TP-1		0 to 1	<1
TP-1		1 to 2	<1
TP-1		2 to 3	<1
TP-1		3 to 4	<1
TP-1		4 to 5	<1
TP-2		0 to 1	<1
TP-2		1 to 2	<1
TP-2		2 to 3	<1
TP-2		3 to 4	1.1
TP-2		4 to 5	<1
TP-2		5 to 6	<1
TP-2		6 to 7	<1
TP-3		0 to 1	<1
TP-3		1 to 2	<1
TP-3		2 to 3	<1
TP-3		3 to 4	<1
TP-3		4 to 5	<1
TP-3		5 to 6	<1
TP-3		6 to 7	<1
TP-4		0 to 2	<1
TP-4		2 to 4	<1
TP-4		4 to 6	<1
TP-4		6 to 8	<1
TP-4		8 to 9	<1
TP-4		9 to 10	<1
TP-5		0 to 2	<1
TP-5		2 to 4	<1
TP-5		4 to 6.5	<1

Location	Sample Number	Sample Depth (ft)	PID Reading (ppmV)
TP-6		0 to 3	<1
TP-6		3 to 6	<1
TP-6		6 to 8	<1
TP-6		8 to 10	65.6
TD_7 (1)		0 to 2	~1
TP-7 (1)		3 to 5	<1
TP-7 (1)		5 to 7	<1
, (1)		5107	~1
TP-7 (2)		0 to 2	<1
TP-7 (2)		2 to 4	<1
TP-7 (2)		4 to 6	<1
TP-7 (2)		6 to 7	<1
TP-7 (2)		7 to 8	<1
TP-8		0 to 2	<1
TP-8		2 to 4	<1
TP-8		4 to 6	<1
TP-Q		0 to 2	~1
TP-9		0 to 2	<1
		2 t0 4	<1
17-5		4 10 0	<1
TP-10		0 to 1	<1
TP-10		1 to 2	<1
TP-10		2 to 4	<1
TP-10		4 to 5	<1
TP-10		5 to 7	<1
TP-10		7 to 8	<1
TP-10		8 to 9	<1
TP-10		9 to 10	<1
TP-11		0 to 3	<1
TP-11		3 to 5	<1
TP-11		5 to 7	<1
TP-12		0 to 2	<1
TP-12		2 to 4	<1
TP-12		4 to 6	<1
TP-12		6 to 7	<1
			**
TP-13		0 to 2	<1
TP-13		2 to 4	<1
TP-13		4 to 5	<1
TP-13		5 to 6.5	<1

Location	Sample Number	Sample Depth (ft)	PID Reading (ppmV)
TP-14		0 to 1	<1
TP-14		1 to 2	<1
TP-14		2 to 3	<1
TP-14		3 to 4	<1
TP-14		4 to 5	<1
TP-14		5 to 6	<1
TP-14		6 to 7	<1
TP-14		7 to 8	<1
TP-14		8 to 9	<1
TP-19		0 to 1	<1
TP-19		1 to 2	<1
TP-19		2 to 3	<1
TP-19		3 to 4	<1
TP-19		4 to 5	<1
TP-19		5 to 6	<1
TP-19		6 to 7.5	<1

Notes:

1. Soil boring PID headspace readings were recorded during drilling operations on June 8, 9 and 10, 2021.

2. Soil test pit PID headspace readings were recorded during excavation on June 10 and 11, 2021.

3. PIDs were calibrated and used in accordance with Nobis SOP FS-007 Vapor and Air Screening with PID and FID.

# Table 2Groundwater Elevation DataRobin Rug125 Thames StreetBristol, Rhode Island

Well No.	Date	Reference Elevation (ft.)	Depth to Groundwater (ft.)	Groundwater Elevation (ft.)
NB-2	6/30/2021	98.90	5.40	93.50
NB-3	6/30/2021	109.78	6.44	103.34
GZA-1	6/30/2021	96.93	7.71	89.22
GZA-2	6/30/2021	96.35	7.09	89.26
GZA-3	6/30/2021	96.14	6.57	89.57

Notes:

1. Well elevations were surveyed on June 30, 2021. The reference elevation is based on a temporary benchmark located at the southeast corner of a conrete pad on Church Street Extension, with a given elevation of 100 ft.

2. Groundwater level measurements were obtained by Nobis Group on the dates indicated, using an electronic water level indicator.

### Table 3 Soil Analytical Results - Soil Borings Robin Rug 125 Thames Street Bristol, Rhode Island

			Soil Boring/Sample Depth				RIDEM Soil Standards <sup>(1)(2)</sup>						
			SB-3	SB-2	SB-4	SB-5/NB-1	SB-6	SB-7	SB-8/NB-2	SB-11			
Parameter		Units	7-9 ft	12-14 ft	7-9 ft	10-12 ft	2 ft	2 ft	7-9 ft	8-10 ft	RDEC	I/C DEC	Leachability Criteria (GB)
VOCS (EPA 8260C):													
Tetrachloroethene		mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	0.40	<0.5	<0.5	12	110	4.2
Naphthalene		mg/kg	<0.1	<0.1	<0.1	<0.1	0.10	<0.1	<0.1	<0.1	NS	NS	NS
SVOCs (8270D):													
Carbazole		mg/kg	< 0.08	< 0.08	< 0.08	<0.08	3.10	0.57	< 0.07	< 0.08	NS	NS	NS
Dibenzofuran		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	2.20	0.31	< 0.07	< 0.08	NS	NS	NS
Naphthalene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	2.60	0.35	< 0.07	< 0.08	54	10,000	NS
2-Methylnaphthalene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	0.73	0.12	< 0.07	< 0.08	123	10,000	NS
1-Methylnaphthalene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	0.55	0.13	< 0.07	< 0.08	NS	NS	NS
Acenaphthylene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	2.8	0.57	< 0.07	< 0.08	23	10,000	NS
Acenaphthene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	2.4	0.41	< 0.07	< 0.08	43	10,000	NS
Fluorene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	2.6	0.40	< 0.07	< 0.08	28	10,000	NS
Phenanthrene		mg/kg	< 0.08	< 0.08	< 0.08	0.11	30	4.90	< 0.07	< 0.08	40	10,000	NS
Anthracene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	8.1	1.40	< 0.07	< 0.08	35	10,000	NS
Fluoranthene		mg/kg	< 0.08	< 0.08	< 0.08	0.14	57	7.20	< 0.07	< 0.08	28	10,000	NS
Pyrene		mg/kg	< 0.08	< 0.08	< 0.08	0.12	37	6.80	< 0.07	< 0.08	13	10,000	NS
Benzo[a]anthracene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	25	4.60	< 0.07	< 0.08	0.9	7.8	NS
Chrysene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	22	4.20	< 0.07	< 0.08	0.4	780	NS
Benzo[b]fluoranthene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	27	6.10	< 0.07	< 0.08	0.9	7.8	NS
Benzo[k]fluoranthene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	7.8	2.30	< 0.07	< 0.08	0.9	78	NS
Benzo[a]pyrene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	22	4.60	< 0.07	< 0.08	0.4	0.8	NS
Indeno[1,2,3-cd]pyrene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	9.2	1.30	< 0.07	< 0.08	0.9	7.8	NS
Dibenz[a,h]anthracene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	2.2	0.31	< 0.07	< 0.08	0.4	0.8	NS
Benzo[g,h,i]perylene		mg/kg	< 0.08	< 0.08	< 0.08	< 0.08	6.3	0.98	< 0.07	< 0.08	0.8	10,000	NS
	<u>Total SVOCs</u>	mg/kg	<0.08	<0.08	<0.08	0.37	270.58	47.55	<0.07	<0.08	n/a	n/a	n/a
	<u>Total PAHs</u>	mg/kg	<0.08	<0.08	<0.08	0.37	265.28	46.67	<0.07	<0.08	n/a	n/a	n/a
TPH (8100 Modified):													
C9 - C40 Hydrocarbons		mg/kg	<30	<30	<30	90	800	190	<30	<30	500	2,500	2,500
Pesticides (EPA 8081B):		mg/kg	<0.005 to <0.05	<0.005 to <0.05	<0.005 to <0.05	<0.005 to <0.05	<0.005 to <0.05	<0.005 to <0.05	<0.005 to <0.05	<0.005 to <0.05	NS	NS	NS
PCBs (8082A):		mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	10	10	10.0
Metals:													
Arsenic		mg/kg	4.1	4.0	1.5	4.2	6.1	4.7	8.50	4.5	7.00	7.00	NS
Barium		mg/kg	19	11	2.3	8.5	92	62	16	18	5500	10000	NS
Cadmium		mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	39	1000	NS
Chromium, Total		mg/kg	14	7.7	6.1	24	25	17	12	12	1790	20000	NS
Chromium, Hexavalent		mg/kg	NA	NA	<0.43	<0.41	<0.44	<0.44	NA	NA	390	10000	NS
Lead		mg/kg	6.7	5.7	2.3	19	310	260	6.60	7.7	150	500	NS
Mercury		mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	0.60	0.16	<0.1	< 0.1	23	610	NS
Selenium		mg/kg	< 0.5	< 0.5	< 0.5	0.52	< 0.5	< 0.5	0.57	< 0.5	390	10000	NS
Silver		mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	200	10000	NS
TCLP, Lead:		mg/L	NA	NA	NA	NA	<0.5	<0.5	NA	NA	n/a	n/a	NS
Cyanide, Total:		mg/kg	<0.5	<0.5	<0.5	<0.5	0.54	<0.5	<0.5	<0.5	200	10,000	NS

#### Notes:

Samples were collected on June 8, 9 and 10, 2021.

Samples were analyzed by Eastern Analytical, Inc. of Concord, NH.

Samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8260C. Only analaytes detected at least once shown above.

Samples were analyzed for Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270D. Only analytes detected at least once shown above. NA = Not analyzed for parameter shown.



Concentration is less than laboratory detection limit. Analyte not detected.

Concentration in **BOLD/Yellow** exceeds Residential Direct Exposure Criteria (RDEC)

Concentration in **BOLD/Blue** exceeds both Residential Direct Exposure Criteria (RDEC) and Industrial/Commercial DEC (IC/DEC) (1) Source: Rhode Island Department of Environmental Management (RIDEM) - Site Remediation Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, effective April 22, 2020. Subchapter 30, Section 1.9.2 -Soil Objectives Table 2 : Direct Exposure Criteria for Residential (REDEC) and Industrial/Commercial (I/CDEC) and Table 2 - Leachability Criteria for GA Groundwater and GB Groundwater. (2) Source RIDEM Site Remediation Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, effective April 22, 2020. Subchapter 30, Section 1.92 Soil Objectives, Subsection B.4. (a) Soil Objectives for Total Petroleum Hydrocarbons (TPH).

NS = indicates no standard is established for parameter group and/or analyte.

### Table 4 Soil Analytical Results - Test Pits Robin Rug 125 Thames Street Bristol, Rhode Island

			Test Pit No./Sample Depth									RIDEM Standards <sup>(1) (2)</sup>		
		TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7	TP-14					
Parameter	Units	0-2 ft	3-4 ft	2-3 ft	9 ft	6 ft	9-10 ft	0-3.5 ft	1-2 ft	RDEC	I/C DEC	Leachability Criteria (GB)		
VOCS (EPA 8260C):	<i>.</i>													
Styrene	mg/kg	<0.5		5.1		<0.5	<0.5	<0.8	<0.5	13	190	64		
SVOCS/PAHs (EPA 8270D):														
Naphthalene	mg/kg	< 0.07	0.086	< 0.09	< 0.08	< 0.07	< 0.08	< 0.09	< 0.08	54.00	10000	NS		
Acenaphthylene	mg/kg	0.10	0.19	< 0.09	< 0.08	< 0.07	< 0.08	< 0.09	< 0.08	23.00	10000	NS		
Acenaphthene	mg/kg	< 0.07	0.13	< 0.09	< 0.08	< 0.07	< 0.08	< 0.09	< 0.08	43.00	10000	NS		
Fluorene	mg/kg	0.07	0.19	< 0.09	< 0.08	< 0.07	< 0.08	< 0.09	< 0.08	28.00	10000	NS		
Phenanthrene	mg/kg	0.75	1.50	0.57	< 0.08	< 0.07	< 0.08	0.17	0.38	40.00	10000	NS		
Anthracene	mg/kg	0.22	0.46	0.12	< 0.08	< 0.07	< 0.08	< 0.09	0.12	35.00	10000	NS		
Fluoranthene	mg/kg	1 30	2 40	0.95	< 0.08	< 0.07	< 0.08	0.53	0.12	28.00	10000	NS		
Pyrene	ma/ka	1 10	2.40	0.55	< 0.08	< 0.07	< 0.08	0.55	0.59	13.00	10000	NS		
Benzolalanthracene	mg/kg	0.71	1 30	0.75	< 0.08	< 0.07	< 0.08	0.01	0.35	0.90	7.80	NS		
Chrycono	mg/kg	0.71	1.30	0.70	< 0.08	< 0.07	< 0.08	0.44	0.37	0.30	7.80	NIS		
Denzelhlfluerenthene	mg/kg	0.09	1.50	0.73	< 0.08	< 0.07	< 0.08	0.40	0.56	0.40	780	INS NS		
Benzo[b]nuoranthene	mg/kg	0.83	1.60	0.93	< 0.08	< 0.07	< 0.08	0.40	0.47	0.90	7.60	INS NE		
Benzo[k]nuorantnene	mg/kg	0.33	0.54	0.35	< 0.08	< 0.07	< 0.08	0.14	0.16	0.90	/8.00	INS NG		
Benzolajpyrene	mg/кg	0.68	1.30	0.65	< 0.08	< 0.07	< 0.08	0.35	0.36	0.40	0.80	INS NG		
Indeno[1,2,3-cd]pyrene	mg/кg	0.32	0.58	0.28	< 0.08	< 0.07	< 0.08	0.21	0.26	0.90	7.80	INS NG		
Dibenz[a,h]anthracene	mg/kg	0.08	0.15	< 0.09	< 0.08	< 0.07	< 0.08	< 0.09	< 0.08	0.40	0.80	NS		
Benzolg,h,i]perylene	mg/kg	0.24	0.43	0.21	< 0.08	< 0.07	< 0.08	0.22	0.22	0.80	10000	NS		
<u>Total PAHs</u>	mg/kg	7.42	14.17	6.30	<0.08	<0.07	<0.08	3.47	4.02	n/a	n/a	n/a		
TPH (8100 Modified):														
C9 - C40 Hydrocarbons	mg/kg	69	93	230	< 30	< 30	580	69	59	500	2500	2500		
Pesticides (FPA 8081B)														
4 4'-DDT	mg/kg	< 0.005	NΔ	< 0.006	NΔ	NΔ	0 040	0 014	< 0.006	NS	NS	NS		
4 4'-DDF	mg/kg	< 0.005	NA	< 0.000	NA	NA		0.014	< 0.006	NS	NS	NS		
	mg/kg	< 0.005		< 0.000			< 0.000	< 0.006	< 0.000	NS	NS	NS		
4,4-000	iiig/ kg	< 0.005	NA I	< 0.000	NA	NA	0.003	< 0.000	< 0.000	113	113			
PCBs (8082A):														
PCB-1260	mg/kg	0.040	NA	< 0.02	NA	NA	< 0.02	< 0.02	< 0.02	10	10	10.0		
Metals:														
Arsenic	mg/kg	8.4	6.9	18	4.9	2.9	2.3	6.6	4.2	7	7	NS		
Barium	mg/kg	29	43	120	20	11	8.3	1.500	72	5500	10000	NS		
Cadmium	mg/kg	< 0.5	0.59	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	39	1000	NS		
Chromium Total	mø/kø	14	25	15	13	8.4	7 1	13	15	1790	20000	NS		
Chromium, Hexavalent	mg/kg	NA	ΝΔ		ΝΔ	0.4 ΝΔ	ΝΔ	ΝΔ	ΝΔ	390	10000	NS		
Lead	mø/ka	55	120	63	77	60	8 4	4 600	99	150	500	NS		
Mercury	1115/ ^5 ma/ka	- 0 1	0.28	03	· · · · · · · · · · · · · · · · · · ·	2 O 1	<b>0.</b> <del>1</del> ∠ ∩ 1	0.28	0.22	22	610	NIS		
Selenium	ma/ka	< 0.1 0 65	0.20	0.12	~ 0.1	< 0.1	<u> </u>	1 2	0.22	200	10000	NIC		
Silvor	mg/kg	<b>U.05</b>		<b>2.4</b>		<ul><li>0.5</li></ul>	<b>U.02</b>	<b>1.3</b>	<b>U.34</b>	220	10000			
Silver	пів/кв	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	200	10000	CVI		
TCLP, Lead:	mg/L	NA	<0.5	NA	NA	NA	NA	1.4	<0.5	n/a	n/a	NS		

Notes:

Samples were collected on June 10 and 11, 2021.

Samples were analyzed by Eastern Analytical, Inc. of Concord, NH.

Samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8260C. Only analytes detected at least once shown above.

Samples were analyzed for Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270D analyzed for PAHs only. Only analytes detected at least once shown above. NA = Not analyzed for parameter shown.



Concentration is less than laboratory detection limit. Analyte not detected.

Concentration in **BOLD/Yellow** exceeds Residential Direct Exposure Criteria (RDEC)

Concentration in **BOLD/Blue** exceeds both Residential Direct Exposure Criteria (RDEC) and Industrial/Commercial DEC (IC/DEC) 9.2 (1) Source: Rhode Island Department of Environmental Management (RIDEM) - Site Remediation Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, effective April 22, 2020. Subchapter 30, Section 1.9.2 - Soil Objectives Table 2 : Direct Exposure Criteria for Residential (REDEC) and Industrial/Commercial (I/CDEC) and Table 2 - Leachability Criteria for GA Groundwater and GB Groundwater. (2) Source RIDEM Site Remediation Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, effective April 22, 2020. Subchapter 30, Section 1.92 Soil Objectives, Subsection B.4. (a) Soil Objectives for Total Petroleum Hydrocarbons (TPH).

NS = indicates no standard is established for parameter group and/or analyte.

### Table 5 Groundwater Sampling Results Robin Rug 125 Thames Street Bristol, Rhode Island

			S	ample Locatio	n		RIDEM Site Remediation - Method 1 Groundwater Objective (1)
Parameter	Units	NB-2	NB-3	GZA-1	GZA-2	GZA-3	GB Category
VOCs (EPA 8260):	mg/L	<0.5 to <30	<0.5 to <30	<0.5 to <30	<0.5 to <30	<0.5 to <30	varies
PAHs (EPA Method 8270):							
Phenanthrene	mg/L	<0.1	<0.1	<0.1	<0.1	0.13	NS
Fluoranthene	mg/L	<0.1	<0.1	<0.1	<0.1	0.28	NS
Pyrene	mg/L	<0.1	<0.1	0.14	<0.1	0.24	NS
Benzo[a]anthracene	mg/L	<0.1	<0.1	<0.1	<0.1	0.18	NS
Chrysene	mg/L	<0.1	<0.1	<0.1	<0.1	0.12	NS
Benzo[b]fluoranthene	mg/L	<0.1	<0.1	<0.1	<0.1	0.18	NS
Benzo[a]pyrene	mg/L	<0.1	<0.1	<0.1	<0.1	0.14	NS
TPH (EPA 8100 Modified):							
C9 - C40 Hydrocarbons	mg/L	<0.4	<0.5	<0.5	<0.4	<0.4	NS

#### Notes:

Samples were collected on 6/29/21. NB-2 was sampled on 6/30/21.

Samples were analyzed by Eastern Analytical, Inc. of Concord, NH.

Samples were analyzed by EPA Method 8270 for PAHs only.

0.14

<0.5 Concentration is less than laboratory detection limit. Analyte not detected.

Concentrations in **BOLD** indicate analytes detected above laboratory detection limits.

(1) Source: Rhode Island Department of Environmental Management (RIDEM) - Site Remediation Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, effective April 22, 2020. Subchapter 30, Section 1.9.3 - Groundwater Objectives Table 4: GB Groundwater Objectives. NS = indicates no standard is established for parameter group and/or analyte.

Project No. 095560.260

# Table 6Subslab Soil Vapor Sampling ResultsRobin Rug125 Thames StreetBristol, Rhode Island

						Soil Vapor Screening Values <sup>(1)</sup>			
		Sample Location			CT DEEP	2021 <sup>(2)</sup>	MassDEP - 2013 <sup>(3)</sup>		
		SG-1	SG-2	SG-4	SG-5	Volatilizati	on Criteria	Sub-Slab Soil Gas	Screening Values
Parameter	Units	Bldg #3	Bldg #1	Bldg#7	Bldg#7A	Residential	I/C	Residential	I/C
VOCs (EPA Method TO-15):									
Acetone	ug/m <sup>3</sup>	12	12	13	28	140,000	690,000	6,400	50,000
Benzene	ug/m <sup>3</sup>	0.95	<0.32	<0.32	0.61	2,500	4,600	160	770
Chloroform	ug/m <sup>3</sup>	0.74	1.80	<0.49	0.81	380	690	130	210
1,4-Dichlorobenzene	ug/m <sup>3</sup>	9.90	2.70	1.10	<0.60	18,000	33,000	35	120
Ethanol	ug/m <sup>3</sup>	20	62	44	<7.5	-	-	-	-
Ethylbenzene	ug/m <sup>3</sup>	0.89	0.59	<0.43	0.52	40,000	400,000	520	62,000
Styrene	ug/m <sup>3</sup>	<0.43	0.43	<0.43	0.53	39,000	400,000	98	1,400
Tetrachloroethylene (PCE)	ug/m <sup>3</sup>	9.60	18	260	11	3,800	6,900	98	290
Toluene	ug/m <sup>3</sup>	4.80	1.60	0.93	2.30	160,000	690,000	3,800	310,000
1,1,1-Trichloroethane (1,1,1-TCA)	ug/m <sup>3</sup>	<0.55	<0.55	2.30	<0.55	380,000	690,000	210	320,000
Trichloroethylene (TCE)	ug/m <sup>3</sup>	<0.54	1.20	19	<0.54	760	1,400	28	130
Trichlorofluoromethane (Freon 11)	ug/m <sup>3</sup>	13	<2.2	430	<2.2	-	-	-	-
1,2,4-Trimethylbenzene	ug/m <sup>3</sup>	2.80	<0.49	<0.49	<0.49	-	-	-	-
Xylenes, Total	ug/m <sup>3</sup>	2.38	1.56	1.72	1.87	170,000	690,000	1,400	6,200
<u>Total VOCs</u>	ug/m3	77.06	101.88	772.05	45.64	-	-	-	-

Notes:

Vapor (air) samples were collected on 6/30/21.

Samples were analyzed by Con-Test, a Pace Analytical Laboratory.

Samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method TO-15

<0.5 Concentration is less than laboratory detection limit. Analyte not detected.

**0.14** Concentration in **BOLD** indicate analytes detected above laboratory detection limits.

**260** Concentration in **BOLD/Yellow** exceeds MassDEP Residenital Use Subslab Soil Gas Screening Value.

(1) Source: Rhode Island Department of Environmental Management (RIDEM) has no screening values or standards for soil vapor. Screening values shown from CTDEEP and MassDEP are for reference only.

(2) Source: State of Connecticut Regulations - Volatilization Criteria for Soil Vapor, Appendix F to RSRs 22a-133k-3.

(3) Source: Massachusetts Department of Environmental Protection (MassDEP) Interim Final Vapor Intrusion Guidance WSC#-11-435, Dec 2011, Revised February 22, 2013,

Appendix II (Sub-Slab Soil Gas Screening Values)

(-) = indicates no screening value or standard established for analyte.

# Table 7PCB Wipe Sampling ResultsRobin Rug125 Thames StreetBristol, Rhode Island

			PCBs (ug/Wipe)	
Sample ID	Location	Aroclor-1254	Aroclor-1260	Total PCBs
WS-1	Elevator cables in Building #4 "Penthouse"	0.25	<0.20	0.25
WS-2	Elevator cables in Building #2 "Penthouse"	<0.20	<0.20	<0.20
WS-3	Elevator cables in Building #7 "Penthouse"	<0.20	<0.20	<0.20
WS-4	Elevator cables in Building #7A "Penthouse"	<0.20	0.20	0.20
CW-1	Concrete floor in NW corner of Building #4 basement	0.32	<0.20	0.32
CW-2	Concrete floor in Building #5 basement next to waste oil drum storage	<0.20	<0.20	<0.20
CW-3	Concrete floor in Building #3 basement next to leaking drum and former UST piping	<0.20	<0.20	<0.20
CW-4	Stained area on concrete floor in Building #2A	<0.20	<0.20	<0.20
CW-5	Concrete floor between base of back two transformers in basement of Building #1	<0.20	<0.20	<0.20
CW-6	Concrete slab in Building #6 near elevator	0.27	<0.20	0.27
CW-7	Concrete floor between base of first two transformers in basement of Building #1	0.47	<0.20	<0.20
CW-8	Metal floor in Building #7A in front of elevator doors	0.40	0.35	0.75
CW-9	Surface of transformer, near base, in basement of Building #1	<0.20	<0.20	<0.20
		RIDEM Rep	ortable Notification	10 ug/100 cm2

Notes:

Samples collected on 6/30/2021.

Samples were analyzed by Con-Test, a Pace Analytical Laboratory.

Polychlorinated Biphenyls (PCBs) SW-846 8082A

Wipe Area = 10 cm x 10 cm square = 100 cm2.

Project No. 095560.260

### Table 8 Summary of Soil DEC Exceedances Robin Rug 125 Thames Street Bristol, RI

					Soil Concentration (mg/kg) > RIDEM	
Parcel No.	Current Use	Future Use	Location/Depth	Constituent	Standard	RIDEM Soil Standard <sup>(1)</sup>
Parcel No.	Current Use	Future Use	Location/Depth SB-6 2 feet	Constituent Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno[1,2,3-cd]pyrene Dibenzo[a,h]anthracene Benzo[g,h,i]perylene TPH Lead	Standard           57           37           25           22.0           27.0           7.8           22.0           9.2           2.2           6.3           800           310	RIDEM Soil Standard <sup>(1)</sup> RDEC = 28 mg/kg RDEC = 13 mg/kg RDEC = 0.9 mg/kg; I/C DEC = 7.8 mg/kg RDEC = 0.9 mg/kg; I/C DEC = 7.8 mg/kg RDEC = 0.9 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.4 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.9 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.4 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.4 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.4 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.8 mg/kg RDEC = 500 mg/kg RDEC = 150 mg/kg
10-42 Main Mill Parcel (Robin Rug)	Industrial/ Commercial	Residential	SB-7 2 feet TP-2 3 - 4 feet	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno[1,2,3-cd]pyrene Benzo[g,h,i]perylene Lead Benzo(a)anthracene Chrysene	4.6 4.2 6.1 2.3 4.6 1.3 0.98 260 1.30 1.30 1.60	RDEC = 28 mg/kg RDEC = 0.4 mg/kg RDEC = 0.9 mg/kg RDEC = 0.9 mg/kg RDEC = 0.4 mg/kg; I/C DEC = 0.8 mg/kg RDEC = 0.9 mg/kg RDEC = 0.8 mg/kg RDEC = 150 mg/kg RDEC = 28 mg/kg RDEC = 0.4 mg/kg RDEC = 0.9 mg/kg
				Benzo(a)pyrene	1.30	RDEC = 0.4 mg/kg; I/C DEC = 0.8 mg/kg
			TP-3 2 - 3 feet	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Arsenic	0.75 0.93 0.65 18	RDEC = 0.4 mg/kg RDEC = 0.9 mg/kg RDEC = 0.4 mg/kg RDEC = 7.0 mg/kg
10-60 Main Mill Parcel (Robin Rug)	Industrial/ Commercial	Residential	TP-1 0 - 2 feet	Chrysene Benzo(a)pyrene Arsenic	0.69 0.68 8.4	RDEC = 0.4 mg/kg RDEC = 0.4 mg/kg RDEC = 7.0 mg/kg; I/C DEC = 7.0 mg/kg
10-43 Parking Lot Parcel	Residential	Industrial/ Commercial (Parking Lot for Condos)	SB-8 7 - 9 feet TP-6 9 - 10 feet	Arsenic TPH	8.5	RDEC = 7.0 mg/kg; I/C DEC = 7.0 mg/kg RDEC = 500 mg/kg
10-76 Parking Lot Parcel	Residential	Industrial/ Commercial (Parking Lot for Condos)	TP-7 0 - 3.5 feet	Lead	4,600	RDEC = 150 mg/kg; I/C DEC = 500 mg/kg

Note:

(1) Source: Rhode Island Department of Environmental Management (RIDEM) - Site Remediation Rules and Regulations for the Investigation and Remediation of Hazardous Materials Releases, effective April 22, 2020. Subchapter 30, Section 1.9.2 - Soil Objectives Table 1 : Direct Exposure Criteria for Residential (REDEC) and Industrial/Commercial

F I G U R E S




	Test Pit (TP-15 and TP-16 not
ſ	excavated)

- PCB Wipe (elevator cable) WS-series (total = 4)
- PCB Wipe (concrete floor) CW-series (total =9)
- Soil Gas Vapor Point (SG-3 not installed)
- Soil Boring (total=11)
- Groundwater Monitoring Well
- 🛧 Stained Floor
- Transformer(Qty. 3 out of use)
- Former UST Piping Into
- Sewer Manhole
- Pipe Stickups
- Waste Oil
- Leaking Oil
- Floor
- GPR Exploration Location
  - Cable-Weighted
  - Former Stock Dye Kettle
  - Former Water
  - Hydraulic
  - Trench Around
  - Water
  - Active
  - Former UST (20,000 gal. #6 oil)
- Former
- Parcel Boundary (Total = 14)
- 10-42 = Tax Map and Lot Number

#### **FIGURE 2**

#### SITE PLAN ROBIN RUG FACILITY 125 THAMES STREET BRISTOL, RHODE ISLAND

PREPARED BY: SKPCHECKED BY: BEEPROJECT NO. 95560.26DATE: AUGUST 2021



Legend

1

1

<b>-</b>	Test Pit (TP-15 and TP-16 not excavated)
	PCB Wipe (elevator cable) WS-series (total = 4)
	PCB Wipe (concrete floor) CW-series (total =9)
•	Soil Gas Vapor Point (SG-3 not installed)
<del>\</del>	Soil Boring
<del>\$</del>	Groundwater Monitoring Well with Groundwater Elevation 93.50 (on 6/30/21)
•	Temporary Benchmark
	Floor Drains
	Groundwater Elevation Contour
	Groundwater Flow Direction
	GPR Exploration Location
	Cable-Weighted Elevator
	Former Stock Dye Kettle
	Former Water Tower
	Hydraulic Lift
	Trench Around Boiler
	Boilers
	Water Tanks
	Active AST
	Former UST (20,000 gal. #6 oil)
	Former AST
	Parcel Boundary (Total =14)
0-42	2 = Tax Map Parcel ID

#### **FIGURE 3**

GROUNDWATER POTENTIOMETRIC MAP **ROBIN RUG FACILITY 125 THAMES STREET BRISTOL, RHODE ISLAND** 

PREPARED BY: SKP	CHECKED BY: BEE
PROJECT NO. 95560.26	DATE: AUGUST 2021

A T T A C H M E N T S



Eastern Analytical, Inc.

professional laboratory and drilling services

Bettina Eames Nobis Group 18 Chenell Drive Concord , NH 03301



Laboratory Report for:

Eastern Analytical, Inc. ID: 227592 Client Identification: Robin Rug | 095560.260 Date Received: 6/14/2021

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R: % Recovery

#### Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072), West Virginia (9910C) and Alabama (41620). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

#### References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

Date





Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Temperat Acceptable t	Γemperature upon receipt (°C):       3.3       Received on ice or cold packs (Yes/No):       γ         Acceptable temperature range (°C):       0-6       0-6       0-6       0-6						
Lab ID	Sample ID	Date Received	Date/ Sam	Time pled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
227592.01	SB-10 (10-12')	6/14/21	6/8/21	10:15	soil		Sample canceled at customer's request
227592.02	SB-8/NB-2 (7-9')	6/14/21	6/8/21	14:20	soil	96.4	Adheres to Sample Acceptance Policy
227592.03	SB-11 (8-10')	6/14/21	6/9/21	08:30	soil	90.1	Adheres to Sample Acceptance Policy
227592.04	SB-9 (10-12')	6/14/21	6/9/21	09:30	soil		Sample canceled at customer's request
227592.05	SB-4 (7-9')	6/14/21	6/9/21	12:25	soil	85.1	Adheres to Sample Acceptance Policy
227592.06	SB-5/NB-1 (10-12')	6/14/21	6/9/21	13:25	soil	89.2	Adheres to Sample Acceptance Policy
227592.07	SB-3 (7-9')	6/14/21	6/10/21	15:35	soil	88.3	Adheres to Sample Acceptance Policy
227592.08	SB-2 (12-14')	6/14/21	6/10/21	16:35	soil	87.5	Adheres to Sample Acceptance Policy
227592.09	SB-6 (2.0')	6/14/21	6/11/21	13:30	soil	86.2	Adheres to Sample Acceptance Policy
227592.1	SB-7 (2.0')	6/14/21	6/11/21	11:50	soil	84.1	Adheres to Sample Acceptance Policy
227592.11	Trip Blank	6/14/21	6/8/21	07:00	soil	100.0	Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.

Eastern Analytical, Inc.

#### EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
	007500.00	007500.00	227502.05	227502.06
Lab Sample ID:	227592.02	227092.03	227592.05	227592.00
	SOII	SOI	SOI	SUI
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analvst:	JAK	JAK	JAK	JAK
Method:	82600	82600	82600	8260C
Dilution Coston	02000	1	1	
Dilution Factor.	1	I		
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1	< 0.1	< 0.1
Vinyl chloride	< 0.02	< 0.02	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.1	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl Ether	< 0.1	< 0.05	< 0.1	< 0.05
Acetone	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
tert-Butyl Alcohol (TBA)	< 2	< 2	< 2	< 2
Methylene chloride	< 0.1	< 0.1	< 0.1	< 0.1
Carbon disuitide Methyl t-butyl ether(MTRE)	< 0.1	< 0.1	< 0.1	< 0.1
Ethvl-t-butvl ether(FTBF)	< 0.1	< 0.1	< 0.1	< 0.1
Isopropyl ether(DIPE)	< 0.1	< 0.1	< 0.1	< 0.1
tert-amyl methyl ether(TAME)	< 0.1	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,1-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
2,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
2-Butanone(MEK)	< 0.05	< 0.5	< 0.5	< 0.5
Bromochloromethane	< 0.05	< 0.05	< 0.05	< 0.05
Tetrahydrofuran(THF)	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	< 0.05	< 0.05	< 0.05	< 0.05
1,1,1-Irichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
1 1-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
Benzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
Trichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
Dibromomethane	< 0.05	< 0.05	< 0.05	< 0.05
1 4-Dioxane	< 0.05	< 0.05	< 1	< 1
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	< 0.05	< 0.05	< 0.05	< 0.05
trans-1,3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,2-1 FICNIOFOETNANE	< 0.05	< 0.05	< 0.05	< 0.05
Tetrachloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
Dibromochloromethane	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.02
	< 0.05	< 0.05	< 0.05	< 0.05
	< 0.05	< 0.05	< 0.05	< 0.05
Eastern Analytical, Inc	www.eas	ernanalytical.com   800.287.0	0525   customerservice@e	asternanalytical.com 2

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com 2

# M

## LABORATORY REPORT

#### EAI ID#: 227592

#### Client: Nobis Group

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
· · · · · · · · · · · · · · · · · · ·				
Lab Sample ID:	227592.02	227592.03	227592.05	227592.06
Matrix:	soil	soil	soil	soil
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	ma/ka	ma/ka	ma/ka	ma/ka
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Ethvlbenzene	< 0.05	< 0.05	< 0.05	< 0.05
mp-Xylene	< 0.05	< 0.05	< 0.05	< 0.05
o-Xylène	< 0.05	< 0.05	< 0.05	< 0.05
Styrene	< 0.05	< 0.05	< 0.05	< 0.05
Bromoform	< 0.05	< 0.05	< 0.05	< 0.05
IsoPropylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
Bromobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,2,2-Tetrachloroethane	< 0.05	< 0.05	< 0.05	< 0.05
1,2,3-Trichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
n-Propylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorotoluene	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorotoluene	< 0.05	< 0.05	< 0.05	< 0.05
1,3,5- I rimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
tert-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-I rimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
12 Dichlerahamana	< 0.05	< 0.05	< 0.05	< 0.05
n Joonropyltoluono	< 0.05	< 0.05	< 0.05	< 0.05
1 4 Dichlorobonzono	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
n-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1.2-Dibromo-3-chloropropane	< 0.05	< 0.05	< 0.05	< 0.00
1.3.5-Trichlorobenzene	< 0.00	< 0.00	< 0.00	< 0.05
1.2.4-Trichlorobenzene	< 0.00	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1,2,3-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
4-Bromofluorobenzene (surr)	88 %R	87 %R	87 %R	89 %R
1,2-Dichlorobenzene-d4 (surr)	103 %R	103 %R	103 %R	102 %R
Toluene-d8 (surr)	96 %R	95 %R	96 %R	97 %R
1,2-Dichloroethane-d4 (surr)	102 %R	104 %R	104 %R	104 %R

EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	ma/ka	ma/ka	mg/kg	mg/kg
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst	JAK	JAK	JAK	JAK
Method:	82600	82600	8260C	8260C
Dilution Easter	1	1	1	
Dilution Pactor:		•		
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1	< 0.1	< 0.1
Vinyl chloride	< 0.02	< 0.02	< 0.02	< 0.02
Chloroothana	< 0.1	< 0.1	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl Ether	< 0.05	< 0.05	< 0.05	< 0.05
Acetone	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
tert-Butyl Alcohol (TBA)	< 2	< 2	< 2	<2
Methylene chloride	< 0.1	< 0.1	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.1	< 0.1	< 0.1
Ethyl-t-butyl ether(ETBE)	< 0.1	< 0.1	< 0.1	< 0.1
Isopropyl ether(DIPE)	< 0.1	< 0.1	< 0.1	< 0.1
tert-amyl methyl ether(TAME)	< 0.1	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,1-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
2,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
2-Butanone(MEK)	< 0.05	< 0.05	< 0.03	< 0.5
Bromochloromethane	< 0.05	< 0.05	< 0.05	< 0.05
Tetrahvdrofuran(THF)	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	< 0.05	< 0.05	< 0.05	< 0.05
1,1,1-Trichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
Carbon tetrachloride	< 0.05	< 0.05	< 0.05	< 0.05
1,1-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
1 2-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
Trichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
Dibromomethane	< 0.05	< 0.05	< 0.05	< 0.05
Bromodichloromethane	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dioxane	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.5	< 0.5	< 0.0
Toluene	< 0.05	< 0.05	< 0.05	< 0.05
trans-1.3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,2-Trichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
2-Hexanone	< 0.1	< 0.1	< 0.1	< 0.1
Tetrachloroethene	< 0.05	< 0.05	< 0.05	0.40
1,3-Dichloropropane	< 0.05	< 0.05	< U.U5 < 0.05	< 0.05 < 0.05
1 2 Dibromochloromethane	< 0.05	< 0.05	< 0.00	< 0.05
	< 0.02	< 0.02	< 0.02	< 0.05
1,1,1,2-Tetrachloroethane	< 0.05	< 0.05	< 0.05	< 0.05
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#### EAI ID#: 227592

#### Client: Nobis Group

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Easter:	1		1	1
Diation Pactor.	,	•		
Ethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
mp-Xylene	< 0.05	< 0.05	< 0.05	< 0.05
o-Xylene	< 0.05	< 0.05	< 0.05	< 0.05
Styrene	< 0.05	< 0.05	< 0.05	< 0.05
Bromoform	< 0.05	< 0.05	< 0.05	< 0.05
IsoPropylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
Bromobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,2,2-Tetrachloroethane	< 0.05	< 0.05	< 0.05	< 0.05
1,2,3-Trichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
n-Propylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorotoluene	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorotoluene	< 0.05	< 0.05	< 0.05	< 0.05
1,3,5-Trimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
tert-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
sec-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
p-lsopropyltoluene	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
n-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dibromo-3-chloropropane	< 0.05	< 0.05	< 0.05	< 0.05
1,3,5-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	< 0.1	< 0.1	0.10	< 0.1
1,2,3-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
4-Bromofluorobenzene (surr)	86 %R	86 %R	88 %R	91 %R
1,2-Dichlorobenzene-d4 (surr)	103 %R	103 %R	102 %R	101 %R
Toluene-d8 (surr)	95 %R	95 %R	95 %K	93 %R
1,2-Dichloroethane-d4 (surr)	105 %R	105 %R	105 %R	105 %R

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## LABORATORY REPORT

#### EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	Trip Blank		
Lab Sample ID:	227592.11		
Matrix:	soil		
Data Samplad:	6/8/21		
Date Sampled:	6/14/21		
	0/14/21		
Units:	mg/kg		
Date of Analysis:	6/15/21		
Analyst:	JAK		
Method:	8260C		
Dilution Factor:	1		
Dichlorodifluoromethane	< 0.1		
Chloromethane	< 0.1		
Vinyl chloride	< 0.02		
Bromomethane	< 0.1		
Trichlorofluoromethane	< 0.1 < 0.1		
Diethyl Ether	< 0.05		
Acetone	< 2		
1,1-Dichloroethene	< 0.05		
tert-Butyl Alcohol (TBA)	< 2		
Methylene chloride	< 0.1		
Carbon disulfide	< 0.1		
Ethyl-t-butyl ether(ETBE)	< 0.1		
Isopropyl ether(DIPE)	< 0.1		
tert-amyl methyl ether(TAME)	< 0.1		
trans-1,2-Dichloroethene	< 0.05		
1,1-Dichloroethane	< 0.05		
2,2-Dichloropropane	< 0.05		
2-Butanone(MEK)	< 0.5		
Bromochloromethane	< 0.05		
Tetrahydrofuran(THF)	< 0.5		
Chloroform	< 0.05		
1,1,1-1richloroethane	< 0.05		
1 1-Dichloropropene	< 0.05		
Benzene	< 0.05		
1,2-Dichloroethane	< 0.05		
Trichloroethene	< 0.05		
1,2-Dichloropropane	< 0.05		
Dibromomethane Bromodichloromothano	< 0.05		
1 4-Dioxane	< 1		
4-Methyl-2-pentanone(MIBK)	< 0.5		
cis-1,3-Dichloropropene	< 0.05		
Toluene	< 0.05		
trans-1,3-Dichloropropene	< 0.05		
2-Hexanone	< 0.05		
Tetrachloroethene	< 0.05		
1,3-Dichloropropane	< 0.05	·	
Dibromochloromethane	< 0.05		
1,2-Dibromoethane(EDB)	< 0.02		
Chlorobenzene	< 0.05		
	< 0.05		C
			D

Eastern Analytical, Inc.

#### Client: Nobis Group

Sample ID:	Trip Blank	 	 	
/ -··				
Lab Sample ID:	227592.11			
Matrix:	soil			
Date Sampled:	6/8/21			
Date Received:	6/14/21			
Units:	mg/kg			
Date of Analysis:	6/15/21			
Analyst:	JAK			
Method:	8260C			
Dilution Factor:	1			
Ethylbenzene	< 0.05			
mp-Xylene	< 0.05			
o-Xylene	< 0.05			
Styrene	< 0.05			
Bromoform	< 0.05			
IsoPropylbenzene	< 0.05			
Bromobenzene	< 0.05			
1,1,2,2-letrachloroethane	< 0.05			
n,2,3-Thenloropropane	< 0.05			
2 Chlorotokuono	< 0.05			
	< 0.05			
1.3.5-Trimethylbenzene	< 0.05			
tert-Butylbenzene	< 0.05			
1.2.4-Trimethylbenzene	< 0.05			
sec-Butvlbenzene	< 0.05			
1,3-Dichlorobenzene	< 0.05			
p-Isopropyltoluene	< 0.05			
1,4-Dichlorobenzene	< 0.05			
1,2-Dichlorobenzene	< 0.05			
n-Butylbenzene	< 0.05			
1,2-Dibromo-3-chloropropane	< 0.05			
1,3,5-Trichlorobenzene	< 0.05			
1,2,4-Irichlorobenzene	< 0.05			
Nephthelene	< 0.05			
123 Trichlorobenzene	< 0.1			
4-Bromofluorobenzene (surr)	< 0.00 80 % P			
1 2-Dichlorobenzene-d4 (surr)	101 %R			
Toluene-d8 (surr)	95 %R			
1,2-Dichloroethane-d4 (surr)	103 %R			

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## EAI ID#: 227592

#### Client: Nobis Group

### Client Designation: Robin Rug | 095560.260

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
Lab Sample ID:	227592.02	227592.03	227592.05	227592.06
Matrix:	soil	soil	soil	soil
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Unite:	ma/ka	ma/ka	ma/ka	ma/ka
Data of Extraction/Drops	6/16/21	6/14/21	6/14/21	6/16/21
Date of Extraction/Prep:	6/17/21	6/15/21	6/15/21	6/17/21
Date of Analysis:	0/1//21	0/10/21	0/10/21	0/1/21
Analyst:	JMR	JMK	JMR	JIVIR
Method:	8270D	8270D	8270D	82700
Dilution Factor:	1	1	1	1
alpha-Terpineol	< 0.34	< 0.4	< 0.4	< 0.4
Phenol	< 0.07	< 0.08	< 0.08	< 0.08
2-Chlorophenol	< 0.07	< 0.08	< 0.08	< 0.08
2,4-Dichlorophenol	< 0.07	< 0.08	< 0.08	< 0.08
2,4,5- [richlorophenol	< 0.07	< 0.08	< 0.08	< 0.08
2,4,6-1 richlorophenol	< 0.07	< 0.08	< 0.08	< 0.00
	< 0.34	< 0.4	< 0.4	< 0.4
2-Nitrophenol	< 0.34	< 0.4	< 0.4	< 0.4
2 4-Dinitrophenol	< 0.7	< 0.7	< 0.8	< 0.7
2-Methylphenol	< 0.07	< 0.08	< 0.08	< 0.08
3/4-Methylphenol	< 0.07	< 0.08	< 0.08	< 0.08
2,4-Dimethylphenol	< 0.34	< 0.4	< 0.4	< 0.4
4-Chloro-3-methylphenol	< 0.07	< 0.08	< 0.08	< 0.08
4,6-Dinitro-2-methylphenol	< 0.34	< 0.4	< 0.4	< 0.4
Benzoic Acid	< 3.4	< 4	< 4	< 4
N-Nitrosodimethylamine	< 0.07	< 0.08	< 0.08	< 0.08
n-Nitroso-di-n-propylamine	< 0.04	< 0.04	< 0.05	< 0.04
n-Nitrosodipnenylamine	< 0.07	< 0.00	< 0.08	< 0.08
bis(2-Chloroethyl)ether	< 0.07	< 0.08	< 0.00	< 0.08
bis(2-Chloroethoxy)methane	< 0.07	< 0.00	< 0.08	< 0.08
1 3-Dichlorobenzene	< 0.07	< 0.08	< 0.08	< 0.08
Acetophenone	< 0.7	< 0.7	< 0.8	< 0.7
1.4-Dichlorobenzene	< 0.07	< 0.08	< 0.08	< 0.08
1.2-Dichlorobenzene	< 0.07	< 0.08	< 0.08	< 0.08
1,2,4-Trichlorobenzene	< 0.07	< 0.08	< 0.08	< 0.08
2-Chloronaphthalene	< 0.07	< 0.08	< 0.08	< 0.08
4-Chlorophenyl-phenylether	< 0.07	< 0.08	< 0.08	< 0.08
4-Bromophenyl-phenylether	< 0.07	< 0.08	< 0.08	< 0.08
Hexachloroethane	< 0.07	< 0.08	< 0.00	< 0.08
Hexachlorobutadiene	< 0.07	< 0.08	< 0.00	< 0.4
Hexachlorobenzene	< 0.34	< 0.08	< 0.08	< 0.08
4-Chloroaniline	< 0.07	< 0.08	< 0.08	< 0.08
2.3-Dichloroaniline	< 0.07	< 0.08	< 0.08	< 0.08
2-Nitroaniline	< 0.34	< 0.4	< 0.4	< 0.4
3-Nitroaniline	< 0.34	< 0.4	< 0.4	< 0.4
4-Nitroaniline	< 0.34	< 0.4	< 0.4	< 0.4
Aniline	< 0.07	< 0.08	< 0.08	< 0.08
Benzyl alcohol	< 0.7	< 0.7	אין > 0.8 אין 2 אין 2	<ul> <li>0.7</li> <li>&lt; 0.08</li> </ul>
Nitrobenzene	< 0.07	< 0.08 - 0.08	< 0.00 < 0.08	< 0.00
2.4 Dipitrotoluono	<ul> <li>0.07</li> <li>0.17</li> </ul>	< 0.00	< 0.2	< 0.2
2,4-Dinitrotoluene	< 0.14 < 0.14	< 0.2	< 0.2	< 0.2
Benzidine (estimated)	< 0.34	< 0.4	< 0.4	< 0.4
3,3'-Dichlorobenzidine	< 0.07	< 0.08	< 0.08	< 0.08

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EALID#: 227592

#### Client: Nobis Group

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
Lab Sample ID:	227592,02	227592.03	227592.05	227592.06
Matrix:	soil	soil	soil	soil
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Unitor	ma/ka	ma/ka	ma/ka	ma/ka
onits.	6/16/01	6/14/21	6/14/21	6/16/21
Date of Extraction/Prep:	0/10/21	0/14/21	0/14/21	6/17/21
Date of Analysis:	6/17/21	6/15/21	6/15/21	0/1//21
Analyst:	JMR	JMR	JMR	JMR
Method:	8270D	8270D	8270D	8270D
Dilution Factor:	1	1	1	1
Pvridine	< 0.34	< 0.4	< 0.4	< 0.4
Azobenzene	< 0.07	< 0.08	< 0.08	< 0.08
Carbazole	< 0.07	< 0.08	< 0.08	< 0.08
Dimethylphthalate	< 0.07	< 0.08	< 0.08	< 0.08
Diethylphthalate	< 0.34	< 0.4	< 0.4	< 0.4
Di-n-butylphthalate	< 0.34	< 0.4	< 0.4	< 0.4
Butylbenzylphthalate	< 0.34	< 0.4	< 0.4	< 0.4
bis(2-Ethylhexyl)phthalate	< 0.34	< 0.4	< 0.4	< 0.4
Di-n-octylphthalate	< 0.34	< 0.4	< 0.4	< 0.4
Dibenzofuran	< 0.07	< 0.08	< 0.08	< 0.08
Naphthalene	< 0.07	< 0.08	< 0.08	< 0.08
2-Methylnaphthalene	< 0.07	< 0.08	< 0.08	< 0.08
1-Methylnaphthalene	< 0.07	< 0.08	< 0.08	< 0.08
Acenaphthylene	< 0.07	< 0.08	< 0.08	< 0.08
Acenaphthene	< 0.07	< 0.08	< 0.08	< 0.08
Fluorene	< 0.07	< 0.08	< 0.08	< 0.00 0.11
Phenanthrene	< 0.07	< 0.08	< 0.00	< 0.08
Anthracene	< 0.07	< 0.08	< 0.00	0.14
Purana	< 0.07	< 0.00	< 0.08	0.12
Pyrene	< 0.07	< 0.08	< 0.08	< 0.08
Chrisopo	< 0.07	< 0.08	< 0.08	< 0.08
Benzolbifluoranthene	< 0.07	< 0.08	< 0.08	< 0.08
Benzolkifluoranthene	< 0.07	< 0.08	< 0.08	< 0.08
Benzolalpyrene	< 0.07	< 0.08	< 0.08	< 0.08
Indeno[1 2 3-cd]nvrene	< 0.07	< 0.08	< 0.08	< 0.08
Dibenz[a h]anthracene	< 0.07	< 0.08	< 0.08	< 0.08
Benzola h ilpervlene	< 0.07	< 0.08	< 0.08	< 0.08
n-Decane	< 0.34	< 0.4	< 0.4	< 0.4
n-Octadecane	< 0.34	< 0.4	< 0.4	< 0.4
2-Fluorophenol (surr)	68 %R	58 %R	68 %R	62 %R
Phenol-d6 (surr)	71 %R	61 %R	72 %R	67 %R
2,4,6-Tribromophenol (surr)	84 %R	74 %R	88 %R	83 %R
Nitrobenzene-D5 (surr)	77 %R	67 %R	77 %R	70 %R
2-Fluorobiphenyl (surr)	80 %R	70 %R	83 %R	75 %R
p-Terphenvl-D14 (surr)	82 %R	76 %R	83 %R	/6 %K

#### Client: Nobis Group

#### Client Designation: Robin Rug | 095560.260

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	ma/ka	ma/ka	ma/ka	ma/ka
Date of Extraction/Prep:	6/16/21	6/16/21	6/16/21	6/14/21
Date of Analysis	6/17/21	6/17/21	6/17/21	6/15/21
Date of Analysis.	0/11/21	IMD	IMD	IMD
	JIME			9070D
	82700	82700	02700	02700
Dilution Factor:	1	1	6	I
alpha-Terpineol	< 0.4	< 0.4	< 2	< 0.4
Phenol	< 0.08	< 0.08	< 0.4	< 0.08
2-Chlorophenol	< 0.08	< 0.08	< 0.4 < 0.4	< 0.08
2.4.5-Trichlorophenol	< 0.08	< 0.08	< 0.4	< 0.08
2,4,6-Trichlorophenol	< 0.08	< 0.08	< 0.4	< 0.08
Pentachlorophenol	< 0.4	< 0.4	< 2	< 0.4
2-Nitrophenol	< 0.4	< 0.4	< 2	< 0.4
	< 0.4 < 0.8	< 0.4 < 0.8	< 4	< 0.4 < 0.8
2-Methylphenol	< 0.08	< 0.08	< 0.4	< 0.08
3/4-Methylphenol	< 0.08	< 0.08	< 0.4	< 0.08
2,4-Dimethylphenol	< 0.4	< 0.4	< 2	< 0.4
4-Chloro-3-methylphenol	< 0.08	< 0.08	< 0.4	< 0.08
4,6-Dinitro-2-methylphenol Benzoic Acid	< 0.4 < 4	< 4	< 20	< 4
N-Nitrosodimethylamine	< 0.08	< 0.08	< 0.4	< 0.08
n-Nitroso-di-n-propylamine	< 0.04	< 0.05	< 0.2	< 0.05
n-Nitrosodiphenylamine	< 0.08	< 0.08	< 0.4	< 0.08
bis(2-Chloroethyl)ether	< 0.08	< 0.08	< 0.4	< 0.06 < 0.08
bis(2-Chloroetboxy)methane	< 0.08	< 0.08	< 0.4	< 0.08
1.3-Dichlorobenzene	< 0.08	< 0.08	< 0.4	< 0.08
Acetophenone	< 0.8	< 0.8	< 4	< 0.8
1,4-Dichlorobenzene	< 0.08	< 0.08	< 0.4	< 0.08
1,2-Dichlorobenzene	< 0.08	< 0.08	< 0.4	< 0.08
2-Chloronaphthalene	< 0.08	< 0.08	< 0.4	< 0.08
4-Chlorophenyl-phenylether	< 0.08	< 0.08	< 0.4	< 0.08
4-Bromophenyl-phenylether	< 0.08	< 0.08	< 0.4	< 0.08
Hexachloroethane	< 0.08	< 0.08	< 0.4	< 0.08
Hexachlorocyclopentadiene	< 0.08	< 0.08	< 2	< 0.4
Hexachlorobenzene	< 0.08	< 0.08	< 0.4	< 0.08
4-Chloroaniline	< 0.08	< 0.08	< 0.4	< 0.08
2,3-Dichloroaniline	< 0.08	< 0.08	< 0.4	< 0.08
2-Nitroaniline 3-Nitroaniline	< 0.4 < 0.4	< 0.4	<2	< 0.4
4-Nitroaniline	< 0.4	< 0.4	< 2	< 0.4
Aniline	< 0.08	< 0.08	< 0.4	< 0.08
Benzyl alcohol	< 0.8	< 0.8	< 4	8.0 > - 0.09
NITrobenzene	< 0.08	< 0.08 < 0.08	< 0.4 < 0.4	< 0.08
2.4-Dinitrotoluene	< 0.2	< 0.2	< 0.8	< 0.2
2,6-Dinitrotoluene	< 0.2	< 0.2	< 0.8	< 0.2
Benzidine (estimated)	< 0.4	< 0.4	< 2	< 0.4
3,3'-Dichlorobenzidine	< 0.08	< 0.08	< 0.4	< 0.08

Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com

EALID#: 227592

## M

EAI ID#: 227592

#### Client: Nobis Group

#### Client Designation: Robin Rug | 095560.260

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Unite	ma/ka	ma/ka	ma/ka	ma/ka
Data of Extraction/Prop	6/16/21	6/16/21	6/16/21	6/14/21
Date of Extraction/Prep:	0/10/21	6/17/21	6/17/21	6/15/21
Date of Analysis:	0/1//21	0/1//21	0/17/21	0/10/21
Analyst:	JMR	JMR	JMR	JMR
Method:	8270D	8270D	8270D	8270D
Dilution Factor:	1	1	6	1
Pyridine	< 0.4	< 0.4	< 2	< 0.4
Azobenzene	< 0.08	< 0.08	< 0.4	< 0.08
Carbazole	< 0.08	< 0.08	3.1	0.57
Dimethylphthalate	< 0.08	. < 0.08	< 0.4	< 0.08
Diethylphthalate	< 0.4	< 0.4	< 2	< 0.4
Di-n-butyiphthalate	< 0.4	< 0.4	< 2	< 0.4
bis(2 Ethylboxyl)phthalate	< 0.4	< 0.4	< 2	< 0.4
Dis(2-Ethylnexyl)philialate	< 0.4	< 0.4	< 2	< 0.4
Dibenzofuran	< 0.4	< 0.08	2.2	0.31
Naphthalene	< 0.08	< 0.08	2.6	0.35
2-Methylnaphthalene	< 0.08	< 0.08	0.73	0.12
1-Methylnaphthalene	< 0.08	< 0.08	0.55	0.13
Acenaphthylene	< 0.08	< 0.08	2.8	0.57
Acenaphthene	< 0.08	< 0.08	2.4	0.41
Fluorene	< 0.08	< 0.08	2.6	0.40
Phenanthrene	< 0.08	< 0.08	30	4.9
Anthracene	< 0.08	< 0.08	8.1	1.4
Fluoranthene	< 0.08	< 0.08	57	1.2
Pyrene	< 0.08	< 0.08	37	0.0
Benzolajanthracene	< 0.08	< 0.08	25	4.0
	< 0.08	< 0.08	22	F.2 6 1
Benzolbifuoranthene	< 0.08	< 0.08	78	2.3
Benzolalpyrapa	< 0.08	< 0.00	22	4.6
Indepo[1 2 3-cd]pyrene	< 0.00	< 0.00	9.2	1.3
Dibenzla hlanthracene	< 0.00	< 0.08	2.2	0.31
Benzola h ilperviene	< 0.08	< 0.08	6.3	0.98
n-Decane	< 0.4	< 0.4	< 2	< 0.4
n-Octadecane	< 0.4	< 0.4	< 2	< 0.4
2-Fluorophenol (surr)	57 %R	61 %R	59 %R	66 %R
Phenol-d6 (surr)	62 %R	65 %R	64 %R	70 %R
2,4,6-Tribromophenol (surr)	80 %R	79 %R	83 %R	88 %R
Nitrobenzene-D5 (surr)	62 %R	69 %R	68 %R	74 %R
2-Fluorobiphenyl (surr)	70 %R	74 %R	76 %R	81 %R
p-Terphenvl-D14 (surr)	79 %R	78 %R	80 %R	83 %R

Deviations from the Report:

SB-6 (2.0'): Parameter: Fluoranthene Date of Analysis: 6/18/2021

Dilution Factor: 30

SB-6 (2.0'): Detection limits elevated due to sample matrix causing internal standard failure in initial extraction.

# $\mathcal{M}$

## LABORATORY REPORT

#### EAI ID#: 227592

#### Client: Nobis Group

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
Lab Sample ID:	227592.02	227592.03	227592.05	227592.06
Matrix:	soil	soil	soil	soil
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/15/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JLB	JLB	JLB	JLB
Method:	8100mod	8100mod	8100mod	8100mod
Dilution Factor:	1	1	1	1
TPH (C9-C40) p-Terphenyl-D14 (surr)	< 30 78 %R	< 30 77 %R	< 30 77 %R	90 85 %R

# $\mathcal{M}$

## LABORATORY REPORT

#### EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/15/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JLB	JLB	JLB	JLB
Method:	8100mod	8100mod	8100mod	8100mod
Dilution Factor:	1	1	11	2
TPH (C9-C40) p-Terphenyl-D14 (surr)	< 30 55 %R	< 30 69 %R	800 DOR	190 118 %R

DOR: Diluted out of range.

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## LABORATORY REPORT

EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
Lab Sample ID:	227592.02	227592.03	227592.05	227592.06
Matrix:	soil	soil	soil	soil
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
% Solid:	96.4	90.1	85.1	89.2
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/14/21	6/14/21	6/14/21	6/14/21
Date of Analysis:	6/18/21	6/18/21	6/18/21	6/18/21
Analyst:	MB	MB	MB	MB
Extraction Method:	35400	35400	35400	35400
Analysis Mothod:	9091P	00910	0091P	9091B
Dilution Foster	00016	00010	0001D	0001D
Dilution Factor:	1	1	1	ì
Aldrin	< 0.005	< 0.005	< 0.006	< 0.006
alpha-BHC	< 0.005	< 0.005	< 0.006	< 0.006
beta-BHC	< 0.005	< 0.005	< 0.006	< 0.006
Lindane(gamma-BHC)	< 0.005	< 0.005	< 0.006	< 0.006
delta-BHC	< 0.005	< 0.005	< 0.006	< 0.006
Chlordane	< 0.02	< 0.02	< 0.02	< 0.02
4,4'-DDT	< 0.005	< 0.005	< 0.006	< 0.006
4,4'-DDE	< 0.005	< 0.005	< 0.006	< 0.006
4,4'-DDD	< 0.005	< 0.005	< 0.006	< 0.006
Dieldrin	< 0.005	< 0.005	< 0.006	< 0.006
Endosulfan I	< 0.005	< 0.005	< 0.006	< 0.006
Endosulfan II	< 0.005	< 0.005	< 0.006	< 0.006
Endosulfan Sulfate	< 0.005	< 0.005	< 0.006	< 0.006
Endrin	< 0.005	< 0.005	< 0.006	< 0.006
Endrin Aldehyde	< 0.005	< 0.005	< 0.006	< 0.006
Endrin Ketone	< 0.005	< 0.005	< 0.006	< 0.006
Heptachlor	< 0.005	< 0.005	< 0.006	< 0.006
Heptachlor Epoxide	< 0.005	< 0.005	< 0.006	< 0.006
Methoxychlor	< 0.005	< 0.005	< 0.006	< 0.006
Toxaphene	< 0.05	< 0.05	< 0.06	< 0.06
TMX (surr)	64 %R	57 %R	62 %R	61 %R
DCB (surr)	46 %R	45 %R	41 %R	41 %R

Clean-up was performed on the samples and associated batch QC.

#### EAI ID#: 227592

#### Client: Nobis Group

#### Client Designation: Robin Rug | 095560.260

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
% Solid:	88.3	87.5	86.2	84.1
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/14/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/18/21	6/18/21	6/18/21	6/18/21
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8081B	8081B	8081B	8081B
Dilution Factor:	1	1	1	1
Aldrin	< 0.006	< 0.006	< 0.006	< 0.006
alpha-BHC	< 0.006	< 0.006	< 0.006	< 0.006
beta-BHC	< 0.006	< 0.006	< 0.006	< 0.006
Lindane(gamma-BHC)	< 0.006	< 0.006	< 0.006	< 0.006
delta-BHC	< 0.006	< 0.006	< 0.006	< 0.006
Chlordane	< 0.02	< 0.02	< 0.02	< 0.02
4,4'-DDT	< 0.006	< 0.006	< 0.006	< 0.006
4,4'-DDE	< 0.006	< 0.006	< 0.006	< 0.006
4,4'-DDD	< 0.006	< 0.006	< 0.006	< 0.006
Dieldrin	< 0.006	< 0.006	< 0.006	< 0.006
Endosulfan I	< 0.006	< 0.006	< 0.006	< 0.006
Endosulfan II	< 0.006	< 0.006	< 0.006	< 0.006
Endosulfan Sulfate	< 0.006	< 0.006	< 0.006	< 0.006
Endrin	< 0.006	< 0.006	< 0.006	< 0.006
Endrin Aldehyde	< 0.006	< 0.006	< 0.006	< 0.006
Endrin Ketone	< 0.006	< 0.006	< 0.006	< 0.006
Heptachlor	< 0.006	< 0.006	< 0.006	< 0.006
Heptachlor Epoxide	< 0.006	< 0.006	< 0.006	< 0.006
Methoxychlor	< 0.006	< 0.006	< 0.006	< 0.006
Toxaphene	< 0.06	< 0.06	< 0.06	< 0.06
TMX (surr)	57 %R	57 %R	36 %R	39 %R
DCB (surr)	45 %R	43 %R	35 %R	33 %R

Clean-up was performed on the samples and associated batch QC.

#### EAI ID#: 227592

#### Client: Nobis Group

#### Client Designation: Robin Rug | 095560.260

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')
			007500.05	007500.00
Lab Sample ID:	227592.02	227592.03	227592.05	227592.00
Matrix:	soil	soil	soil	SOI
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
% Solid:	96.4	90.1	85.1	89.2
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/14/21	6/14/21	6/14/21	6/14/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A
Dilution Factor:	1	1	1	1
PCB-1016	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1221	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1232	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1242	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1248	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1254	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1260	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1262	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1268	< 0.02	< 0.02	< 0.02	< 0.02
TMX (surr)	94 %R	85 %R	99 %R	98 %R
DCB (surr)	98 %R	97 %R	99 %R	84 %R

Acid clean-up was performed on the samples and associated batch QC.

## $\mathcal{M}$

## LABORATORY REPORT

EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
% Solid:	88.3	87.5	86.2	84.1
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/14/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/16/21	6/16/21	6/16/21
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A
Dilution Factor:	1	1	1	1
PCB-1016	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1221	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1232	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1242	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1248	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1254	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1260	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1262	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1268	< 0.02	< 0.02	< 0.02	< 0.02
TMX (surr)	97 %R	85 %R	51 %R	56 %R
DCB (surr)	108 %R	96 %R	52 %R	56 %R

Acid clean-up was performed on the samples and associated batch QC.

Eastern Analytical, Inc.

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## LABORATORY REPORT

#### EAI ID#: 227592

#### Client: Nobis Group

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10 -12')					
Lab Sample ID:	227592.02	227592.03	227592.05	227592.06					
Matrix:	soil	soil	soil	soil					
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21		Ana	lvsis		
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21	Units	Date	Time	Method	Analyst
Cyanide Total	< 0.5	< 0.5	< 0.5	< 0.5	mg/kg	06/16/21	8:55	9010/9014	A RB

Sample ID:	SB-3 (7-9')	SB-2 (12-14')	SB-6 (2.0')	SB-7 (2.0')					
Lab Sample ID:	227592.07	227592.08	227592.09	227592.1					
Matrix:	soil	soil	soil	soil					
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21		Ana	livsis		
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21	Units	Date	Time	Method	Analyst
Cyanide Total	< 0.5	< 0.5	0.54	< 0.5	mg/kg	06/16/21	8:55	9010/90	14 RB

#### EAI ID#: 227592

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	SB-8/NB-2 (7-9')	SB-11 (8-10')	SB-4 (7-9')	SB-5/NB-1 (10-12')					
Lab Sample ID:	227592.02	227592.03	227592.05	227592.06					
Matrix:	soil	soil	soil	soil					
Date Sampled:	6/8/21	6/9/21	6/9/21	6/9/21	Analytical		Date of		
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21	Matrix	Units	Analysis	Method	Analyst
Arsenic	8.5	4.5	1.5	4.2	SolTotDry	mg/kg	6/15/21	6020	DS
Barium	16	18	2.3	8.5	SolTotDry	mg/kg	6/15/21	6020	DS
Cadmium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	DS
Chromium	12	12	6.1	24	SolTotDry	mg/kg	6/15/21	6020	DS
Lead	6.6	7.7	2.3	19	SolTotDry	mg/kg	6/15/21	6020	DS
Mercury	< 0.1	< 0.1	< 0.1	< 0.1	SolTotDry	mg/kg	6/15/21	6020	DS
Selenium	0.57	< 0.5	< 0.5	0.52	SolTotDry	mg/kg	6/15/21	6020	DS
Silver	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	DS

Sample ID:	SB-3 (7-9') SB-2 (12-1		
Lab Sample ID:	227592.07	227592.08	
Matrix:	soil	soil	
Date Sampled:	6/10/21	6/10/21	
Date Received:	6/14/21	6/14/21	
Arsenic	4.1	4.0	
Barium	19	11	
Cadmium	< 0.5	< 0.5	
Chromium	14	7.7	
Lead	6.7	5.7	
Mercury	< 0.1	< 0.1	

< 0.5

< 0.5

< 0.5

< 0.5

Analytical Matrix	Units	Date of Analysis	Method	Analyst
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS
SolTotDry	mg/kg	6/15/21	6020	DS

Selenium

Silver

# M

## LABORATORY REPORT

#### Client: Nobis Group

Sample ID:	SB-6 (2.0')	SB-7 (2.0')					
Lab Sample ID:	227592.09	227592.1					
Matrix:	soil	soil					
Date Sampled:	6/11/21	6/11/21	Analytical		Date of		
Date Received:	6/14/21	6/14/21	Matrix	Units	Analysis	Method A	nalyst
Arsenic	6.1	4.7	SolTotDry	mg/kg	6/15/21	6020	) DS
Barium	92	62	SolTotDry	mg/kg	6/15/21	6020	) DS
Cadmium	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	) DS
Chromium	25	17	SolTotDry	mg/kg	6/15/21	6020	) DS
Lead	310	260	SoiTotDry	mg/kg	6/15/21	6020	) DS
Mercury	0.60	0.16	SolTotDry	mg/kg	6/15/21	6020	DS DS
Selenium	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	) DS
Silver	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	) DS
Lead	< 0.5	< 0.5	TCLPsolid	mg/L	6/18/21	6020	) DS



Tuesday, June 22, 2021

Attn: Front Office Eastern Analytical 25 Chenell Drive Concord, NH 03301

Project ID: 227592 SDG ID: GCI54779 Sample ID#s: CI54779 - CI54782

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,

Shille

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

June 22, 2021

SDG I.D.: GCI54779

Project ID: 227592

Client Id	Lab Id	Matrix	
SB-4 (7-9`)	CI54779	SOIL	
SB-6 (2.0`)	CI54780	SOIL	
SB-7 (2.0`)	CI54781	SOIL	
SB-5/NB-1 (10-12`)	CI54782	SOIL	



Analysis Report June 22, 2021	FOR: Attn: Front Office Eastern Analytical 25 Chenell Drive Concord, NH 03301
	Concord,

Sample Information		Custody Inform	Custody Information		
Matrix:	SOIL	Collected by:		06/09/21	12:25
Location Code:	EASTANAL-NH	Received by:	SW	06/15/21	11:33
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	55122				GC15477

## Laboratory Data

Project ID: 227592 Client ID: SB-4 (7-9`) SDG ID: GCI54779 Phoenix ID: CI54779

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Percent Solid	84		%		06/15/21	AR	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.43	0.43	mg/Kg	1	06/17/21	BJA	SW7196A
pH at 25C - Soil	7.15	1.00	pH Units	1	06/16/21 12:37	DJ/EG	SW846 9045D
Redox Potential	231		mV	1	06/16/21	DJ/EG	SM2580B-09

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

#### Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium: This sample is in a reducing state.

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 June 22, 2021 Reviewed and Released by: Rashmi Makol, Project Manager



Analysis F	Report
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June 22, 2021

FOR: Attn: Front Office Eastern Analytical 25 Chenell Drive Concord, NH 03301

Sampl	le l	nfo	rma	tion
	_	_		

		Ouslouy miom	halon	Date	<u>11110</u>
Matrix:	SOIL	Collected by:		06/11/21	13:30
Location Code:	EASTANAL-NH	Received by:	SW	06/15/21	11:33
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	55122		-		0.015 (77

Custody Information

## Laboratory Data

Project ID: 227592 Client ID: SB-6 (2.0`) SDG ID: GCI54779 Phoenix ID: CI54780

Time

Date

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Percent Solid	85		%		06/15/21	AR	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.44	0.44	mg/Kg	1	06/17/21	BJA	SW7196A
pH at 25C - Soil	7.38	1.00	pH Units	1	06/16/21 12:37	DJ/EG	SW846 9045D
Redox Potential	314		mV	1	06/16/21	DJ/EG	SM2580B-09

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

#### Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium: This sample is in a reducing state.

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 June 22, 2021 Reviewed and Released by: Rashmi Makol, Project Manager



Analysis Report June 22, 2021	FOR:	Attn: Front Office Eastern Analytical 25 Chenell Drive Concord, NH 03301

Sample Information	<u>ation</u>	Custody Inform	nation	<u>Date</u>	<u>Time</u>
Matrix:	SOIL	Collected by:		06/11/21	11:50
Location Code:	EASTANAL-NH	Received by:	SW	06/15/21	11:33
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	55122				0015 (75

## Laboratory Data

Project ID: 227592 Client ID: SB-7 (2.0`) SDG ID: GCI54779 Phoenix ID: CI54781

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Percent Solid	87		%		06/15/21	AR	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.44	0.44	mg/Kg	1	06/18/21	BJA/QH	SW7196A
pH at 25C - Soil	7.93	1.00	pH Units	1	06/16/21 12:37	DJ/EG	SW846 9045D
Redox Potential	338		mV	1	06/16/21	DJ/EG	SM2580B-09

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

#### Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium:

This sample is in a reducing state.

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 June 22, 2021



Analysis Report June 22, 2021	FOR:	Attn: Front Office Eastern Analytical 25 Chenell Drive Concord NH 03301
		Concord, NH 03301

Sample Informa	ation	Custody Inform	nation	Date	Time
Matrix:	SOIL	Collected by:		06/09/21	13:25
Location Code:	EASTANAL-NH	Received by:	SW	06/15/21	11:33
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	55122		-		0.015 (7)

### Laboratory Data

Project ID: 227592 Client ID: SB-5/NB-1 (10-12`) SDG ID: GCI54779 Phoenix ID: CI54782

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Percent Solid	91		%		06/15/21	AR	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.41	0.41	mg/Kg	1	06/18/21	BJA/QH	SW7196A
pH at 25C - Soil	7.39	1.00	pH Units	1	06/16/21 12:37	DJ/EG	SW846 9045D
Redox Potential	320		mV	1	06/16/21	DJ/EG	SM2580B-09

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

#### Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium:

This sample is in a reducing state.

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 June 22, 2021



## QA/QC Report

June 22, 2021

### QA/QC Data

SDG I.D.: GCI54779

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 579920 (mg/kg), (	QC Sam	ple No:	CI54469	40X (CI	54779,	CI5478	30)							
Chromium, Hexavalent - S	Soil													
Chromium, Hexavalent	BRL	0.40	<0.39	<0.42	NC	94.1						85 - 115	30	
Chromium, Hexavalent (Ins)						95.1			92.8			85 - 115	30	
Chromium, Hexavalent (Sol)						93.4			90.8			85 <b>- 1</b> 15	30	
QA/QC Batch 580132 (mg/kg), 0	QC Sam	ple No:	CI57461	40X (Cl	54781,	CI5478	32)							
Chromium, Hexavalent - S	Soil													
Chromium, Hexavalent	BRL	0.40	<0.42	<0.42	NC	95.1						85 - 115	30	
Chromium, Hexavalent (Ins)						103			94.3			85 - 115	30	
Chromium, Hexavalent (Sol)						92.2			56.7			85 - 115	30	m

m = This parameter is outside laboratory MS/MSD specified recovery limits.



## QA/QC Report

June 22, 2021

### QA/QC Data

SDG I.D.: GCI54779

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 579781 (	PH), QC Sample	No: C	CI54731 (C	154779,	CI5478	0, CI54	781, CI	54782)					
pH at 25C - Soil			7.50	7.46	0.50	99.7						85 - 115	20

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 June 22, 2021

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 exceedances. A lack of exceedance information does not necessarily suggest conformance to the criteria exceedances. All efforts are information does not necessarily suggest conformance to the criteria. It is ultimately the ste \*\*\* No Data to Display \*\*\* SampNo State: RI ..... None Acode Phoenix Analyte Sample Criteria Exceedances Report GCI54779 - EASTANAL-NH Analysis Units



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

June 22, 2021

SDG I.D.: GCI54779

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



287-0525 customerservice@easternanalytical.com nless from and against any and all liability, loss, expense or claims for injury or damages , or claims for injury or damages are caused by or result from the negligent or intentional	d, NH 03301 Phone: (603)228-0525 1-800-2 Eastern Analytical, Inc., its officers, employees, and agents harr only in proportion to and to the extent such liability, loss, expense	Eastern Analytical, Inc. 25 Chenell Dr. Concor As a subcontract lab to EAI, you will defend, indemnify and hold arising out of the performance against this chain of custody but are promised for a subcontract lab your officer and
Relinquished by Date/Time Received by	_	Phone # (860) 645-1102
Call prior to analyzing, if RUSH charges will be applied. Samples Collected by: 	Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.	Address 587 East Middle Turnpike Address Manchester , CT 06040 Account #
PO #:55122 EAI ID# 227592 Data Deliverable (circle) Excel NH EMD EQUIS ME EGAD	Results Needed: Preferred Date: Standard         RUSH Due Date: Standard         QC Deliverables       Image: Standard         MA       Image: A+       Image: B+       Image: C+         Notes about project:       Image: A+       Image: B+       Image: C+	EAI ID# 227592 Project State: RI Project ID: 0 Company Phoenix Environmental Labs
	sampel.	Rud- 1 802 jar Pu
54782	Subcontract - Hexavalent Chromium Soil 3060/7196	SB-5/NB-1 (10-12') 6/9/2021 soil 13:25
54781	Subcontract - Hexavalent Chromium Soil 3060/7196	SB-7 (2.0') 6/11/2021 soil
54780	Subcontract - Hexavalent Chromium Soil 3060/7196	SB-6 (2.0') 6/11/2021 soil
54779	Subcontract - Hexavalent Chromium Soil 3060/7196	SB-4 (7-9') 6/9/2021 soil
EAI ID# 227592 Page 1 Sample Notes	aParameters	Sample ID Date Sampled Matrix
WC Seastern Analytical, Inc. 7 Ill professional laboratory and drilling services	DY RECORD	CHAIN-OF-CUSTC

Page 11 of 11

E-MAIL: QUOTE #: Simile REGULATORY PROGRAM NPDESS RGP POTW STORMWATER OR PHONE: Phoject #: \_\_ STIE NAME: FIX: ADDRESS: COMPANY: PROJECT MANAGER: Page KINIX: A JIN: 5-SOIL: OW WW-WASTE WATER ESERVATIVE: N-HCL: N-HNO;; S-H,SO;; Ma-NaOH; M-MEDH ß B-X Eastern Analytical, Inc. لكر: \_\_\_\_\_ JU I professional laboratory and drilling services 1.95 \$ 9 J I 301 ZI ζĴ сү ф y, SAMPLE I. 0 2 0 0 0 60 δ 555 GWP; OR FUND, BROWNFIELD ON OTHER: C DWY 004 200 22 6 MA ME ともし VI WI IV 253 **LOID** Ę S-10" ACTIONAL IN Print Frank S 2.01 2.01 0 **FE**S Ę or Mobers-group. H-HIS SIME AULT VATER, SW-SUMFACE WATER, DW-DIDHKING ų. 4 6 6 б S 6 e Y NU \*IF COMPOSITE, SAMPLING DATE/TIME START & FINISH INDICATE BOTH 1.1.21 10121 5101-1015 0 0 0 DATE / JUME P0 #: 2 3 121 1920  $\overline{\mathcal{D}}$ 91 1230 5001 1150 深 1535 50.91 1222 04.61 25 CHENELL DRIVE CONCORD. NICOSSO TTEL 603 Extr. 11 0330 COMO Ś S  $\hat{\mathbf{v}}$ J J J MATRIX (SEE BELOW) BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS WATEL: 5 G G G G GRAB/\*COMPOSITE G G J. 524.2 524.2 BTEX 524.2 MTBE DALT DjD> 624 1, 4 Dissuit YIIG T VOC (WHITE: ORIGINAL RELINQUISHED BY: RELINQUISHED, BY A B C PREUMA AND A C DATE NEEDED: Standard RELINQUISHED BY ONOC **50**21 BTEX HALOS SAMPLER(S): CHAIN-OF-CUSTODY RECORD TOIS GRO HAYPH MA MCP CALL STATES - EDB DBC DI PAN 38 9 Dening II SVOC 12 IIS DRO HAEPH ONUL 12/11/01-10/01/10 WINK PIST 401 AST 4010 **GREEN: PROJECT MANAGER**) **J**ä 011 & GRUTE, 1664 TPH 1664 E. ELECTRONIC OPTIONS ABX Merras ICIN METALS Tar (31) Lange Star ?EST Hin 5 15101 L R Ì Dissolved Herry (List Selow) 9110 Equis TS ŤSS TDS SPEC. CON ROS E-MAIL COSTOMERSERVICEDEASTERNANALYTICAL.COM WWW.EASTERNANALYTICAL.COM jo, Nojnoj È. ē RECEIVED BY RC, KECENYO reception by: E INORGANICS 800 CEDD T. Au IEN. R . MHz T. Pros. O. Pilos JTR **(D)** oll . L AR. CHOINE 100 COD TOC PREMOUS 퉁 -COUL CHARLES TOTAL SULTIDE Auntine Grunde Reads FIELD READINGS Site History Tax h Var METNES REACTING STATION OTHER MEMOLS SAMPLES FIELD FILTERED? SUSPECTED CONTAMINATION Notes: (18: Special Defection Limits, Bitling Into, 17 Differenti Total Louforn Fical Colforn E Gu MICHO Cr+6 sampling DNA= Is Not Annalise SB-1 (8 HOM) HETELOMORINE PLATE CON 14.01 OTHER C1448 Metals Widd ary Hevai 1 13 PP 227592 ĴЙ, ŝ SB-1 ত Ň S. S ທັ # of Containers ; <8-**1**⊊, PE, Ma PID 53303 22233 53072 2363 12289 Notes MOH VM # 153630 \$ RUCUMMA 53332 (CASCA) 633333 tino Pa, (u ALCUR Land NBdhub) . रवीगान DNA 1 12/ 12/ 21/ 21 R K 336 339 32
Page \_\_\_\_ JUN, SIMIE Phoject #: E-Mail: PHONE COMPANY: Quote #: REGULATORY PROGRAM: NPDES: RGP POTW STORAWATER OA SITE NAME PROJECT MANAGENE BEHINA CAMAS ADDRESS: MATRIDE, A-JAIR, S-SOILE, GW-GRIOURD-WATER, SW-SUNFACE WATER, DW-DRINKING WATER, WW-WASTE WATER ÷. PRESERVATIVE: H-HCL; H-HNO3; S-H2SO4; Na-N2OH; H-MEOH 3 Eastern Analytical, Inc. professional laboratory and drilling services <u>Oncorc</u> SAMPLE I.D. NH MA Samme 20 دلا C311-1, 20 12.00 Kolon 202 GWP, OL FUND, BROWNFIELD OR OTHER, Munich NOOre 2 . ..... đ. ME VI OND 0. J. (n) ų. .,, N. . . . ACA A wordrage-signing 00F 0 12 181 al PNV 6 INDICATE BOTH START & FINISH \*IF COMPOSITE, DATE / TIME SAMPLING DATE / TIME P0 #:\_\_\_\_ SWIE NH I え 25 CHENELL DRIVE CONCORD, NH 02501 Elon 2.8 M:0330 X MATRIX (SEE BELOW) BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS. GRAB/\*COMPOSITE Ē 524.2 524.2 BTEX 524.2 HTBE ONLY (1260) 624 TIG VOC W 1 (WHITE: ORIGINAL OV/OC 1021 BTEX -HALOS DATE NEEDED: RELINQUISHED BY REPORTING LEVEL CHAIN-OF-CUSTODY RECORD RELINGENSHED Sil RELHQUISHED BY: ≻ 1/DEN BOIS GRO MAYPH B270 625 SYTTL: EDB ABN A BN PAH DBCP MA MCP ž 9 Œ Č. TPHEIDO u 11 SVOC TH: 605/228/0525 | 1.800.287.0526 BOIS DRO MAEPH . 944 standard C PEST 408 PEST 8081 PCB 508 PCB 2082 :' GREEN: PROJECT MANAGER) DATE: 6 5/11/11/19/0 • 'ON & GREAT 1664 TPH 1664 ELECTNONIC OPTIONS PREVING OPTIONS PREVING VIEL ON CONTINUES ICLP METALS TOP BII ABK Nenus • TOC PEST HELL 1018 Jel Š. 8118 DISSOLTED HETALS (LAT BELOW) TAT N. THE: TOTAL HETRIS (LIST BELOW) Equis ß TSS TDS. SPEC. COL RC2 SO. NO:NO: ŇÔ, **NECEIVED BY: ICENTO** NORGANICS BOD 000 T. ALL : 33 Cena ĨŒ Tene. T. Pros O. PHO TD Na χ., ъH T. Res. Cincum i" a × 8. TOC DOC cob PROMI TODA CYANDE TODA SELFERE 14 A. SITE HISTOMY TR XHLD MULL METALS REACTIVE SHIFTDE HED READINGS 210 REDOM REACTIVE CYANDE SUSPECTED CONTAMINATION: \*\* Notes: (IE: SFECIAL DETECTION LIMITS, BILLING INFO, IL DIFFERENT) SANPLES FIELD FILTERED? OTHER MEMIS IGROUNT FLISTFONT form Courses E. Cal MICRO . 1 Ċ, 5.3 FICH COLIFORN THIOCOCUL 8 RCRA Interioritaria Piara Const OTHER , Ś . . 65 ÷, • 2 s, .2 AL EL 227592 1 # of Cordinate , F -NOTES 53820 Ŧ DD N. S. ÷ PR, CU З, 2 . (\* \* « ŝ.



Eastern Analytical, Inc.

professional laboratory and drilling services

Bettina Eames Nobis Group 18 Chenell Drive Concord , NH 03301



Laboratory Report for:

Eastern Analytical, Inc. ID: 227591 Client Identification: Robin Rug | 095560.260 Date Received: 6/14/2021

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R: % Recovery

#### Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072), West Virginia (9910C) and Alabama (41620). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

#### References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

haw, Lab Director



EAI ID#: 227591

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Temperature upon receipt (°C):       2.9       Received on ice or cold packs (Yes/No):       Y         Acceptable temperature range (°C):       0-6       6       6       6							
Lab ID	Sample ID	Date Received	Date/T Samp	ïme led	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
227591.01	Trip Blank	6/14/21	6/10/21	08:00	soil	100.0	Adheres to Sample Acceptance Policy
227591.02	TP-7 0-3.5'	6/14/21	6/10/21	09:00	soil	82.1	Adheres to Sample Acceptance Policy
227591.03	TP-6 9-10'	6/14/21	6/10/21	11:15	soil	86.7	Adheres to Sample Acceptance Policy
227591.04	TP-5 6'	6/14/21	6/10/21	13:00	soil	93.9	Adheres to Sample Acceptance Policy
227591.05	TP-4 9'	6/14/21	6/10/21	14:50	soil	89.5	Adheres to Sample Acceptance Policy
227591.06	Trip Blank	6/14/21	6/11/21	07:00	soil	100.0	Adheres to Sample Acceptance Policy
227591.07	TP-14 1-2'	6/14/21	6/11/21	08:30	soil	90.3	Adheres to Sample Acceptance Policy
227591.08	TP-1 0-2'	6/14/21	6/11/21	10:15	soil	92.1	Adheres to Sample Acceptance Policy
227591.09	TP-2 3-4'	6/14/21	6/11/21	10:55	soil	92.0	Adheres to Sample Acceptance Policy
227591.1	TP-3 2-3'	6/14/21	6/11/21	11:40	soil	81.6	Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.

Eastern Analytical, Inc.

## LABORATORY REPORT

### EAI ID#: 227591

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	Trip Blank	TP-7 0-3.5'	TP-6 9-10'	TP-5 6'
Lab Sample ID:	227591.01	227591.02	227591.03	227591.04
Matrix:	soil	soil	soil	soil
Data Samplad:	6/10/21	6/10/21	6/10/21	6/10/21
Date Sampled.	6/14/21	6/14/21	6/14/21	6/14/21
	0/14/21	malka	ma/ka	ma/ka
	mg/kg	nig/kg	0.45.04	6/15/21
Date of Analysis:	6/14/21	6/14/21	6/15/21	0/10/21
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	82600
Dilution Factor:	1	2	1	1
Dichlorodifluoromethane	< 0.1	< 0.2	< 0.1	< 0.1
Vinyl chloride	< 0.1	< 0.2	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.2	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.2	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.2	< 0.1	< 0.1
Diethyl Ether	< 0.05	< 0.08	< 0.05	< 0.03
1 1-Dichloroethene	< 0.05	< 0.08	< 0.05	< 0.05
tert-Butyl Alcohol (TBA)	< 2	< 3	< 2	< 2
Methylene chloride	< 0.1	< 0.2	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.2	< 0.1	< 0.1
Ethyl-t-butyl ether(ETBE)	< 0.1	< 0.2	< 0.1	< 0.1
Isopropyl ether(DIPE)	< 0.1	< 0.2	< 0.1	< 0.1
tert-amyl methyl ether(TAME)	< 0.1	< 0.2	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.05	< 0.08	< 0.05	< 0.05
2 2-Dichloropropage	< 0.05	< 0.08	< 0.05	< 0.05
cis-1.2-Dichloroethene	< 0.05	< 0.08	< 0.05	< 0.05
2-Butanone(MEK)	< 0.5	< 0.8	< 0.5	< 0.5
Bromochloromethane	< 0.05	< 0.08	< 0.05	< 0.05
Chloroform	< 0.5 < 0.05	< 0.08	< 0.05	< 0.05
1.1.1-Trichloroethane	< 0.05	< 0.08	< 0.05	< 0.05
Carbon tetrachloride	< 0.05	< 0.08	< 0.05	< 0.05
1,1-Dichloropropene	< 0.05	< 0.08	< 0.05	< 0.05
Вепzепе 1 2-Dichloroethane	< 0.05	< 0.08	< 0.05	< 0.05
Trichloroethene	< 0.05	< 0.08	< 0.05	< 0.05
1,2-Dichloropropane	< 0.05	< 0.08	< 0.05	< 0.05
Dibromomethane	< 0.05	< 0.08	< 0.05	< 0.05
1 4-Dioxane	< 0.05	< 0.06	< 1	< 1
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.8	< 0.5	< 0.5
cis-1,3-Dichloropropene	< 0.05	< 0.08	< 0.05	< 0.05
	< 0.05	< 0.08	< 0.05	< 0.05
1 1 2-Trichloroethane	< 0.05	< 0.08	< 0.05	< 0.05
2-Hexanone	< 0.1	< 0.2	< 0.1	< 0.1
Tetrachloroethene	< 0.05	< 0.08	< 0.05	< 0.05
1,3-Dichloropropane	< 0.05	< 0.08	< 0.05 < 0.05	< 0.05
1 2-Dibromoethane(EDB)	< 0.05	< 0.03	< 0.03	< 0.02
Chlorobenzene	< 0.05	< 0.08	< 0.05	< 0.05
1,1,1,2-Tetrachloroethane	< 0.05	< 0.08	< 0.05	< 0.05
				2

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LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	Trip Blank	TP-7 0-3.5'	TP-6 9-10'	TP-5 6'
			······································	
Lab Sample ID:	227591.01	227591.02	227591.03	227591.04
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/10/21	6/10/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/14/21	6/14/21	6/15/21	6/15/21
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	2	1	1
Ethylbenzene	< 0.05	< 0.08	< 0.05	< 0.05
mp-Xylene	< 0.05	< 0.08	< 0.05	< 0.05
o-Xylene	< 0.05	< 0.08	< 0.05	< 0.05
Styrene	< 0.05	< 0.08	< 0.05	< 0.05
Bromoform	< 0.05	< 0.08	< 0.05	< 0.05
IsoPropylbenzene	< 0.05	< 0.08	< 0.05	< 0.05
	< 0.05	< 0.08	< 0.05	< 0.05
1,1,2,2-1 etrachioroethane	< 0.05	< 0.08	< 0.05	< 0.05
n Pronylbenzene	< 0.05	< 0.08	< 0.05	< 0.05
2-Chlorotoluene	< 0.05	< 0.00	< 0.05	< 0.05
4-Chlorotoluene	< 0.05	< 0.00	< 0.05	< 0.05
1 3 5-Trimethylbenzene	< 0.00	< 0.08	< 0.05	< 0.05
tert-Butylbenzene	< 0.00	< 0.08	< 0.05	< 0.05
1.2.4-Trimethylbenzene	< 0.05	< 0.08	< 0.05	< 0.05
sec-Butylbenzene	< 0.05	< 0.08	< 0.05	< 0.05
1,3-Dichlorobenzene	< 0.05	< 0.08	< 0.05	< 0.05
p-lsopropyltoluene	< 0.05	< 0.08	< 0.05	< 0.05
1,4-Dichlorobenzene	< 0.05	< 0.08	< 0.05	< 0.05
1,2-Dichlorobenzene	< 0.05	< 0.08	< 0.05	< 0.05
n-Butylbenzene	< 0.05	< 0.08	< 0.05	< 0.05
1,2-Dibromo-3-chloropropane	< 0.05	< 0.08	< 0.05	< 0.05
1,3,5-Trichlorobenzene	< 0.05	< 0.08	< 0.05	< 0.05
1,2,4-Trichlorobenzene	< 0.05	< 0.08	< 0.05	< 0.05
Hexachlorobutadiene	< 0.05	< 0.08	< 0.05	< 0.05
	< 0.1	< 0.2	< 0.05	< 0.05
	< U.U5		< 0.05 140 %R	~ 0.00 88 %R
1.2 Dichlorobonzono d4 (surr)	92 %R 100 % P	102 %P	92 %R	102 %R
Toluene-d8 (surr)	95 % P	95 %R	88 %R	96 %R
1,2-Dichloroethane-d4 (surr)	101 %R	102 %R	108 %R	101 %R

TP-7 0-3.5': Reporting limits are elevated due to the % solids content of the sample or the sample mass used for analysis. TP-6 9-10': Non target interference in the sample resulted in recovery high outside of the acceptance control limits of 70-130%R for the surrogate 4-Bromofluorobenzene (surr).

### LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	Trip Blank	TP-14 1-2'	TP-1 0-2'	TP-3 2-3'
l ab Sample ID:	227591.06	227591.07	227591.08	227591.1
Matrix:	soil	soil	soil	soil
Data Sampladi	6/11/21	6/11/21	6/11/21	6/11/21
Date Sampled.	6/14/21	6/14/21	6/14/21	6/14/21
Date Received.	0/14/21	5/14/21		malka
Units:	mg/kg	mg/kg	nig/kg	
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	2
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1	< 0.2
Vinyl ebleride	< 0.1	< 0.1	< 0.1	< 0.2
Bromomethane	< 0.02	< 0.1	< 0.1	< 0.2
Chloroethane	< 0.1	< 0.1	< 0.1	< 0.2
Trichlorofluoromethane	< 0.1	< 0.1	< 0.1	< 0.2
Diethyl Ether	< 0.05	< 0.05	< 0.05	< 0.1 < 4
1.1-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.1
tert-Butyl Alcohol (TBA)	< 2	< 2	< 2	< 4
Methylene chloride	< 0.1	< 0.1	< 0.1	< 0.2
Carbon disulfide	< 0.1	< 0.1	< 0.1	< 0.2
Ethyl-t-butyl ether(ETBE)	< 0.1	< 0.1	< 0.1	< 0.2
Isopropyl ether(DIPE)	< 0.1	< 0.1	< 0.1	< 0.2
tert-amyl methyl ether(TAME)	< 0.1	< 0.1	< 0.1	< 0.2
trans-1,2-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.1
2.2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.1
cis-1,2-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.1
2-Butanone(MEK)	< 0.5	< 0.5	< 0.5	< 1
Bromochloromethane	< 0.05	< 0.05	< 0.05 < 0.5	< 0.1
Chloroform	< 0.05	< 0.05	< 0.05	< 0.1
1,1,1-Trichloroethane	< 0.05	< 0.05	< 0.05	< 0.1
Carbon tetrachloride	< 0.05	< 0.05	< 0.05	< 0.1
1,1-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.1
1.2-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.1
Trichloroethene	< 0.05	< 0.05	< 0.05	< 0.1
1,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.1
Dibromomethane	< 0.05	< 0.05	< 0.05	< 0.1
1.4-Dioxane	< 1	< 1	< 1	< 2
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.5	< 0.5	< 1
cis-1,3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.1
loluene trans-1.3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.1
1,1,2-Trichloroethane	< 0.05	< 0.05	< 0.05	< 0.1
2-Hexanone	< 0.1	< 0.1	< 0.1	< 0.2
Tetrachloroethene	< 0.05	< 0.05	< 0.05	< 0.1
	< 0.05 < 0.05	< 0.05 < 0.05	< 0.05	< 0.1
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.04
Chlorobenzene	< 0.05	< 0.05	< 0.05	< 0.1
1,1,1,2-Tetrachloroethane	< 0.05	< 0.05	< 0.05	< 0.1
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## LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	Trip Blank	TP-14 1-2'	TP-1 0-2'	TP-3 2-3'
l ab Sample ID:	227591.06	227591.07	227591.08	227591.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/11/21	6/11/21	6/11/21	6/11/21
Date Sampled.	6/14/21	6/14/21	6/14/21	6/14/21
	0/14/21	malka	ma/ka	ma/ka
	mg/kg			6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	0/15/21
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	2
Ethylbenzene	< 0.05	< 0.05	< 0.05	< 0.1
mp-Xylene	< 0.05	< 0.05	< 0.05	< 0.1
o-Xylene	< 0.05	< 0.05	< 0.05	< 0.1
Styrene	< 0.05	< 0.05	< 0.05	5.1
Bromoform	< 0.05	< 0.05	< 0.05	< 0.1
IsoPropylbenzene	< 0.05	< 0.05	< 0.05	< 0.1
Bromobenzene	< 0.05	< 0.05	< 0.05	< 0.1
1,1,2,2-l etrachioroethane	< 0.05	< 0.05	< 0.05	< 0.1
1,2,3-1 richioropropane	< 0.05	< 0.05	< 0.05	< 0.1
n-Propyidenzene	< 0.05	< 0.05	< 0.05	< 0.1
	< 0.05	< 0.05	< 0.00	< 0.1
1 3 5-Trimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.1
tert-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.1
1 2 4-Trimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.1
sec-Butvlbenzene	< 0.05	< 0.05	< 0.05	< 0.1
1.3-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.1
p-Isopropyltoluene	< 0.05	< 0.05	< 0.05	< 0.1
1,4-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.1
1,2-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.1
n-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.1
1,2-Dibromo-3-chloropropane	< 0.05	< 0.05	< 0.05	< 0.1
1,3,5-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.1
1,2,4-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.1
Hexachlorobutadiene	< 0.05	< 0.05	< 0.05	< 0.1
	< 0.1	< 0.1	< 0.05	< 0.2
1,2,3-111Chlorobenzene		> 0.03	20.00 89 %R	103 %R
1 2. Dichlorobenzene d4 (surr)	00 %R 101 %P	102 %R	102 %R	95 %R
Toluene-d8 (surr)	96 %R	95 %R	95 %R	95 %R
1,2-Dichloroethane-d4 (surr)	101 %R	102 %R	103 %R	102 %R

TP-3 2-3': Reporting limits are elevated due to the % solids content of the sample or the sample mass used for analysis.

### LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Sample ID:	TP-7 0-3.5'	TP-6 9-10'	TP-5 6'	TP-4 9'
Lab Sample ID:	227591.02	227591.03	227591.04	227591.05
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/10/21	6/10/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	ma/ka	mg/kg
Date of Extraction/Prep	6/15/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JMR	JMR	JMR	JMR
Method:	8270D	8270D	8270D	8270D
Dilution Factor:	1	1	1	1
Naphthalene	< 0.09	< 0.08	< 0.07	< 0.08
2-Methylnaphthalene	< 0.09	< 0.08	< 0.07	< 0.08
1-Methyinaphthalene	< 0.09	< 0.08	< 0.07	< 0.08
Acenaphthylene	< 0.09	< 0.08	< 0.07	< 0.08
Acenaphthene	< 0.09	< 0.08	< 0.07	< 0.08
Fluorene	< 0.09	< 0.08	< 0.07	< 0.08
Phenanthrene	0.17	< 0.08	< 0.07	< 0.08
Anthracene	< 0.09	< 0.08	< 0.07	< 0.08
Fluoranthene	0.53	< 0.08	< 0.07	< 0.08
Pyrene	0.61	< 0.08	< 0.07	< 0.08
Benzo[a]anthracene	0.44	< 0.08	< 0.07	< 0.08
Chrysene	0.40	< 0.08	< 0.07	< 0.08
Benzo[b]fluoranthene	0.40	< 0.08	< 0.07	< 0.08
Benzo[k]fluoranthene	0.14	< 0.08	< 0.07	< 0.08
Benzo[a]pyrene	0.35	< 0.08	< 0.07	< 0.08
Indeno[1,2,3-cd]pyrene	0.21	< 0.08	< 0.07	< 0.08
Dibenz[a,h]anthracene	< 0.09	< 0.08	< 0.07	< 0.08
Benzo[g,h,i]perylene	0.22	< 0.08	< 0.07	< 0.08
p-Terphenyl-D14 (surr)	71 %R	79 %R	76 %R	70 %R

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### LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Sample ID:	TP-14 1-2'	TP-1 0-2'	TP-2 3-4'	TP-3 2-3'
Lab Sample ID:	227591.07	227591.08	227591.09	227591.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/11/21	6/11/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	ma/ka	ma/ka	ma/ka	ma/ka
Date of Extraction/Prep:	6/15/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JMR	JMR	JMR	JMR
Method:	8270D	8270D	8270D	8270D
Dilution Factor:	1	1	1	1
Naphthalene	< 0.08	< 0.07	0.086	< 0.09
2-Methylnaphthalene	< 0.08	< 0.07	< 0.08	< 0.09
1-Methylnaphthalene	< 0.08	< 0.07	< 0.08	< 0.09
Acenaphthylene	< 0.08	0.10	0.19	< 0.09
Acenaphthene	< 0.08	< 0.07	0.13	< 0.09
Fluorene	< 0.08	0.073	0.19	< 0.09
Phenanthrene	0.38	0.75	1.5	0.57
Anthracene	0.12	0.22	0.46	0.12
Fluoranthene	0.71	1.3	2.4	0.95
Pyrene	0.59	1.1	2.1	0.79
Benzolajanthracene	0.37	0.71	1.3	0.70
	0.38	0.69	1.3	0.75
Benzolbjfluoranthene	0.47	0.83	1.6	0.93
Benzo[Kjfluoranthene	0.16	0.33	0.54	0.35
Benzolajpyrene	0.36	0.68	1.3	0.65
Diference 1,2,3-cajpyrene	0.26	0.32	0.58	0.28
Dibenzla, njantnracene	< 0.08	0.081	0.15	< 0.09
Denzolg,n,ijperviene	0.22	0.24	0.43	0.21
p-Terphényl-D14 (surr)	69 %R	74 %R	75 %R	66 %R

### LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	TP-7 0-3.5'	TP-6 9-10'	TP-5 6'	TP-4 9'
· · · ·				· · · · · · · · ·
Lab Sample ID:	227591.02	227591.03	227591.04	227591.05
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/10/21	6/10/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/15/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JLB	JLB	JLB	JLB
Method:	8100mod	8100mod	8100mod	8100mod
Dilution Factor:	1	1	1	1
TPH (C9-C40) p-Terphenyl-D14 (surr)	69 86 %R	580 97 %R	< 30 <b>81 %R</b>	< 30 68 %R

Eastern Analytical, Inc.

## LABORATORY REPORT

### EAI ID#: 227591

### Client: Nobis Group

Sample ID:	TP-14 1-2'	TP-1 0-2'	TP-2 3-4'	TP-3 2-3'
Lab Sample ID:	227591.07	227591.08	227591.09	227591.1
Matrix:	soil	soil	soil	soil
Date Sampled:	6/11/21	6/11/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/15/21	6/15/21	6/15/21	6/15/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	JLB	JLB	JLB	JLB
Method:	8100mod	8100mod	8100mod	8100mod
Dilution Factor:	1	1	1	1
TPH (C9-C40) p-Terphenyl-D14 (surr)	59 84 %R	69 89 %R	93 96 %R	230 107 %R

## LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	TP-7 0-3.5'	TP-6 9-10'	TP-14 1-2'	TP-1 0-2'
Lab Sample ID:	227591.02	227591.03	227591.07	227591.08
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
% Solid:	82.1	86.7	90.3	92.1
Units:	ma/ka	ma/ka	mg/kg	mg/kg
Date of Extraction/Prep:	6/14/21	6/14/21	6/14/21	6/14/21
Date of Analysis:	6/18/21	6/18/21	6/18/21	6/18/21
Analyst:	MR	MB	MB	MB
Extraction Method:	35400	35400	35400	35400
Analysis Methods	9091D	9091B	2091B	8081B
Analysis Method:	00010	00016	00010	00015
Dilution Factor:	1	1	1	I
Aldrin	< 0.006	< 0.006	< 0.006	< 0.005
alpha-BHC	< 0.006	< 0.006	< 0.006	< 0.005
beta-BHC	< 0.006	< 0.006	< 0.006	< 0.005
Lindane(gamma-BHC)	< 0.006	< 0.006	< 0.006	< 0.005
delta-BHC	< 0.006	< 0.006	< 0.006	< 0.005
Chlordane	< 0.02	< 0.02	< 0.02	< 0.02
4,4'-DDT	0.014	0.040	< 0.006	< 0.005
4,4'-DDE	0.012	< 0.006	< 0.006	< 0.005
4,4'-DDD	< 0.006	0.063	< 0.006	< 0.005
Dieldrin	< 0.006	< 0.006	< 0.006	< 0.005
Endosulfan I	< 0.006	< 0.006	< 0.006	< 0.005
Endosulfan II	< 0.006	< 0.006	< 0.006	< 0.005
Endosulfan Sulfate	< 0.006	< 0.006	< 0.006	< 0.005
Endrin	< 0.006	< 0.006	< 0.006	< 0.005
Endrin Aldehyde	< 0.006	< 0.006	< 0.006	< 0.005
Endrin Ketone	< 0.006	< 0.006	< 0.006	< 0.005
Heptachlor	< 0.006	< 0.006	< 0.006	< 0.005
Heptachlor Epoxide	< 0.006	< 0.006	< 0.006	< 0.005
Methoxychlor	< 0.006	< 0.006	< 0.006	< 0.005
Toxaphene	< 0.06	< 0.06	< 0.06	< 0.05
TMX (surr)	61 %R	45 %R	60 %R	53 %R
DCB (surr)	44 %R	56 %R	<b>45 %</b> R	35 %R

Clean-up was performed on the samples and associated batch QC.

## LABORATORY REPORT

EAI ID#: 227591

#### Client: Nobis Group

### Client Designation: Robin Rug | 095560.260

Sample ID:	TP-3 2-3'
Lab Sample ID:	227591.1
Matrix:	soil
Date Sampled:	6/11/21
Date Received:	6/14/21
% Solid:	81.6
Units:	mg/kg
Date of Extraction/Prep:	6/14/21
Date of Analysis:	6/18/21
Analyst:	MB
Extraction Method:	3540C
Analysis Method:	8081B
Dilution Eactor:	1
	I
Aldrin	< 0.006
alpha-BHC	< 0.006
beta-BHC	< 0.006
Lindane(gamma-BHC)	< 0.006
delta-BHC	< 0.006
Chlordane	< 0.02
4,4'-DDT	< 0.006
4,4'-DDE	< 0.006
4,4'-DDD	< 0.006
Dieldrin	< 0.006
Endosulfan I	< 0.006
Endosulfan II	< 0.006
Endosullan Sullate	< 0.006
Endrin Aldebyde	< 0.006
Endrin Ketone	< 0.006
Hentachlor	< 0.000
Heptachlor Epoxide	< 0.006
Methoxychlor	< 0.006
Toxaphene	< 0.06
TMX (surr)	49 %R
DCB (surr)	37 %R

Clean-up was performed on the samples and associated batch QC.

## LABORATORY REPORT

EAI ID#: 227591

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	TP-7 0-3.5'	TP-6 9-10'	TP-14 1-2'	TP-1 0-2'
I ab Sample ID:	227591 02	227591.03	227591.07	227591.08
Matrix:	soil	soil	soil	soil
Date Sampled:	6/10/21	6/10/21	6/11/21	6/11/21
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21
% Solid:	82.1	86.7	90.3	92.1
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/14/21	6/14/21	6/14/21	6/14/21
Date of Analysis:	6/15/21	6/15/21	6/15/21	6/15/21
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A
Dilution Factor:	1	1	1	1
PCB-1016	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1221	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1232	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1242	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1248	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1254	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1260	< 0.02	< 0.02	< 0.02	0.040
PCB-1262	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1268	< 0.02	< 0.02	< 0.02	< 0.02
TMX (surr)	96 %R	58 %R	79 %R	88 %R
DCB (surr)	94 %R	93 %R	87 %R	78 %R

Acid clean-up was performed on the samples and associated batch QC.

## LABORATORY REPORT

### EAI ID#: 227591

#### Client: Nobis Group

#### Client Designation: Robin Rug | 095560.260

Sample ID:	TP-3 2-3'
Lab Sample ID:	227591.1
Matrix:	soil
Date Sampled:	6/11/21
Date Received:	6/14/21
% Solid:	81.6
Units:	mg/kg
Date of Extraction/Prep:	6/14/21
Date of Analysis:	6/15/21
Analyst:	MB
Extraction Method:	3540C
Analysis Method:	8082A
Dilution Factor:	1
PCB-1016	< 0.02
PCB-1221	< 0.02
PCB-1232	< 0.02
PCB-1242	< 0.02
PCB-1248	< 0.02
PCB-1254	< 0.02
PCB-1260	< 0.02
PCB-1262	< 0.02
PCB-1268	< 0.02
TMX (surr)	76 %R
DCB (surr)	73 %R

Acid clean-up was performed on the samples and associated batch QC.

## LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Sample ID:	TP-6 9-10'	TP-5 6'	TP-4 9'	TP-1 0-2'					
Lab Sample ID:	227591.03	227591.04	227591.05	227591.08					
Matrix:	soil	soil	soil	soil					
Date Sampled:	6/10/21	6/10/21	6/10/21	6/11/21	Analytical		Date of		
Date Received:	6/14/21	6/14/21	6/14/21	6/14/21	Matrix	Units	Analysis	Method	Analyst
Arsenic	2.3	2.9	4.9	8.4	SolTotDry	mg/kg	6/15/21	6020	DS
Barium	8.3	11	20	29	SolTotDry	mg/kg	6/15/21	6020	DS
Cadmium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	DS
Chromium	7.1	8.4	13	14	SolTotDry	mg/kg	6/15/21	6020	DS
Lead	8.4	6.0	7.7	55	SolTotDry	mg/kg	6/15/21	6020	DS
Mercury	< 0.1	< 0.1	< 0.1	< 0.1	SolTotDry	mg/kg	6/15/21	6020	DS
Selenium	0.82	< 0.5	< 0.5	0.65	SolTotDry	mg/kg	6/15/21	6020	DS
Silver	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	DS

Sample ID:	TP-3 2-3'
Lab Sample ID:	227591.1
Matrix:	soil
Date Sampled:	6/11/21
Date Received:	6/14/21
Arsenic	18
Barium	120
Cadmium	1.2
Chromium	15
Lead	63
Mercury	0.13
Silver	<b>2.4</b> < 0.5

Units	Date of Analysis	Method	Analyst
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
mg/kg	6/15/21	6020	DS
	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Date of Analysismg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21mg/kg6/15/21	Date of AnalysisMethodmg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020mg/kg6/15/216020

### LABORATORY REPORT

EAI ID#: 227591

### Client: Nobis Group

Sample ID:	TP-7 0-3.5'	TP-14 1-2'	TP-2 3-4'					
Lab Sample ID:	227591.02	227591.07	227591.09					
Matrix:	soil	soil	soil					
Date Sampled:	6/10/21	6/11/21	6/11/21	Analytical		Date of		
Date Received:	6/14/21	6/14/21	6/14/21	Matrix	Units	Analysis	Method Ana	alyst
Arsenic	6.6	4.2	6.9	SolTotDry	mg/kg	6/15/21	6020	DS
Barium	1500	72	43	SolTotDry	mg/kg	6/15/21	6020	DS
Cadmium	< 0.5	< 0.5	0.59	SolTotDry	mg/kg	6/15/21	6020	DS
Chromium	13	15	25	SolTotDry	mg/kg	6/15/21	6020	DS
Lead	4600	99	130	SolTotDry	mg/kg	6/15/21	6020	DS
Mercury	0.28	0.22	0.28	SolTotDry	mg/kg	6/15/21	6020	DS
Selenium	1.3	0.54	0.66	SolTotDry	mg/kg	6/15/21	6020	DS
Silver	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/15/21	6020	DS
Lead	1.4	< 0.5	< 0.5	TCLPsolid	mg/L	6/18/21	6020	DS

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				0			S)	VO	C		ŢĊĻ₽		İN	Ò	RG/	N	cs	1	Mı	CRO	Me	TALS		Этн	ER	- <u>i</u>		
Sample I.D.	Sampling Date / Time *If Composite, Indicate Both Start & Finish Date / Time	MATRIX (SEE BELOW) Grab/*Composite	124.7 124.1 HTDE oxur 124.6 Art VTICs	L. T. Durant	BOIS GNO HAVPH	AND PAH) EDB OBC	(Hello) (L) L	2015 DRO MAEPH	EL MU VO MU	Oli & Greate 1664 TPH 1664	ITCLP 1311 ABH METALS VOC PEST HERB	600 (600 15 TS TM	BA () F 50, NO, NO, NO,NO,	TKN NR <sub>15</sub> TN T. PROS. O. PHOS.	ph 1. AES. CHLORINE CPEC FON T ATT	COD PHENOLS TOT, DOC	Total Crambe Fight Sulede	ALACATE CAMERA ALACTINE SALERDE FALORATE CAMERA ENTREMIENTE	Total Coliform E. Coli Fera Coliform	Entertrocci Herentrophic Plans Count	DISSOLAED HEARS (FIST BELOW)	TOTAL MERUS (LUFT BELOW)	RERA & untal			# of Contructus	Nc MeOH	)TE Yu
Trip blank	6-10-21 10800	56	5	<u>&lt;</u>			_			****										-						1		
TP-7 0-3.5'	10700	56	: )	<u> </u>		x	X		X								<u> </u>	<u> </u>					X			3		
TP-6 9-10'	1115	56		<u> </u>	<u>e</u> -	X	X		x		5						TF	5	14	$\underline{O}$			x			3		
TP-5 6'	1300	56		KK FT	ব	X	X		逖	68	19	14	21				02	27	1				X			3		
TP-4 9'	V /1450	56	; )	R		X	X		×۵	68	Q U	IN	21										×			3		
Trip blank	6-11-21/0700	56		<																						1		
TP-14 1-2'	10830	56		٢		X	Х		X														X			3		
TP-1 0-2'	11015	56		<u>k</u>		x	x		×.														x			3		
TP-2 3-41	1055	56		Ċ.		x	X		184	1	e)	6/1	NI:	11									X			3		
TP-3 2-3'	V /1140	56		٤	_	X	x		x	·~···													X			3		
MATRIX: A-AR; S-JOIL; GW-GROUND WAT WW-WASTE WATER	ER; SW-SURFACE WATER; DW-DRIN	UNG WATER		1.5								ŀ	1															
PRESERVATIVE: H-HCL; N-HNO;; S-H;SO4;	Na-NaOK; M-MEOH	······		× (		L	Ļ				] 		1	<u> </u>	J	<u> </u>	<u></u>	Ļ	Ļ	Ļ	<u> </u>	<u> </u>			<u> </u>	<u> </u>	<u></u>	
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PROJECT #: <u>07.3.360.00</u> State: NH MA ME			·····	s	ANPLER	s): ∠	fz)	Rij	22,4	4_																		
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Bettina Eames Nobis Group 18 Chenell Drive Concord , NH 03301



Laboratory Report for:

Eastern Analytical, Inc. ID: 228404 Client Identification: Robin Rug | 095560.260 Date Received: 7/1/2021

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R: % Recovery

### Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072), West Virginia (9910C) and Alabama (41620). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

### References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Loume Ansban

Lorraine Olashaw, Lab Director

 $\underline{\neg \cdot + \cdot 2}$ Date



#### EAI ID#: 228404

#### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Temperat Acceptable t	ure upon receipt (°C): emperature range (°C): 0-6	3.8	Received on ice or cold packs (Yes/No): Υ									
Lab ID	Sample ID	Date Received	Date/ Sam	Time pled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)					
228404.01	Trip Blank	7/1/21	6/29/21	07:00	aqueous		Adheres to Sample Acceptance Policy					
228404.02	NB-2	7/1/21	6/30/21	08:00	aqueous		Adheres to Sample Acceptance Policy					
228404.03	NB-3	7/1/21	6/29/21	15:10	aqueous		Adheres to Sample Acceptance Policy					
228404.04	GZA-1	7/1/21	6/29/21	16:50	aqueous		Adheres to Sample Acceptance Policy					
228404.05	GZA-2	7/1/21	6/29/21	17:35	aqueous		Adheres to Sample Acceptance Policy					
228404.06	GZA-3	7/1/21	6/29/21	16:15	aqu <b>e</b> ous		Adheres to Sample Acceptance Policy					

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.

Eastern Analytical, Inc.

## LABORATORY REPORT

### EAI ID#: 228404

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	Trip Blank	NB-2	NB-3	GZA-1
Lab Sample ID:	228404.01	228404.02	228404.03	228404.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	6/29/21	6/30/21	6/29/21	6/29/21
Date Received:	7/1/21	7/1/21	7/1/21	7/1/21
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	7/1/21	7/1/21	7/1/21	7/1/21
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
	·	L. L		
Dichlorodifluoromethane	< 2	< 2	< 2	< 2
Chloromethane Vinul obleride	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 1	< 2	< 2
Chloroethane	< 2	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 2	< 2	< 2
Diethyl Ether	< 2	< 2	< 2	< 2
Acetone	< 10	< 10	< 10	< 10
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30
Methylene chloride	< 1	< 1	< 1	< 1
Carbon disulfide	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	<1	< 1	< 1	< 1
Isopropyl ether(DIPE)	< 2	< 2	< 2	<2
tert-amyl methyl ether(TAME)	< 2	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 1	< 1	< 1
cis-1 2-Dichloroethene	< 1	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 10	< 10	< 10
Bromochloromethane	< 1	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10
1 1 1-Trichloroethane	< 1	< 1	< 1	< 1
Carbon tetrachloride	<1	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 1	< 1	< 1
Benzene	< 1	< 1	< 1	< 1
Trichloroethene	< 1	< 1	< ]	< 1
1,2-Dichloropropane	<1	< 1	< 1	<1
Dibromomethane	< 1	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 50	< 50	< 50	< 50 < 10
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
2-Hevanone	< 1	< 1	< 1	< 1
Tetrachloroethene	< 1	< 1	<1	< 10
1,3-Dichloropropane	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1	< 1
T,Z-DIDromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1,2-Tetrachloroethane	< 1	< 1	<1	< 1
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Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com

### LABORATORY REPORT

EAI ID#: 228404

### Client: Nobis Group

Sample ID:	Trip Blank	NB-2	NB-3	GZA-1
			000404.00	000404.04
Lab Sample ID:	228404.01	228404.02	228404.03	228404.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	6/29/21	6/30/21	6/29/21	6/29/21
Date Received:	7/1/21	7/1/21	7/1/21	7/1/21
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	7/1/21	7/1/21	7/1/21	7/1/21
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
			. 4	. 4
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	<	< 1
Styrene	< 1	< 1	<	< 2
Bromotorm	< 2	< 2	< 2	<ul> <li>&lt; 2</li> <li>&lt; 1</li> </ul>
IsoPropylbenzene	< 1	< 1	< 1	< 1
Bromobenzene	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
p-lsopropyltoluene	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1
1.2.4-Trichlorobenzene	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 2	< 2	< 2	< 2
1.2.3-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	90 %R	91 %R	91 %R	90 %R
1.2-Dichlorobenzene-d4 (surr)	103 %R	101 %R	103 %R	103 %R
Toluene-d8 (surr)	97 %R	97 %R	97 %R	97 %R
1.2-Dichloroethane-d4 (surr)	106 %R	105 %R	106 %R	106 %R

### LABORATORY REPORT

### EALID#: 228404

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

		······································
Sample ID:	GZA-2	GZA-3
	000 10 1 0 -	000 10 1 07
Lab Sample ID:	228404.05	228404.06
Matrix:	aqueous	aqueous
Date Sampled:	6/29/21	6/29/21
Date Received:	7/1/21	7/1/21
Units:	ug/L	ug/L
Date of Analysis:	7/1/21	7/1/21
Analyst:	DGM	DGM
Method:	82600	82600
Dilution Easter	1	1
Dilution Factor:	I	I
Dichlorodifluoromethane	< 2	< 2
Chloromethane	<2	< 2
Vinyl chloride	< 1	< 1
Bromomethane	< 2	< 2
Chloroethane	< 2	< 2
I richlorofluoromethane	< 2	<2
	< 2	< 2
1 1-Dichloroethene	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30
Methylene chloride	< 1	< 1
Carbon disulfide	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	< 1
Ethyl-t-butyl ether(ETBE)	< 2	< 2
Isopropyl ether(DIPE)	< 2	< 2
trans_1 2-Dichloroethene	< 2	< 1
1 1-Dichloroethane	< 1	< 1
2.2-Dichloropropane	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 1
2-Butanone(MEK)	< 10	< 10
Bromochloromethane	< 1	<1
Tetrahydrofuran(THF)	< 10	< 10
Chlorotorm	< 1	< 1
Carbon tetrachloride	< 1	< 1
1.1-Dichloropropene	< 1	<1
Benzene	< 1	< 1
1,2-Dichloroethane	< 1	< 1
Trichloroethene	<1	< 1
1,2-Dichloropropane	< 1	< 1
Bromodichloromethane	< 1	< 0.5
1.4-Dioxane	< 50	< 50
4-Methyl-2-pentanone(MIBK)	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 0.5
Toluene	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5
1,1,2-I richloroethane	< 1	<1
z-nexanone Tetrachloroethene	< 1U 2 1	< 10
1.3-Dichloropropane	< 1	< 1
Dibromochloromethane	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 0.5
Chlorobenzene	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 1

Eastern Analytical, Inc.

### LABORATORY REPORT

EAI ID#: 228404

### Client: Nobis Group

Sample ID:	GZA-2	GZA-3
Lab Sample ID:	228404.05	228404.06
Matrix:	aqueous	aqueous
Date Sampled:	6/29/21	6/29/21
Date Received:	7/1/21	7/1/21
Units:	ua/L	ua/L
Date of Analysis:	7/1/21	7/1/21
Analyst <sup>,</sup>	DGM	DGM
Method:	82600	92600
Diretion Footow	02000	82000
Dilution Factor:	I	1
Ethylbenzene	< 1	< 1
mp-Xylene	< 1	< 1
o-Xylene	< 1	< 1
Styrene	< 1	<1
Bromotorm	< 2	< 2
Bromobenzene	< 1	< 1
1 1 2 2-Tetrachloroethane	< 1	< 1
1.2.3-Trichloropropane	< 0.5	< 0.5
n-Propvibenzene	< 1	< 1
2-Chlorotoluene	< 1	< 1
4-Chlorotoluene	<1	< 1
1,3,5-Trimethylbenzene	< 1	< 1
tert-Butylbenzene	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1
sec-Butylbenzene	< 1	< 1
	< 1	<1
1 A-Dichlorobonzono	< 1	< 1
1 2-Dichlorobenzene	< 1	< 1
n-Butvibenzene	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2
1,3,5-Trichlorobenzene	<1	- < 1
1,2,4-Trichlorobenzene	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5
Naphthalene	< 2	< 2
1,2,3-Trichlorobenzene	< 0.5	< 0.5
4-bromotiuorobenzene (surr)	90 %R	90 %R
Toluono-d8 (surr)	102 %R	102 %R
1 2-Dichloroethane-d4 (surr)	3/ %K 106 % D	9/%R
	100 /0R	103 %K

## LABORATORY REPORT

### EAI ID#: 228404

### Client: Nobis Group

Sample ID:	NB-2	NB-3	GZA-1	GZA-2
Lab Sample ID:	228404.02	228404.03	228404.04	228404.05
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	6/30/21	6/29/21	6/29/21	6/29/21
Date Received:	7/1/21	7/1/21	7/1/21	7/1/21
Units:	ua/L	ua/L	ua/L	ug/L
Date of Extraction/Prep:	7/1/21	7/1/21	7/1/21	7/1/21
Date of Analysis:	7/1/21	7/1/21	7/1/21	7/1/21
Analyst:	IMR	IMR	IMR	JMR
Mathod:	82700	82700	82700	8270D
Dilution Fratew	82700	02700	02700	1
Dilution Factor:	1	I	I	I
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	< 0.1	< 0.1	0.14	< 0.1
Benzo[a]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[b]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzolkifluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzolalpyrene	< 0.1	< 0.1	< 0.1	< 0.1
Indeno[1,2,3-cd]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz[a,h]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[g,h,i]pervlene	< 0.1	< 0.1	< 0.1	< 0.1
p-Terphenyl-D14 (surr)	51 %R	48 %R	30 %R	66 %R

## LABORATORY REPORT

EAI ID#: 228404

### Client: Nobis Group

Sample ID:	GZA-3
Lab Sample ID:	228404.06
Matrix:	aqueous
Date Sampled:	6/29/21
Date Received:	7/1/21
Units:	ug/L
Date of Extraction/Prep:	7/1/21
Date of Analysis:	7/1/21
Analyst:	JMR
Method:	8270D
Dilution Factor:	1
Naphthalene	< 0.1
2-Methylnaphthalene	< 0.1
1-Methylnaphthalene	< 0.1
Acenaphthylene	< 0.1
Acenaphthene	< 0.1
Fluorene Rhonanthrono	< 0.1
Anthracene	< 0.13
Fluoranthene	0.28
Pyrene	0.24
Benzo[a]anthracene	0.18
Chrysene	0.12
Benzo[b]fluoranthene	0.18
Benzo[k]Tiuorantnene	< ∪.1 0 14
Indeno[1 2 3-cd]pvrene	< 0.1
Dibenz[a,h]anthracene	< 0.1
Benzo[g,h,i]perylene	< 0.1
p-Terphenyl-D14 (surr)	55 %R

## LABORATORY REPORT

EAI ID#: 228404

### Client: Nobis Group

Client Designation: Robin Rug | 095560.260

Sample ID:	NB-2	NB-3	GZA-1	GZA-2
Lab Sample ID:	228404.02	228404.03	228404.04	228404.05
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	6/30/21	6/29/21	6/29/21	6/29/21
Date Received:	7/1/21	7/1/21	7/1/21	7/1/21
Units:	mg/L	mg/L	mg/L	mg/L
Date of Extraction/Prep:	7/1/21	7/1/21	7/1/21	7/1/21
Date of Analysis:	7/1/21	7/1/21	7/1/21	7/1/21
Analyst:	JLB	JLB	JLB	JLB
Method:	8100mod	8100mod	8100mod	8100mod
Dilution Factor:	1	1	1	1
TPH (C9-C40) p-Terphenyl-D14 (surr)	< 0.4 <b>45 %R</b>	< 0.5 44 %R	< 0.5 <b>29 %R</b>	< 0.4 61 %R

GZA-1: The surrogate p-Terphenyl-D14 exhibited recovery below acceptance limits. The results were confirmed by re-analysis.

Eastern Analytical, Inc.

### LABORATORY REPORT

EAI ID#: 228404

### Client: Nobis Group

Sample ID:	GZA-3
Lab Sample ID:	228404.06
Date Sampled: Date Received:	6/29/21 7/1/21
Units: Date of Extraction/Prep:	mg/L 7/1/21
Date of Analysis:	7/1/21
Analyst: Method:	3LB 8100mod
TPH (C9-C40)	1 < 0.4
p-Terphenyl-D14 (surr)	49 %R

|--|



July 13, 2021

Bettina Eames Nobis Engineering - NH 18 Chenell Drive Concord, NH 03301

Project Location: 125 Thames St, Bristol, RI Client Job Number: Project Number: 095560.260 Laboratory Work Order Number: 21G0028

Enclosed are results of analyses for samples received by the laboratory on July 1, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeopica Hoffman

Jessica L. Hoffman Project Manager

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Nobis Engineering - NH 18 Chenell Drive Concord, NH 03301 ATTN: Bettina Eames 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

REPORT DATE: 7/13/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 095560.260

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21G0028

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

PROJECT LOCATION: 125 Thames St, Bristol, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
WS-1	21G0028-01	Wipe		SW-846 8082A	
WS-2	21G0028-02	Wipe		SW-846 8082A	
WS-3	21G0028-03	Wipe		SW-846 8082A	
WS-4	21G0028-04	Wipe		SW-846 8082A	
CW-1	21G0028-05	Wipe		SW-846 8082A	
CW-2	21G0028-06	Wipe		SW-846 8082A	
CW-3	21G0028-07	Wipe		SW-846 8082A	
CW-4	21G0028-08	Wipe		SW-846 8082A	
CW-5	21G0028-09	Wipe		SW-846 8082A	
CW-6	21G0028-10	Wipe		SW-846 8082A	
CW-7	21G0028-11	Wipe		SW-846 8082A	
CW-8	21G0028-12	Wipe		SW-846 8082A	
CW-9	21G0028-13	Wipe		SW-846 8082A	



CASE NARRATIVE SUMMARY

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

SW-846 8082A

#### Qualifications:

#### R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this

#### compound. Analyte & Samples(s) Qualified:

#### Aroclor-1016

21G0028-01[WS-1], 21G0028-02[WS-2], 21G0028-03[WS-3], 21G0028-04[WS-4], 21G0028-05[CW-1], 21G0028-06[CW-2], 21G0028-07[CW-3], 21G0028-08[CW-4], 21G0028-09[CW-5], 21G0028-10[CW-6], 21G0028-11[CW-7], 21G0028-12[CW-8], 21G0028-13[CW-9], B285514-BLK1, B285514-BS1, B285514-BSD1 Arctor-1016 [2C]

21G0028-01[WS-1], 21G0028-02[WS-2], 21G0028-03[WS-3], 21G0028-04[WS-4], 21G0028-05[CW-1], 21G0028-06[CW-2], 21G0028-07[CW-3], 21G0028-08[CW-4], 21G0028-09[CW-5], 21G0028-10[CW-6], 21G0028-11[CW-7], 21G0028-12[CW-8], 21G0028-13[CW-9], B285514-BLK1, B285514-BS1 B285514-BSD1

#### Aroclor-1260

21G0028-01[WS-1], 21G0028-02[WS-2], 21G0028-03[WS-3], 21G0028-04[WS-4], 21G0028-05[CW-1], 21G0028-06[CW-2], 21G0028-07[CW-3], 21G0028-08[CW-4], 21G0028-09[CW-5], 21G0028-10[CW-6], 21G0028-11[CW-7], 21G0028-12[CW-8], 21G0028-13[CW-9], B285514-BLK1, B285514-BS1, B285514-BSD1

#### Aroclor-1260 [2C]

21G0028-01[WS-1], 21G0028-02[WS-2], 21G0028-03[WS-3], 21G0028-04[WS-4], 21G0028-05[CW-1], 21G0028-06[CW-2], 21G0028-07[CW-3], 21G0028-08[CW-4], 21G0028-09[CW-5], 21G0028-10[CW-6], 21G0028-11[CW-7], 21G0028-12[CW-8], 21G0028-13[CW-9], B285514-BLK1, B285514-BSD1

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

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

na Wattlengta

Lisa A. Worthington Technical Representative



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: WS-1

Sample ID: 21G0028-01

Sample Matrix: Wipe

Sampled: 6/28/2021 13:00

Sample Description:

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1254 [1]	0.25	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1260 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Aroclor-1268 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:25	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	6	Flag/Qual				
Decachlorobiphenyl [1]		71.8	30-150					7/13/21 8:25	
Decachlorobiphenyl [2]		67.9	30-150					7/13/21 8:25	
Tetrachloro-m-xylene [1]		68.0	30-150					7/13/21 8:25	
Tetrachloro-m-xylene [2]		68.0	30-150					7/13/21 8:25	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: WS-2

Sample ID: 21G0028-02

Sample Matrix: Wipe

Sampled: 6/28/2021 12:55

Sample Description:

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1260 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Aroclor-1268 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 8:43	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	5	Flag/Qual				
Decachlorobiphenyl [1]		77.5	30-150					7/13/21 8:43	
Decachlorobiphenyl [2]		74.1	30-150					7/13/21 8:43	
Tetrachloro-m-xylene [1]		72.3	30-150					7/13/21 8:43	
Tetrachloro-m-xylene [2]		72.1	30-150					7/13/21 8:43	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: WS-3

Sampled: 6/28/2021 13:10

Sample Description:

Sample ID: 21G0028-03

Sample Matrix: Wipe

.

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1260 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:00	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	8	Flag/Qual				
Decachlorobiphenyl [1]		83.9	30-150					7/13/21 9:00	
Decachlorobiphenyl [2]		80.1	30-150					7/13/21 9:00	
Tetrachloro-m-xylene [1]		82.5	30-150					7/13/21 9:00	
Tetrachloro-m-xylene [2]		82.2	30-150					7/13/21 9:00	


Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: WS-4

Sample ID: 21G0028-04

Sample Matrix: Wipe

Sampled: 6/28/2021 13:20

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/8/21 7/13/21 9:18   7/8/21 7/13/21 9:18   7/8/21 7/13/21 9:18   7/8/21 7/13/21 9:18   7/8/21 7/13/21 9:18   7/8/21 7/13/21 9:18	
Aroclor-1260 [2]	0.20	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:18	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	;	Flag/Qual				
Decachlorobiphenyl [1]		68.7	30-150					7/13/21 9:18	
Decachlorobiphenyl [2]		65.3	30-150					7/13/21 9:18	
Tetrachloro-m-xylene [1]		69.3	30-150					7/13/21 9:18	
Tetrachloro-m-xylene [2]		69.4	30-150					7/13/21 9:18	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-1

Sample ID: 21G0028-05

Sample Matrix: Wipe

Sampled: 6/28/2021 14:00

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1254 [2]	0.32	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1260 [2]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:36	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	5	Flag/Qual				
Decachlorobiphenyl [1]		89.0	30-150					7/13/21 9:36	
Decachlorobiphenyl [2]		91.9	30-150					7/13/21 9:36	
Tetrachloro-m-xylene [1]		85.1	30-150					7/13/21 9:36	
Tetrachloro-m-xylene [2]		84.2	30-150					7/13/21 9:36	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-2

Sample ID: 21G0028-06

Sample Matrix: Wipe

Sampled: 6/28/2021 15:00

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1260 [2]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53   7/8/21 7/13/21 9:53	
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 9:53	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	6	Flag/Qual				
Decachlorobiphenyl [1]		87.6	30-150					7/13/21 9:53	
Decachlorobiphenyl [2]		83.5	30-150					7/13/21 9:53	
Tetrachloro-m-xylene [1]		85.7	30-150					7/13/21 9:53	
Tetrachloro-m-xylene [2]		84.6	30-150					7/13/21 9:53	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-3

Sample ID: 21G0028-07

Sample Matrix: Wipe

Sampled: 6/28/2021 14:05

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1260 [2]	ND	0.20	μg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:11	SFM
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual				
Decachlorobiphenyl [1]		88.5	30-150					7/13/21 10:11	
Decachlorobiphenyl [2]		84.3	30-150					7/13/21 10:11	
Tetrachloro-m-xylene [1]		78.3	30-150					7/13/21 10:11	
Tetrachloro-m-xylene [2]		79.0	30-150					7/13/21 10:11	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-4

Sample ID: 21G0028-08

Sample Matrix: Wipe

Sampled: 6/28/2021 15:10

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1260 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Aroclor-1268 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:29	SFM
Surrogates		% Recovery	<b>Recovery Limits</b>	s	Flag/Qual				
Decachlorobiphenyl [1]		70.0	30-150					7/13/21 10:29	
Decachlorobiphenyl [2]		66.8	30-150					7/13/21 10:29	
Tetrachloro-m-xylene [1]		75.4	30-150					7/13/21 10:29	
Tetrachloro-m-xylene [2]		75.3	30-150					7/13/21 10:29	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-5

Sample ID: 21G0028-09

Sample Matrix: Wipe

Sampled: 6/28/2021 14:35

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1260 [1]	ND	0.20	μg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 10:46	SFM
Surrogates		% Recovery	Recovery Limits	5	Flag/Qual				
Decachlorobiphenyl [1]		92.6	30-150					7/13/21 10:46	
Decachlorobiphenyl [2]		85.4	30-150					7/13/21 10:46	
Tetrachloro-m-xylene [1]		78.9	30-150					7/13/21 10:46	
Tetrachloro-m-xylene [2]		79.3	30-150					7/13/21 10:46	



Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-6

Sampled: 6/28/2021 14:30

Sample Description:

Sample ID: 21G0028-10

Sample Matrix: Wipe

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1221 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1254 [2]	0.27	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1260 [1]	ND	0.20	μg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1262 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Aroclor-1268 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:04	SFM
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
Decachlorobiphenyl [1]		102	30-150					7/13/21 11:04	
Decachlorobiphenyl [2]		97.2	30-150					7/13/21 11:04	
Tetrachloro-m-xylene [1]		94.3	30-150					7/13/21 11:04	
Tetrachloro-m-xylene [2]		94.0	30-150					7/13/21 11:04	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-7 Sample ID: 21G0028-11

Sample Matrix: Wipe

Sampled: 6/28/2021 15:20

Sample Description:

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1254 [2]	0.47	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1260 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:22	SFM
Surrogates		% Recovery	Recovery Limits	6	Flag/Qual				
Decachlorobiphenyl [1]		96.1	30-150					7/13/21 11:22	
Decachlorobiphenyl [2]		86.7	30-150					7/13/21 11:22	
Tetrachloro-m-xylene [1]		85.2	30-150				7/13/21 11:22		
Tetrachloro-m-xylene [2]		85.8	30-150					7/13/21 11:22	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-8

Sampled: 6/28/2021 15:30

Sample Description:

Sample ID: 21G0028-12

Sample Matrix: Wipe

		Polychlori	nated Biphenyls wit	th 3540 Soxh	let Extraction				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1254 [2]	0.40	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1260 [2]	0.35	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:39	SFM
Surrogates		% Recovery	Recovery Limits	8	Flag/Qual				
Decachlorobiphenyl [1]		75.0	30-150					7/13/21 11:39	
Decachlorobiphenyl [2]		71.6	30-150					7/13/21 11:39	
Tetrachloro-m-xylene [1]		75.8	30-150					7/13/21 11:39	
Tetrachloro-m-xylene [2]		76.3	30-150					7/13/21 11:39	



Work Order: 21G0028

Project Location: 125 Thames St, Bristol, RI Date Received: 7/1/2021 Field Sample #: CW-9

Sample ID: 21G0028-13

Sample Matrix: Wipe

Sampled: 6/28/2021 15:05

Sample Description:

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1254 [2]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1260 [1]	ND	0.20	µg/Wipe	1	R-05	SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5   7/8/21 7/13/21 11:5		SFM
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	7/8/21	7/13/21 11:57	SFM
Surrogates		% Recovery	Recovery Limits	\$	Flag/Qual				
Decachlorobiphenyl [1]		89.0	30-150					7/13/21 11:57	
Decachlorobiphenyl [2]		83.1	30-150					7/13/21 11:57	
Tetrachloro-m-xylene [1]		91.0	30-150					7/13/21 11:57	
Tetrachloro-m-xylene [2]		90.9	30-150					7/13/21 11:57	



## Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [Wipe]	Final [mL]	Date
21G0028-01 [WS-1]	B285514	1.00	10.0	07/08/21
21G0028-02 [WS-2]	B285514	1.00	10.0	07/08/21
21G0028-03 [WS-3]	B285514	1.00	10.0	07/08/21
21G0028-04 [WS-4]	B285514	1.00	10.0	07/08/21
21G0028-05 [CW-1]	B285514	1.00	10.0	07/08/21
21G0028-06 [CW-2]	B285514	1.00	10.0	07/08/21
21G0028-07 [CW-3]	B285514	1.00	10.0	07/08/21
21G0028-08 [CW-4]	B285514	1.00	10.0	07/08/21
21G0028-09 [CW-5]	B285514	1.00	10.0	07/08/21
21G0028-10 [CW-6]	B285514	1.00	10.0	07/08/21
21G0028-11 [CW-7]	B285514	1.00	10.0	07/08/21
21G0028-12 [CW-8]	B285514	1.00	10.0	07/08/21
21G0028-13 [CW-9]	B285514	1.00	10.0	07/08/21



## QUALITY CONTROL

## Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes
Batch B285514 - SW-846 3540C											
Blank (B285514-BLK1)				Prepared: 07	7/08/21 Analy	yzed: 07/13/2	21				
Aroclor-1016	ND	0.20	µg/Wipe								R-05
Aroclor-1016 [2C]	ND	0.20	µg/Wipe								R-05
Aroclor-1221	ND	0.20	µg/Wipe								
Aroclor-1221 [2C]	ND	0.20	µg/Wipe								
Aroclor-1232	ND	0.20	µg/Wipe								
Aroclor-1232 [2C]	ND	0.20	µg/Wipe								
Aroclor-1242	ND	0.20	µg/Wipe								
Aroclor-1242 [2C]	ND	0.20	µg/Wipe								
Aroclor-1248	ND	0.20	µg/Wipe								
Aroclor-1248 [2C]	ND	0.20	µg/Wipe								
Aroclor-1254	ND	0.20	µg/Wipe								
Aroclor-1254 [2C]	ND	0.20	µg/Wipe								
Aroclor-1260	ND	0.20	µg/Wipe								R-05
Aroclor-1260 [2C]	ND	0.20	µg/Wipe								R-05
Aroclor-1262	ND	0.20	µg/Wipe								
Aroclor-1262 [2C]	ND	0.20	µg/Wipe								
Aroclor-1268	ND	0.20	µg/Wipe								
Aroclor-1268 [2C]	ND	0.20	µg/Wipe								
Surrogate: Decachlorobiphenyl	1.60		µg/Wipe	2.00		80.2	30-150				
Surrogate: Decachlorobiphenyl [2C]	1.53		µg/Wipe	2.00		76.4	30-150				
Surrogate: Tetrachloro-m-xylene	1.54		µg/Wipe	2.00		76.9	30-150				
Surrogate: Tetrachloro-m-xylene [2C]	1.53		µg/Wipe	2.00		76.7	30-150				
LCS (B285514-BS1)				Prepared: 07	7/08/21 Anal	yzed: 07/13/2	21				
Aroclor-1016	0.49	0.20	µg/Wipe	0.500		97.3	40-140				R-05
Aroclor-1016 [2C]	0.48	0.20	µg/Wipe	0.500		96.9	40-140				R-05
Aroclor-1260	0.48	0.20	µg/Wipe	0.500		96.7	40-140				R-05
Aroclor-1260 [2C]	0.44	0.20	µg/Wipe	0.500		87.5	40-140				R-05
Surrogate: Decachlorobiphenyl	1.93		µg/Wipe	2.00		96.4	30-150				
Surrogate: Decachlorobiphenyl [2C]	1.84		µg/Wipe	2.00		92.0	30-150				
Surrogate: Tetrachloro-m-xylene	1.73		µg/Wipe	2.00		86.7	30-150				
Surrogate: Tetrachloro-m-xylene [2C]	1.72		µg/Wipe	2.00		86.1	30-150				
LCS Dup (B285514-BSD1)				Prepared: 07	7/08/21 Anal	yzed: 07/13/2	21				
Aroclor-1016	0.35	0.20	µg/Wipe	0.500		69.1	40-140	33.9	*	30	R-05
Aroclor-1016 [2C]	0.35	0.20	µg/Wipe	0.500		70.2	40-140	31.9	*	30	R-05
Aroclor-1260	0.32	0.20	µg/Wipe	0.500		64.5	40-140	40.0	*	30	R-05
Aroclor-1260 [2C]	0.28	0.20	$\mu g/Wipe$	0.500		56.8	40-140	42.5	*	30	R-05
Surrogate: Decachlorobiphenyl	1.20		µg/Wipe	2.00		59.8	30-150				
Surrogate: Decachlorobiphenyl [2C]	1.15		µg/Wipe	2.00		57.7	30-150				
Surrogate: Tetrachloro-m-xylene	1.23		µg/Wipe	2.00		61.5	30-150				
Surrogate: Tetrachloro-m-xylene [2C]	1.24		µg/Wipe	2.00		61.9	30-150				



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

WS-1

Lab Sample ID: 21G		21G0028-01		Da	ate(s) Analy	zed: 07/13/2021	07/1	07/13/2021	
Instrument ID (1):				Instrument ID (2):					
GC Column (1):		ID:	(mm)		C Column (2	2):	ID:	(mm)	
	ANAI YTE	COL	RT	RT WI	NDOW				
				FROM	ТО	CONCENTION			
	Aroclor-1254	1	0.000	0.000	0.000	0.25			
		2	0.000	0.000	0.000	0.21	17.4		



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

CW-1

Lab Sample ID: 21G		G0028-05		Da	ate(s) Analy	zed: 07/13/2021	07/1	3/2021
Instrument ID (1):				Instrument ID (2):				
GC Column (1):		ID:	(mm) GC Column (2):			2):	ID:	(mm)
	ΑΝΑΙ ΥΤΕ	COL	RT	RT WINDOW		CONCENTRATION	%RPD	
		001		FROM	то	CONCENTIATION	/011110	
	Aroclor-1254	1	0.000	0.000	0.000	0.25		
		2	0.000	0.000	0.000	0.32	24.6	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

CW-7

Lab Sample ID: 210		G0028-11		Date(s) Analyzed: 07/1		zed: 07/13/2021	07/13/2021	
Instrument ID (1):				In	strument ID			
GC Column (1):		ID:	(mm) GC Column (2):			2):	ID:	(mm)
	ΑΝΑΙ ΥΤΕ	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD	
		002		FROM	то	CONCENTION	7011111	
	Aroclor-1254	1	0.000	0.000	0.000	0.45		
		2	0.000	0.000	0.000	0.47	4.4	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

CW-8

Lab Sample ID: 21G		60028-12		Da	ate(s) Analy	zed: 07/13/2021	07/1	3/2021
In	strument ID (1):			In				
GC Column (1):		ID:	: (mm) GC Column (2):		2):	ID:	(mm)	
	ΔΝΙΔΙ ΥΤΕ	COL	BL	RT WINDOW			%RPD	
		COL		FROM	ТО	CONCENTIATION		
	Aroclor-1260	1	0.000	0.000	0.000	0.30		
		2	0.000	0.000	0.000	0.35	15.4	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS

Lab Sample ID: B28		35514-BS1	I	D	ate(s) Analy	zed: 07/13/2021	07/1	07/13/2021		
Ins	strument ID (1):			Instrument ID (2):						
GC Column (1):		ID:	(mm) GC Column (2):		ID:	(mm)				
	ANAI YTE	COL	RT	RT W	NDOW	CONCENTRATION	%RPD			
	,			FROM	то		/011110			
	Aroclor-1016	1	0.000	0.000	0.000	0.49				
Ī		2	0.000	0.000	0.000	0.48	2.1			
Ī	Aroclor-1260	1	0.000	0.000	0.000	0.48				
Ī		2	0.000	0.000	0.000	0.44	8.7			



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

La	b Sample ID:	B285514-BSD	1	Da	ate(s) Analy	zed: 07/13/2021	07/1	3/2021
Instrument ID (1):				In				
GC Column (1):		ID:	(mm) GC Column (2):			ID:	(mm)	
	ΔΝΔΙ ΥΤΕ	COL	DT RT				%RPD	
				FROM	то	CONCENTIATION	/011110	
	Aroclor-1016	1	0.000	0.000	0.000	0.35		
		2	0.000	0.000	0.000	0.35	0.0	
	Aroclor-1260	1	0.000	0.000	0.000	0.32		
		2	0.000	0.000	0.000	0.28	13.3	



## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
t	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.



CERTIFICATIONS

Certified Analyses included in this Report

Analyte

Certifications

No certified Analyses included in this Report

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

Table of Contents trove yers, whole to that we out LAB USE ONLY: Lab Sample # / Comments: Lobels recre wet and Rell off 5 C(U)3 ပွ ပွ S Other NA Temp Blank Received: Y. WNA Therm ID#: AN B Ð Cooler 1 Temp Upon Receipt: \_\_\_\_ ΥN Page: Cooler 1 Therm Corr. Factor: Custody Seals Present/Intact Y CW-T, Carl of: Lab Sample Temperature Info: Cooler 1 Corrected Temp: Trip Blank Received: Y \*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (8) ammonium sulfate, Y.Y LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or Lab Sample Receipt Checklist Collector Signature Present TSP Custody Signatures Present VOA - Headspace Acceptable Non Conformance(s): YES / NO Residual Chlorine Present Correct Bottles Sufficient Volume Samples Received on Ice Samples in Holding Time pH Strips: Sulfide Present Lead Acetate Strips: HCL MeOH Cl Strips: Sample pH Acceptable 2 ( CCD R ALL SHADED AREAS are for LAB USE ONLY **USDA Regulated Soils** Therm ID#: Comments: .ab Project Manager Bottles Intact ab Profile/Line: **MTIL Log-in Number Here** m ۍې • A10 8 J 3 Ì STUSE ONLY Pace Coug SHORT HOLDS PRESENT (<72 hours): Y N N/A (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other 2676634 MTH Courier Acctnum: emplate: Table #: Prelogin: PN: Container Preservative Type PB. Client Analyses Sogi Samples received via FEDEX UPS Lab Tracking #: Date/Time: Date/Time: Date/Time: K/12 INYXOS A93 2824 esos Ũ BERNES DWDIS-GROUP.COM NA # of Ctns 095560, 260/RI/ BNSTOV ITTITUTIO oany: (Signature) eceived by/Company (Signature) 3eceived by/Company: (Signature) None CHAIN-OF-CUSTODY Analytical Request Document z Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields а Е Time Zone Collected: Field Filtered (if applicable): mmediately Packed on Ice: > Accounts Payable Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Compliance Monitoring δŋγ on X Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT) Я Х oN [ Radchem sample(s) screened (<500 cpm): DW Location Code: Time Composite End Blue # OI SW4 WO Site Collection Info/Address: Received by/ Date [ ] Yes ] Yes Analysis: N Yes Wet County/City: Packing Material Used 1330 00FI 1510 1435 1430 1310 1405 [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (MC) 1255 1500 standard tomaround 2030 2002 Composite Start) Billing Information: Time Type of Ice Used: Collected (or [ ] Same Day [ ] Next Day 128- N Date (Expedite Charges Apply) 16/08/01 Date/Time: Ũ Turnaround Date Required: Comp / Grab Customer Remarks / Special Conditions / Possible Hazards: 5 5 ĥ  $\mathbf{f}$ 0 5 ٢ 5 <u></u> Purchase Order #: tonkos /m ecos ponton Phone: 603- ススリーリンシー」Site/Facility ID #: Report To: Betting Eawes Matrix \* S M C N d N 23 नु d N 23 M 03 d Z DAL Quote #: ush Extraction Nulded ure) iquished by/Company: (Signature) Dispose as appropriate [ ] Return Customer Project Name/Number: Email: Collected By (print): Pace Analytical\* Koulell obin Rug Address Churve 11 Company: NODIS **Customer Sample ID** 0-NC 1-5Z CW - 5 ample Disposal: CN-3 CW-3 オーろつ NS-2 NS-3 CN-1 and 22 Archive: Copy To: ) Hold: 28 Page 29 of

Table of Contents oC g S Trip Blank Received: Y N NA HCL MeOH TSP Other Temp Blank Received: Y N NA Therm ID#: Page: AN N V Q N X Cooler 1 Therm Corr. Factor: Cooler 1 Temp Upon Receipt: 5 Lab Sample Temperature Info: Cooler 1 Corrected Temp: LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or \*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (8) ammonium sulfate, Custody Seals Present/Intact Lab Sample Receipt Checklist Collector Signature Present Samples Received on Ice VOA - Headspace Acceptable USDA Regulated Soils Custody Signatures Present Non Conformance(s): Samples in Holding Time Residual Chlorine Present LAB USE ONLY: Lab Sample # / Comments: YES / NO Sample pH Acceptable ALL SHADED AREAS are for LAB USE ONLY Lead Acetate Strips: Comments: Therm ID#: Sufficient Volume Correct Bottles pH Strips: Sulfide Present ab Project Manager Bottles Intact Lab Profile/Line Cl Strips: í Ú **MTJL Log-in Number Here** <u>}</u>][\_\_\_\_ M Pace Courier MITIL LAB USE ONLY SHORT HOLDS PRESENT (<72 hours): Y W N/A (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other 2676633 Courier Acctnum: emplate Table #: Prelogin: ъМ: Container Preservative Type 80 Client Analyses 216002 Samples received via FEDEX UPS Date/Time: Date/Time: Lab Tracking #: Date/Time Z ट्य tunx05 2808 Pit 9 99 σ ſ Email BOMLSDNOVIS- JOND COM NA # of Ctns K) ET Received by/Company: (Signature) Received by/Company: (Signature) None (Signature) CHAIN-OF-CUSTODY Analytical Request Document N Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields []PT[]MT[]CT G Res Time Zone Collected: ield Filtered (if applicable): mmediately Packed on Ice: > Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Compliance Monitoring? Billing Information: Accounts Payake Ъ S/No Ň Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT) Received by/Compare No I Radchem sample(s) screened (<500 cpm): DW Location Code: Time Composite End Blue DW PWS ID #: Site Collection Info/Address Date ] Yes X Yes ] Yes Analysis: Met. 51902 County/City: 095500.200 R1 / Bristol [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day 0.28-31/1520 1530 Packing Material Use 2630 505 11.25 tumarul Composite Start) Time Type of Ice Used: Collected (or [ ] Same Day [ ] Next Day (Expedite Charges Apply) Date 12/06/121 Ì State: Date/Time: **Turnaround Date Required:** Comp / Grab Customer Remarks / Special Conditions / Possible Hazards: 5 D Shavidard ٢ Purchase Order #: Quote #: Phone: 603-334-4183 Site/Facility ID #: MULTINOD 8082 wisoxnet Matrix \* S M C S d N Rush: DUC REPORT OF HUNCE FAMES Extraction nedod nquished by/Company: (Signature) Signature Å Dispose as appropriate [ ] Return CVU I UM Customer Project Name/Number: Ruco Pace Analytical Collected By (print): SALAN DOMJEVS NUTRA A DUCC ed by/Company: Address: CWO We 11 lected By (signature Company: IND/A S Customer Sample ID hobin fple Disposal A N 4-30 CW-9 130 Archive: Copy To: : Hold: Email: Page 29 of 29



July 9, 2021

Bettina Eames Nobis Engineering - NH 18 Chenell Drive Concord, NH 03301

Project Location: Bristol, RI Client Job Number: Project Number: 095560.00 Laboratory Work Order Number: 21G0029

Enclosed are results of analyses for samples received by the laboratory on July 1, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeopica Hoffman

Jessica L. Hoffman Project Manager

# Table of Contents

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Nobis Engineering - NH 18 Chenell Drive Concord, NH 03301 ATTN: Bettina Eames

REPORT DATE: 7/9/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 095560.00

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21G0029

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

PROJECT LOCATION: Bristol, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SG-1	21G0029-01	Sub Slab		EPA TO-15	
SG-2	21G0029-02	Sub Slab		EPA TO-15	
SG-4	21G0029-03	Sub Slab		EPA TO-15	
SG-5	21G0029-04	Sub Slab		EPA TO-15	



#### CASE NARRATIVE SUMMARY

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

EPA TO-15

#### Qualifications:

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

#### Analyte & Samples(s) Qualified:

#### Vinyl Acetate

21G0029-01[SG-1], 21G0029-02[SG-2], 21G0029-03[SG-4], 21G0029-04[SG-5], B285631-BLK1, B285631-BS1, B285631-DUP1, S061346-CCV1

#### V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is

estimated. Analyte & Samples(s) Qualified:

#### 1,2,4-Trichlorobenzene

21G0029-01[SG-1], 21G0029-02[SG-2], 21G0029-03[SG-4], 21G0029-04[SG-5], B285631-BLK1, B285631-BS1, B285631-DUP1, S061346-CCV1

#### Z-01

Compound fails the method requirement of 70-130% recovery for the LCS. Is classified by the lab as a difficult compound and passes the in house limits of 50-150%.

#### Analyte & Samples(s) Qualified:

#### 1,2,4-Trichlorobenzene

21G0029-01[SG-1], 21G0029-02[SG-2], 21G0029-03[SG-4], 21G0029-04[SG-5], B285631-BLK1, B285631-BS1, B285631-DUP1

#### Naphthalene

21G0029-01[SG-1], 21G0029-02[SG-2], 21G0029-03[SG-4], 21G0029-04[SG-5], B285631-BLK1, B285631-BS1, B285631-DUP1

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

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

na Wattlengta

Lisa A. Worthington Technical Representative



#### ANALYTICAL RESULTS

Project Location: Bristol, RI	Sample Description/Location:	Work Order: 21G0029
Date Received: 7/1/2021	Sub Description/Location:	Initial Vacuum(in Hg): -30
Field Sample #: SG-1	Canister ID: 2057	Final Vacuum(in Hg): -7
Sample ID: 21G0029-01	Canister Size: 6 liter	Receipt Vacuum(in Hg): -5.8
Sample Matrix: Sub Slab	Flow Controller ID: 4067	Flow Controller Type: Fixed-Orifice
Sampled: 6/30/2021 14:16	Sample Type: 30 min	Flow Controller Calibration
		RPD Pre and Post-Sampling:

EPA TO-15								
	ppt	ov		ug/r	n3		Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	4.9	4.0		12	9.5	2	7/8/21 19:38	BRF
Benzene	0.30	0.10		0.95	0.32	2	7/8/21 19:38	BRF
Benzyl chloride	ND	0.10		ND	0.52	2	7/8/21 19:38	BRF
Bromodichloromethane	ND	0.10		ND	0.67	2	7/8/21 19:38	BRF
Bromoform	ND	0.10		ND	1.0	2	7/8/21 19:38	BRF
Bromomethane	ND	0.10		ND	0.39	2	7/8/21 19:38	BRF
1,3-Butadiene	ND	0.10		ND	0.22	2	7/8/21 19:38	BRF
2-Butanone (MEK)	ND	4.0		ND	12	2	7/8/21 19:38	BRF
Carbon Disulfide	ND	1.0		ND	3.1	2	7/8/21 19:38	BRF
Carbon Tetrachloride	ND	0.10		ND	0.63	2	7/8/21 19:38	BRF
Chlorobenzene	ND	0.10		ND	0.46	2	7/8/21 19:38	BRF
Chloroethane	ND	0.10		ND	0.26	2	7/8/21 19:38	BRF
Chloroform	0.15	0.10		0.74	0.49	2	7/8/21 19:38	BRF
Chloromethane	ND	0.20		ND	0.41	2	7/8/21 19:38	BRF
Cyclohexane	ND	0.10		ND	0.34	2	7/8/21 19:38	BRF
Dibromochloromethane	ND	0.10		ND	0.85	2	7/8/21 19:38	BRF
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	7/8/21 19:38	BRF
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 19:38	BRF
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 19:38	BRF
1,4-Dichlorobenzene	1.6	0.10		9.9	0.60	2	7/8/21 19:38	BRF
Dichlorodifluoromethane (Freon 12)	ND	0.10		ND	0.49	2	7/8/21 19:38	BRF
1,1-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 19:38	BRF
1,2-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 19:38	BRF
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 19:38	BRF
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 19:38	BRF
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 19:38	BRF
1,2-Dichloropropane	ND	0.10		ND	0.46	2	7/8/21 19:38	BRF
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 19:38	BRF
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 19:38	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	7/8/21 19:38	BRF
1,4-Dioxane	ND	1.0		ND	3.6	2	7/8/21 19:38	BRF
Ethanol	11	4.0		20	7.5	2	7/8/21 19:38	BRF
Ethyl Acetate	ND	1.0		ND	3.6	2	7/8/21 19:38	BRF
Ethylbenzene	0.20	0.10		0.89	0.43	2	7/8/21 19:38	BRF
4-Ethyltoluene	ND	0.10		ND	0.49	2	7/8/21 19:38	BRF
Heptane	ND	0.10		ND	0.41	2	7/8/21 19:38	BRF
Hexachlorobutadiene	ND	0.10		ND	1.1	2	7/8/21 19:38	BRF



#### ANALYTICAL RESULTS

Project Location: Bristol, RI Date Received: 7/1/2021 Field Sample #: SG-1 Sample ID: 21G0029-01 Sample Matrix: Sub Slab Sampled: 6/30/2021 14:16

Sample Description/Location: Sub Description/Location: Canister ID: 2057 Canister Size: 6 liter Flow Controller ID: 4067 Sample Type: 30 min

Work Order: 21G0029 Initial Vacuum(in Hg): -30 Final Vacuum(in Hg): -7 Receipt Vacuum(in Hg): -5.8 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

			EPA TO-15						
	ppl	bv		ug/r	n3		Date/Time		
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst	
Hexane	ND	4.0		ND	14	2	7/8/21 19:38	BRF	
2-Hexanone (MBK)	ND	0.20		ND	0.82	2	7/8/21 19:38	BRF	
Isopropanol	ND	4.0		ND	9.8	2	7/8/21 19:38	BRF	
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	7/8/21 19:38	BRF	
Methylene Chloride	ND	1.0		ND	3.5	2	7/8/21 19:38	BRF	
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	7/8/21 19:38	BRF	
Naphthalene	ND	0.10	Z-01	ND	0.52	2	7/8/21 19:38	BRF	
Propene	ND	4.0		ND	6.9	2	7/8/21 19:38	BRF	
Styrene	ND	0.10		ND	0.43	2	7/8/21 19:38	BRF	
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	7/8/21 19:38	BRF	
Tetrachloroethylene	1.4	0.10		9.6	0.68	2	7/8/21 19:38	BRF	
Tetrahydrofuran	ND	1.0		ND	2.9	2	7/8/21 19:38	BRF	
Toluene	1.3	0.10		4.8	0.38	2	7/8/21 19:38	BRF	
1,2,4-Trichlorobenzene	ND	0.10	Z-01, V-34	ND	0.74	2	7/8/21 19:38	BRF	
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 19:38	BRF	
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 19:38	BRF	
Trichloroethylene	ND	0.10		ND	0.54	2	7/8/21 19:38	BRF	
Trichlorofluoromethane (Freon 11)	2.4	0.40		13	2.2	2	7/8/21 19:38	BRF	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.40		ND	3.1	2	7/8/21 19:38	BRF	
1,2,4-Trimethylbenzene	0.57	0.10		2.8	0.49	2	7/8/21 19:38	BRF	
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 19:38	BRF	
Vinyl Acetate	ND	2.0	V-05	ND	7.0	2	7/8/21 19:38	BRF	
Vinyl Chloride	ND	0.10		ND	0.26	2	7/8/21 19:38	BRF	
m&p-Xylene	0.37	0.20		1.6	0.87	2	7/8/21 19:38	BRF	
o-Xylene	0.18	0.10		0.78	0.43	2	7/8/21 19:38	BRF	
Surrogates	% Recov	very		% REC	C Limits				
4-Bromofluorobenzene (1)		91.0		70-	-130		7/8/21 19:38		



#### ANALYTICAL RESULTS

Project Location: Bristol, RI Date Received: 7/1/2021 Field Sample #: SG-2 Sample ID: 21G0029-02 Sample Matrix: Sub Slab Sampled: 6/30/2021 14:57 Sample Description/Location: Sub Description/Location: Canister ID: 1641 Canister Size: 6 liter Flow Controller ID: 4076 Sample Type: 30 min Work Order: 21G0029 Initial Vacuum(in Hg): -28 Final Vacuum(in Hg): -4 Receipt Vacuum(in Hg): -4.6 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

		I	EPA TO-15						
	ppl	bv			Date/Time				
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst	
Acetone	4.8	4.0		12	9.5	2	7/8/21 20:30	BRF	
Benzene	ND	0.10		ND	0.32	2	7/8/21 20:30	BRF	
Benzyl chloride	ND	0.10		ND	0.52	2	7/8/21 20:30	BRF	
Bromodichloromethane	ND	0.10		ND	0.67	2	7/8/21 20:30	BRF	
Bromoform	ND	0.10		ND	1.0	2	7/8/21 20:30	BRF	
Bromomethane	ND	0.10		ND	0.39	2	7/8/21 20:30	BRF	
1,3-Butadiene	ND	0.10		ND	0.22	2	7/8/21 20:30	BRF	
2-Butanone (MEK)	ND	4.0		ND	12	2	7/8/21 20:30	BRF	
Carbon Disulfide	ND	1.0		ND	3.1	2	7/8/21 20:30	BRF	
Carbon Tetrachloride	ND	0.10		ND	0.63	2	7/8/21 20:30	BRF	
Chlorobenzene	ND	0.10		ND	0.46	2	7/8/21 20:30	BRF	
Chloroethane	ND	0.10		ND	0.26	2	7/8/21 20:30	BRF	
Chloroform	0.38	0.10		1.8	0.49	2	7/8/21 20:30	BRF	
Chloromethane	ND	0.20		ND	0.41	2	7/8/21 20:30	BRF	
Cyclohexane	ND	0.10		ND	0.34	2	7/8/21 20:30	BRF	
Dibromochloromethane	ND	0.10		ND	0.85	2	7/8/21 20:30	BRF	
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	7/8/21 20:30	BRF	
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 20:30	BRF	
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 20:30	BRF	
1,4-Dichlorobenzene	0.44	0.10		2.7	0.60	2	7/8/21 20:30	BRF	
Dichlorodifluoromethane (Freon 12)	ND	0.10		ND	0.49	2	7/8/21 20:30	BRF	
1,1-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 20:30	BRF	
1,2-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 20:30	BRF	
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 20:30	BRF	
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 20:30	BRF	
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 20:30	BRF	
1,2-Dichloropropane	ND	0.10		ND	0.46	2	7/8/21 20:30	BRF	
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 20:30	BRF	
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 20:30	BRF	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	7/8/21 20:30	BRF	
1,4-Dioxane	ND	1.0		ND	3.6	2	7/8/21 20:30	BRF	
Ethanol	33	4.0		62	7.5	2	7/8/21 20:30	BRF	
Ethyl Acetate	ND	1.0		ND	3.6	2	7/8/21 20:30	BRF	
Ethylbenzene	0.14	0.10		0.59	0.43	2	7/8/21 20:30	BRF	
4-Ethyltoluene	ND	0.10		ND	0.49	2	7/8/21 20:30	BRF	
Heptane	ND	0.10		ND	0.41	2	7/8/21 20:30	BRF	
Hexachlorobutadiene	ND	0.10		ND	1.1	2	7/8/21 20:30	BRF	



#### ANALYTICAL RESULTS

Project Location: Bristol, RI Date Received: 7/1/2021 Field Sample #: SG-2 Sample ID: 21G0029-02 Sample Matrix: Sub Slab Sampled: 6/30/2021 14:57 Sample Description/Location: Sub Description/Location: Canister ID: 1641 Canister Size: 6 liter Flow Controller ID: 4076 Sample Type: 30 min Work Order: 21G0029 Initial Vacuum(in Hg): -28 Final Vacuum(in Hg): -4 Receipt Vacuum(in Hg): -4.6 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

EPA TO-15									
	ppbv ug/m3			Date/Time					
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	n Analyzed	Analyst	
Hexane	ND	4.0		ND	14	2	7/8/21 20:30	BRF	
2-Hexanone (MBK)	ND	0.20		ND	0.82	2	7/8/21 20:30	BRF	
Isopropanol	ND	4.0		ND	9.8	2	7/8/21 20:30	BRF	
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	7/8/21 20:30	BRF	
Methylene Chloride	ND	1.0		ND	3.5	2	7/8/21 20:30	BRF	
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	7/8/21 20:30	BRF	
Naphthalene	ND	0.10	Z-01	ND	0.52	2	7/8/21 20:30	BRF	
Propene	ND	4.0		ND	6.9	2	7/8/21 20:30	BRF	
Styrene	0.10	0.10		0.43	0.43	2	7/8/21 20:30	BRF	
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	7/8/21 20:30	BRF	
Tetrachloroethylene	2.6	0.10		18	0.68	2	7/8/21 20:30	BRF	
Tetrahydrofuran	ND	1.0		ND	2.9	2	7/8/21 20:30	BRF	
Toluene	0.42	0.10		1.6	0.38	2	7/8/21 20:30	BRF	
1,2,4-Trichlorobenzene	ND	0.10	V-34, Z-01	ND	0.74	2	7/8/21 20:30	BRF	
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 20:30	BRF	
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 20:30	BRF	
Trichloroethylene	0.23	0.10		1.2	0.54	2	7/8/21 20:30	BRF	
Trichlorofluoromethane (Freon 11)	ND	0.40		ND	2.2	2	7/8/21 20:30	BRF	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.40		ND	3.1	2	7/8/21 20:30	BRF	
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 20:30	BRF	
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 20:30	BRF	
Vinyl Acetate	ND	2.0	V-05	ND	7.0	2	7/8/21 20:30	BRF	
Vinyl Chloride	ND	0.10		ND	0.26	2	7/8/21 20:30	BRF	
m&p-Xylene	0.39	0.20		1.7	0.87	2	7/8/21 20:30	BRF	
o-Xylene	0.20	0.10		0.86	0.43	2	7/8/21 20:30	BRF	
Surrogates	% Recove	ery		% REC	Limits				

89.6

4-Bromofluorobenzene (1)

70-130

7/8/21 20:30

RPD Pre and Post-Sampling:



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

#### ANALYTICAL RESULTS

Project Location: Bristol, RI Sample Description/Location: Work Order: 21G0029 Date Received: 7/1/2021 Sub Description/Location: Initial Vacuum(in Hg): -29 Field Sample #: SG-4 Canister ID: 2205 Final Vacuum(in Hg): -4 Sample ID: 21G0029-03 Canister Size: 6 liter Receipt Vacuum(in Hg): -4.5 Sample Matrix: Sub Slab Flow Controller ID: 4311 Flow Controller Type: Fixed-Orifice Sampled: 6/30/2021 15:27 Sample Type: 30 min Flow Controller Calibration

EPA TO-15										
	ppb	ov			Date/Time					
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst		
Acetone	5.4	4.0		13	9.5	2	7/8/21 21:49	BRF		
Benzene	ND	0.10		ND	0.32	2	7/8/21 21:49	BRF		
Benzyl chloride	ND	0.10		ND	0.52	2	7/8/21 21:49	BRF		
Bromodichloromethane	ND	0.10		ND	0.67	2	7/8/21 21:49	BRF		
Bromoform	ND	0.10		ND	1.0	2	7/8/21 21:49	BRF		
Bromomethane	ND	0.10		ND	0.39	2	7/8/21 21:49	BRF		
1,3-Butadiene	ND	0.10		ND	0.22	2	7/8/21 21:49	BRF		
2-Butanone (MEK)	ND	4.0		ND	12	2	7/8/21 21:49	BRF		
Carbon Disulfide	ND	1.0		ND	3.1	2	7/8/21 21:49	BRF		
Carbon Tetrachloride	ND	0.10		ND	0.63	2	7/8/21 21:49	BRF		
Chlorobenzene	ND	0.10		ND	0.46	2	7/8/21 21:49	BRF		
Chloroethane	ND	0.10		ND	0.26	2	7/8/21 21:49	BRF		
Chloroform	ND	0.10		ND	0.49	2	7/8/21 21:49	BRF		
Chloromethane	ND	0.20		ND	0.41	2	7/8/21 21:49	BRF		
Cyclohexane	ND	0.10		ND	0.34	2	7/8/21 21:49	BRF		
Dibromochloromethane	ND	0.10		ND	0.85	2	7/8/21 21:49	BRF		
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	7/8/21 21:49	BRF		
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 21:49	BRF		
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 21:49	BRF		
1,4-Dichlorobenzene	0.19	0.10		1.1	0.60	2	7/8/21 21:49	BRF		
Dichlorodifluoromethane (Freon 12)	ND	0.10		ND	0.49	2	7/8/21 21:49	BRF		
1,1-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 21:49	BRF		
1,2-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 21:49	BRF		
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 21:49	BRF		
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 21:49	BRF		
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 21:49	BRF		
1,2-Dichloropropane	ND	0.10		ND	0.46	2	7/8/21 21:49	BRF		
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 21:49	BRF		
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 21:49	BRF		
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	7/8/21 21:49	BRF		
1,4-Dioxane	ND	1.0		ND	3.6	2	7/8/21 21:49	BRF		
Ethanol	23	4.0		44	7.5	2	7/8/21 21:49	BRF		
Ethyl Acetate	ND	1.0		ND	3.6	2	7/8/21 21:49	BRF		
Ethylbenzene	ND	0.10		ND	0.43	2	7/8/21 21:49	BRF		
4-Ethyltoluene	ND	0.10		ND	0.49	2	7/8/21 21:49	BRF		
Heptane	ND	0.10		ND	0.41	2	7/8/21 21:49	BRF		
Hexachlorobutadiene	ND	0.10		ND	1.1	2	7/8/21 21:49	BRF		



#### ANALYTICAL RESULTS

EPA TO-15

Project Location: Bristol, RI Date Received: 7/1/2021 Field Sample #: SG-4 Sample ID: 21G0029-03 Sample Matrix: Sub Slab Sampled: 6/30/2021 15:27 Sample Description/Location: Sub Description/Location: Canister ID: 2205 Canister Size: 6 liter Flow Controller ID: 4311 Sample Type: 30 min Work Order: 21G0029 Initial Vacuum(in Hg): -29 Final Vacuum(in Hg): -4 Receipt Vacuum(in Hg): -4.5 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

	pp	bv		ug/r	n3		Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Hexane	ND	4.0		ND	14	2	7/8/21 21:49	BRF
2-Hexanone (MBK)	ND	0.20		ND	0.82	2	7/8/21 21:49	BRF
Isopropanol	ND	4.0		ND	9.8	2	7/8/21 21:49	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	7/8/21 21:49	BRF
Methylene Chloride	ND	1.0		ND	3.5	2	7/8/21 21:49	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	7/8/21 21:49	BRF
Naphthalene	ND	0.10	Z-01	ND	0.52	2	7/8/21 21:49	BRF
Propene	ND	4.0		ND	6.9	2	7/8/21 21:49	BRF
Styrene	ND	0.10		ND	0.43	2	7/8/21 21:49	BRF
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	7/8/21 21:49	BRF
Tetrachloroethylene	38	0.10		260	0.68	2	7/8/21 21:49	BRF
Tetrahydrofuran	ND	1.0		ND	2.9	2	7/8/21 21:49	BRF
Toluene	0.25	0.10		0.93	0.38	2	7/8/21 21:49	BRF
1,2,4-Trichlorobenzene	ND	0.10	V-34, Z-01	ND	0.74	2	7/8/21 21:49	BRF
1,1,1-Trichloroethane	0.42	0.10		2.3	0.55	2	7/8/21 21:49	BRF
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 21:49	BRF
Trichloroethylene	3.6	0.10		19	0.54	2	7/8/21 21:49	BRF
Trichlorofluoromethane (Freon 11)	77	0.40		430	2.2	2	7/8/21 21:49	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.40		ND	3.1	2	7/8/21 21:49	BRF
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 21:49	BRF
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 21:49	BRF
Vinyl Acetate	ND	2.0	V-05	ND	7.0	2	7/8/21 21:49	BRF
Vinyl Chloride	ND	0.10		ND	0.26	2	7/8/21 21:49	BRF
m&p-Xylene	0.26	0.20		1.1	0.87	2	7/8/21 21:49	BRF
o-Xylene	0.14	0.10		0.62	0.43	2	7/8/21 21:49	BRF
Surrogates	% Recov	/ery		% REC	C Limits			

70-130

86.2



#### ANALYTICAL RESULTS

Project Location: Bristol, RI Date Received: 7/1/2021 Field Sample #: SG-5 Sample ID: 21G0029-04 Sample Matrix: Sub Slab Sampled: 6/30/2021 15:58 Sample Description/Location: Sub Description/Location: Canister ID: 2010 Canister Size: 6 liter Flow Controller ID: 4213 Sample Type: 30 min Work Order: 21G0029 Initial Vacuum(in Hg): -28 Final Vacuum(in Hg): -5 Receipt Vacuum(in Hg): -6.7 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

		I	EPA TO-15					
	ppl	bv		ug/r	n3		Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	12	4.0		28	9.5	2	7/8/21 22:40	BRF
Benzene	0.19	0.10		0.61	0.32	2	7/8/21 22:40	BRF
Benzyl chloride	ND	0.10		ND	0.52	2	7/8/21 22:40	BRF
Bromodichloromethane	ND	0.10		ND	0.67	2	7/8/21 22:40	BRF
Bromoform	ND	0.10		ND	1.0	2	7/8/21 22:40	BRF
Bromomethane	ND	0.10		ND	0.39	2	7/8/21 22:40	BRF
1,3-Butadiene	ND	0.10		ND	0.22	2	7/8/21 22:40	BRF
2-Butanone (MEK)	ND	4.0		ND	12	2	7/8/21 22:40	BRF
Carbon Disulfide	ND	1.0		ND	3.1	2	7/8/21 22:40	BRF
Carbon Tetrachloride	ND	0.10		ND	0.63	2	7/8/21 22:40	BRF
Chlorobenzene	ND	0.10		ND	0.46	2	7/8/21 22:40	BRF
Chloroethane	ND	0.10		ND	0.26	2	7/8/21 22:40	BRF
Chloroform	0.17	0.10		0.81	0.49	2	7/8/21 22:40	BRF
Chloromethane	ND	0.20		ND	0.41	2	7/8/21 22:40	BRF
Cyclohexane	ND	0.10		ND	0.34	2	7/8/21 22:40	BRF
Dibromochloromethane	ND	0.10		ND	0.85	2	7/8/21 22:40	BRF
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	7/8/21 22:40	BRF
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 22:40	BRF
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 22:40	BRF
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	7/8/21 22:40	BRF
Dichlorodifluoromethane (Freon 12)	ND	0.10		ND	0.49	2	7/8/21 22:40	BRF
1,1-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 22:40	BRF
1,2-Dichloroethane	ND	0.10		ND	0.40	2	7/8/21 22:40	BRF
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 22:40	BRF
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 22:40	BRF
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	7/8/21 22:40	BRF
1,2-Dichloropropane	ND	0.10		ND	0.46	2	7/8/21 22:40	BRF
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 22:40	BRF
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	7/8/21 22:40	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	7/8/21 22:40	BRF
1,4-Dioxane	ND	1.0		ND	3.6	2	7/8/21 22:40	BRF
Ethanol	ND	4.0		ND	7.5	2	7/8/21 22:40	BRF
Ethyl Acetate	ND	1.0		ND	3.6	2	7/8/21 22:40	BRF
Ethylbenzene	0.12	0.10		0.52	0.43	2	7/8/21 22:40	BRF
4-Ethyltoluene	ND	0.10		ND	0.49	2	7/8/21 22:40	BRF
Heptane	ND	0.10		ND	0.41	2	7/8/21 22:40	BRF
Hexachlorobutadiene	ND	0.10		ND	1.1	2	7/8/21 22:40	BRF



#### ANALYTICAL RESULTS

EPA TO-15

Project Location: Bristol, RI Date Received: 7/1/2021 Field Sample #: SG-5 Sample ID: 21G0029-04 Sample Matrix: Sub Slab Sampled: 6/30/2021 15:58 Sample Description/Location: Sub Description/Location: Canister ID: 2010 Canister Size: 6 liter Flow Controller ID: 4213 Sample Type: 30 min Work Order: 21G0029 Initial Vacuum(in Hg): -28 Final Vacuum(in Hg): -5 Receipt Vacuum(in Hg): -6.7 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

	ppl	ov		ug/r	n3		Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Hexane	ND	4.0		ND	14	2	7/8/21 22:40	BRF
2-Hexanone (MBK)	ND	0.20		ND	0.82	2	7/8/21 22:40	BRF
Isopropanol	ND	4.0		ND	9.8	2	7/8/21 22:40	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	7/8/21 22:40	BRF
Methylene Chloride	ND	1.0		ND	3.5	2	7/8/21 22:40	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	7/8/21 22:40	BRF
Naphthalene	ND	0.10	Z-01	ND	0.52	2	7/8/21 22:40	BRF
Propene	ND	4.0		ND	6.9	2	7/8/21 22:40	BRF
Styrene	0.12	0.10		0.53	0.43	2	7/8/21 22:40	BRF
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	7/8/21 22:40	BRF
Tetrachloroethylene	1.7	0.10		11	0.68	2	7/8/21 22:40	BRF
Tetrahydrofuran	ND	1.0		ND	2.9	2	7/8/21 22:40	BRF
Toluene	0.62	0.10		2.3	0.38	2	7/8/21 22:40	BRF
1,2,4-Trichlorobenzene	ND	0.10	V-34, Z-01	ND	0.74	2	7/8/21 22:40	BRF
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 22:40	BRF
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	7/8/21 22:40	BRF
Trichloroethylene	ND	0.10		ND	0.54	2	7/8/21 22:40	BRF
Trichlorofluoromethane (Freon 11)	ND	0.40		ND	2.2	2	7/8/21 22:40	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.40		ND	3.1	2	7/8/21 22:40	BRF
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 22:40	BRF
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	7/8/21 22:40	BRF
Vinyl Acetate	ND	2.0	V-05	ND	7.0	2	7/8/21 22:40	BRF
Vinyl Chloride	ND	0.10		ND	0.26	2	7/8/21 22:40	BRF
m&p-Xylene	0.30	0.20		1.3	0.87	2	7/8/21 22:40	BRF
o-Xylene	0.13	0.10		0.57	0.43	2	7/8/21 22:40	BRF
Surrogates	% Recov	ery		% REC	C Limits			

91.8

4-Bromofluorobenzene (1)

70-130



## Sample Extraction Data

Prep Method: TO-15 Prep Analytical Method: EP		Pressure	Pre	Pre-Dil Initial	Pre-Dil Finel	<b>Default</b>	Actual	
Lab Number [Field ID]	Batch	Dilution	Dilution	mL	mL	mL	mL	Date
21G0029-01 [SG-1]	B285631	1.5	1	N/A	1000	200	150	07/08/21
21G0029-02 [SG-2]	B285631	1.5	1	N/A	1000	200	150	07/08/21
21G0029-03 [SG-4]	B285631	1.5	1	N/A	1000	200	150	07/08/21
21G0029-04 [SG-5]	B285631	1.5	1	N/A	1000	200	150	07/08/21



## QUALITY CONTROL

#### Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppb Results	RL	ug/m3 Results RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B285631 - TO-15 Prep										
Blank (B285631-BLK1)				Prepared & A	Analyzed: 07/	/08/21				
Acetone	ND	0.80								
Benzene	ND	0.020								
Benzyl chloride	ND	0.020								
Bromodichloromethane	ND	0.020								
Bromoform	ND	0.020								
Bromomethane	ND	0.020								
1,3-Butadiene	ND	0.020								
2-Butanone (MEK)	ND	0.80								
Carbon Disulfide	ND	0.20								
Carbon Tetrachloride	ND	0.020								
Chlorobenzene	ND	0.020								
Chloroethane	ND	0.020								
Chloroform	ND	0.020								
Chloromethane	ND	0.040								
Cyclohexane	ND	0.020								
Dibromochloromethane	ND	0.020								
1,2-Dibromoethane (EDB)	ND	0.020								
1,2-Dichlorobenzene	ND	0.020								
1,3-Dichlorobenzene	ND	0.020								
1,4-Dichlorobenzene	ND	0.020								
Dichlorodifluoromethane (Freon 12)	ND	0.020								
1,1-Dichloroethane	ND	0.020								
1,2-Dichloroethane	ND	0.020								
1,1-Dichloroethylene	ND	0.020								
cis-1,2-Dichloroethylene	ND	0.020								
trans-1,2-Dichloroethylene	ND	0.020								
1,2-Dichloropropane	ND	0.020								
cis-1,3-Dichloropropene	ND	0.020								
trans-1,3-Dichloropropene	ND	0.020								
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020								
1,4-Dioxane	ND	0.20								
Ethanol	ND	0.80								
Ethyl Acetate	ND	0.20								
Ethylbenzene	ND	0.020								
4-Ethyltoluene	ND	0.020								
Heptane	ND	0.020								
Hexachlorobutadiene	ND	0.020								
Hexane	ND	0.80								
2-Hexanone (MBK)	ND	0.020								
Isopropanol	ND	0.80								
Methyl tert-Butyl Ether (MTBE)	ND	0.020								
Methylene Chloride	ND	0.20								
4-Methyl-2-pentanone (MIBK)	ND	0.020								
Naphthalene	ND	0.020								Z-01
Propene	ND	0.80								
Styrene	ND	0.020								

Page 14 of 27
## QUALITY CONTROL

Analyte	pl Results	obv RL	ug/m3 Results RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B285631 - TO-15 Prep										
Blank (B285631-BLK1)				Prepared & A	Analyzed: 07	/08/21				
1,1,2,2-Tetrachloroethane	ND	0.020								
Tetrachloroethylene	ND	0.020								
Tetrahydrofuran	ND	0.20								
Toluene	ND	0.020								
1,2,4-Trichlorobenzene	ND	0.020								V-34, Z-01
1,1,1-Trichloroethane	ND	0.020								
1,1,2-Trichloroethane	ND	0.020								
Trichloroethylene	ND	0.020								
Trichlorofluoromethane (Freon 11)	ND	0.080								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.080								
1,2,4-Trimethylbenzene	ND	0.020								
1,3,5-Trimethylbenzene	ND	0.020								
Vinyl Acetate	ND	0.40								V-05
Vinyl Chloride	ND	0.020								
m&p-Xylene	ND	0.040								
o-Xylene	ND	0.020								
Surrogate: 4-Bromofluorobenzene (1)	7.27			8.00		90.9	70-130			
LCS (B285631-BS1)				Prepared & A	Analyzed: 07	/08/21				
Acetone	4.76			5.00		95.1	70-130			
Benzene	4.64			5.00		92.8	70-130			
Benzyl chloride	5.25			5.00		105	70-130			
Bromodichloromethane	5.05			5.00		101	70-130			
Bromoform	4.95			5.00		99.1	70-130			
Bromomethane	3.96			5.00		79.2	70-130			
1,3-Butadiene	3.86			5.00		77.1	70-130			
2-Butanone (MEK)	4.68			5.00		93.6	70-130			
Carbon Disulfide	4.58			5.00		91.5	70-130			
Carbon Tetrachloride	4.68			5.00		93.5	70-130			
Chlorobenzene	4.45			5.00		89.0	70-130			
Chloroethane	4.12			5.00		82.4	70-130			
Chloroform	4.30			5.00		86.0	70-130			
Chloromethane	4.43			5.00		88.5	70-130			
Cyclohexane	4.38			5.00		87.7	70-130			
Dibromochloromethane	4.75			5.00		94.9	70-130			
1,2-Dibromoethane (EDB)	4.75			5.00		95.0	70-130			
1,2-Dichlorobenzene	4.91			5.00		98.2	70-130			
1,3-Dichlorobenzene	5.05			5.00		101	70-130			
1,4-Dichlorobenzene	4.86			5.00		97.2	70-130			
Dichlorodifluoromethane (Freon 12)	4.07			5.00		81.4	70-130			
1,1-Dichloroethane	4.33			5.00		86.7	70-130			
1,2-Dichloroethane	4.38			5.00		87.6	70-130			
1,1-Dichloroethylene	4.67			5.00		93.5	70-130			
cis-1,2-Dichloroethylene	4.26			5.00		85.2	70-130			
trans-1,2-Dichloroethylene	4.21			5.00		84.2	70-130			
1,2-Dichloropropane	4.78			5.00		95.7	70-130			

## QUALITY CONTROL

	pp	bv	ug/r	m3	Spike Level	Source	0/850	%REC	DEE	RPD	FI (0 -
Analyte	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	Flag/Qual
Batch B285631 - TO-15 Prep											
LCS (B285631-BS1)					Prepared & A	Analyzed: 07	/08/21				
cis-1,3-Dichloropropene	4.44				5.00		88.8	70-130			
trans-1,3-Dichloropropene	4.88				5.00		97.6	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	3.85				5.00		77.1	70-130			
1,4-Dioxane	4.88				5.00		97.6	70-130			
Ethanol	5.22				5.00		104	70-130			
Ethyl Acetate	3.98				5.00		79.7	70-130			
Ethylbenzene	4.48				5.00		89.6	70-130			
4-Ethyltoluene	4.51				5.00		90.2	70-130			
Heptane	4.93				5.00		98.6	70-130			
Hexachlorobutadiene	4.46				5.00		89.2	70-130			
Hexane	4.61				5.00		92.2	70-130			
2-Hexanone (MBK)	5.81				5.00		116	70-130			
Isopropanol	4.07				5.00		81.5	70-130			
Methyl tert-Butyl Ether (MTBE)	3.77				5.00		75.4	70-130			
Methylene Chloride	5.17				5.00		103	70-130			
4-Methyl-2-pentanone (MIBK)	5.18				5.00		104	70-130			
Naphthalene	3.04				5.00		60.7 *	70-130			Z-0
Propene	4.06				5.00		81.2	70-130			
Styrene	4.52				5.00		90.4	70-130			
1,1,2,2-Tetrachloroethane	5.08				5.00		102	70-130			
Tetrachloroethylene	4.43				5.00		88.6	70-130			
Tetrahydrofuran	4.13				5.00		82.5	70-130			
Toluene	4.44				5.00		88.7	70-130			
1,2,4-Trichlorobenzene	3.37				5.00		67.4 *	70-130			Z-01, V-34
1,1,1-Trichloroethane	4.62				5.00		92.5	70-130			
1,1,2-Trichloroethane	4.80				5.00		95.9	70-130			
Trichloroethylene	4.82				5.00		96.4	70-130			
Trichlorofluoromethane (Freon 11)	4.12				5.00		82.4	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.39				5.00		87.8	70-130			
1,2,4-Trimethylbenzene	4.54				5.00		90.8	70-130			
1,3,5-Trimethylbenzene	4.69				5.00		93.8	70-130			
Vinyl Acetate	4.54				5.00		90.7	70-130			V-0:
Vinyl Chloride	4.19				5.00		83.9	70-130			
m&p-Xylene	9.74				10.0		97.4	70-130			
o-Xylene	4.76				5.00		95.2	70-130			
Surragate: 4-Bramafluarabenzene (1)	7.69				8.00		96.2	70-130			

## QUALITY CONTROL

Analyte	pp Results	bv RL	ug/ Results	m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B285631 - TO-15 Prep											
Duplicate (B285631-DUP1)		Sour	ce: 21G0029-	02	Prepared & A	Analyzed: 07	/08/21				
Acetone	4.9	4.0	12	9.5		4.8			0.0412	25	
Benzene	ND	0.10	ND	0.32		ND				25	
Benzyl chloride	ND	0.10	ND	0.52		ND				25	
Bromodichloromethane	ND	0.10	ND	0.67		ND				25	
Bromoform	ND	0.10	ND	1.0		ND				25	
Bromomethane	ND	0.10	ND	0.39		ND				25	
,3-Butadiene	ND	0.10	ND	0.22		ND				25	
-Butanone (MEK)	ND	4.0	ND	12		ND				25	
Carbon Disulfide	ND	1.0	ND	3.1		ND				25	
Carbon Tetrachloride	ND	0.10	ND	0.63		ND				25	
Chlorobenzene	ND	0.10	ND	0.46		ND				25	
Chloroethane	ND	0.10	ND	0.26		ND				25	
Chloroform	0.36	0.10	1.7	0.49		0.38			5.43	25	
Chloromethane	ND	0.20	ND	0.41		ND				25	
Cyclohexane	ND	0.10	ND	0.34		ND				25	
Dibromochloromethane	ND	0.10	ND	0.85		ND				25	
,2-Dibromoethane (EDB)	ND	0.10	ND	0.77		ND				25	
.2-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
,3-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
.4-Dichlorobenzene	0.43	0.10	2.6	0.60		0.44			3.69	25	
Dichlorodifluoromethane (Freon 12)	ND	0.10	ND	0.49		ND				25	
1-Dichloroethane	ND	0.10	ND	0.40		ND				25	
2-Dichloroethane	ND	0.10	ND	0.40		ND				25	
1-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
is-1 2-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
rans-1.2-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
2-Dichloropropage	ND	0.10	ND	0.46		ND				25	
is-1 3-Dichloropropene	ND	0.10	ND	0.45		ND				25	
ans-1 3-Dichloropropene	ND	0.10	ND	0.45		ND				25	
,2-Dichloro-1,1,2,2-tetrafluoroethane Freon 114)	ND	0.10	ND	0.70		ND				25	
,4-Dioxane	ND	1.0	ND	3.6		ND				25	
thanol	33	4.0	62	7.5		33			0.472	25	
thyl Acetate	ND	1.0	ND	3.6		ND				25	
thylbenzene	0.13	0.10	0.55	0.43		0.14			7.63	25	
- -Ethyltoluene	ND	0.10	ND	0.49		ND				25	
leptane	ND	0.10	ND	0.41		ND				25	
exachlorobutadiene	ND	0.10	ND	1.1		ND				25	
exane	0.40	4.0	1.4	14		0.40			1.50	25	
-Hexanone (MBK)	ND	0.10	ND	0.41		ND				25	
sopropanol	ND	4.0	ND	9.8		ND				25	
fethyl tert-Butyl Ether (MTRF)	ND	0.10	ND	0 36		ND				25	
fethylene Chloride	ND	10	ND	3.5		ND				25	
-Methyl-2-pentanone (MIRK)	ND	0.10	ND	0.41		ND				25	
anhthalene		0.10	ND	0.52		ND				25	7
ronene		4.0	ND	6.0		ND				25	L-
furene	0.11	ч.0 0.10	0.45	0.7		0.10			5 92	25	
tyrene	0.11	0.10	0.45	0.43		0.10			5.05		000 17

## QUALITY CONTROL

	ממ	bv	ug/	m3	Spike Level	Source		%REC		RPD	
Analyte	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	Flag/Qual
Batch B285631 - TO-15 Prep											
Duplicate (B285631-DUP1)		Sour	rce: 21G0029-	-02	Prepared & A	Analyzed: 07	//08/21				
1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.69		ND				25	
Tetrachloroethylene	2.6	0.10	18	0.68		2.6			0.304	25	
Tetrahydrofuran	ND	1.0	ND	2.9		ND				25	
Toluene	0.44	0.10	1.7	0.38		0.42			4.16	25	
1,2,4-Trichlorobenzene	ND	0.10	ND	0.74		ND				25	V-34, Z-01
1,1,1-Trichloroethane	ND	0.10	ND	0.55		ND				25	
1,1,2-Trichloroethane	ND	0.10	ND	0.55		ND				25	
Trichloroethylene	0.19	0.10	1.0	0.54		0.23			15.2	25	
Trichlorofluoromethane (Freon 11)	0.39	0.40	2.2	2.2		0.38			1.04	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.40	ND	3.1		ND				25	
1,2,4-Trimethylbenzene	ND	0.10	ND	0.49		ND				25	
1,3,5-Trimethylbenzene	ND	0.10	ND	0.49		ND				25	
Vinyl Acetate	ND	2.0	ND	7.0		ND				25	V-05
Vinyl Chloride	ND	0.10	ND	0.26		ND				25	
m&p-Xylene	0.39	0.20	1.7	0.87		0.39			0.00	25	
o-Xylene	0.19	0.10	0.83	0.43		0.20			3.08	25	
Surrogate: 4-Bromofluorobenzene (1)	6.95				8.00		86.9	70-130			



## 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

#### QC result is outside of established limits. Wide recovery limits established for difficult compound. t Wide RPD limits established for difficult compound. ‡ # Data exceeded client recommended or regulatory level ND Not Detected RL Reporting Limit is at the level of quantitation (LOQ) DL Detection Limit is the lower limit of detection determined by the MDL study MCL Maximum Contaminant Level Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded. No results have been blank subtracted unless specified in the case narrative section. V-05 Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound. V-34 Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated. Compound fails the method requirement of 70-130% recovery for the LCS. Is classified by the lab as a difficult Z-01 compound and passes the in house limits of 50-150%.



## INTERNAL STANDARD AREA AND RT SUMMARY

#### EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S052381-ICV1 )		Lab File ID: J2025821.D Analyzed: 09/14/20 23:22							
Bromochloromethane (1)	159501	2.873	155833	2.873	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	756714	3.475	745760	3.475	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	686740	5.06	671608	5.057	102	60 - 140	0.0030	+/-0.50	

## INTERNAL STANDARD AREA AND RT SUMMARY

#### EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S061346-CCV1)			Lab File ID: J21A	89004.D		Analyzed: 07/0	8/21 11:41		-
Bromochloromethane (1)	157356	2.87	155833	2.873	101	60 - 140	-0.0030	+/-0.50	
1,4-Difluorobenzene (1)	638767	3.472	745760	3.475	86	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	572744	5.057	671608	5.057	85	60 - 140	0.0000	+/-0.50	
LCS (B285631-BS1 )			Lab File ID: J21A	89005.D		Analyzed: 07/08	8/21 12:08	•	
Bromochloromethane (1)	154718	2.867	157356	2.87	98	60 - 140	-0.0030	+/-0.50	
1,4-Difluorobenzene (1)	629101	3.472	638767	3.472	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	564227	5.057	572744	5.057	99	60 - 140	0.0000	+/-0.50	
Blank (B285631-BLK1 )			Lab File ID: J21A	89008.D		Analyzed: 07/08	8/21 13:37		
Bromochloromethane (1)	153553	2.853	157356	2.87	98	60 - 140	-0.0170	+/-0.50	
1,4-Difluorobenzene (1)	568518	3.465	638767	3.472	89	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	521545	5.053	572744	5.057	91	60 - 140	-0.0040	+/-0.50	
SG-1 (21G0029-01 )			Lab File ID: J21A	189019.D		Analyzed: 07/08	8/21 19:38	•	
Bromochloromethane (1)	156119	2.86	157356	2.87	99	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	569826	3.465	638767	3.472	89	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	520091	5.053	572744	5.057	91	60 - 140	-0.0040	+/-0.50	
SG-2 (21G0029-02 )			Lab File ID: J21A	89021.D		Analyzed: 07/08	8/21 20:30		
Bromochloromethane (1)	151655	2.86	157356	2.87	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	554837	3.468	638767	3.472	87	60 - 140	-0.0040	+/-0.50	
Chlorobenzene-d5 (1)	524986	5.054	572744	5.057	92	60 - 140	-0.0030	+/-0.50	
Duplicate (B285631-DUP1 )			Lab File ID: J21A	189022.D		Analyzed: 07/08	8/21 20:57		
Bromochloromethane (1)	150490	2.86	157356	2.87	96	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	555730	3.468	638767	3.472	87	60 - 140	-0.0040	+/-0.50	
Chlorobenzene-d5 (1)	530318	5.054	572744	5.057	93	60 - 140	-0.0030	+/-0.50	
SG-4 (21G0029-03 )			Lab File ID: J21A	189024.D		Analyzed: 07/08	8/21 21:49	•	
Bromochloromethane (1)	143197	2.86	157356	2.87	91	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	550533	3.475	638767	3.472	86	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	539904	5.057	572744	5.057	94	60 - 140	0.0000	+/-0.50	



## INTERNAL STANDARD AREA AND RT SUMMARY

#### EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SG-5 (21G0029-04)			Lab File ID: J21A1	189026.D		Analyzed: 07/0	8/21 22:40		
Bromochloromethane (1)	146505	2.86	157356	2.87	93	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	519978	3.465	638767	3.472	81	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	479500	5.054	572744	5.057	84	60 - 140	-0.0030	+/-0.50	



CONTINUING CALIBRATION CHECK

EPA TO-15

S061346-CCV1

		CONC.	(ppbv)	RE	SPONSE FACTOR	1	% DIFF	/ DRIFT
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	А	5.00	4.86	0.9103154	0.8850047		-2.8	30
Benzene	А	5.00	4.78	0.6606025	0.6318197		-4.4	30
Benzyl chloride	А	5.00	4.94	0.5965762	0.5894319		-1.2	30
Bromodichloromethane	А	5.00	5.16	0.4537953	0.4678914		3.1	30
Bromoform	А	5.00	4.98	0.6600998	0.6568519		-0.5	30
Bromomethane	А	5.00	3.96	1.001177	0.7927807		-20.8	30
1,3-Butadiene	А	5.00	4.14	0.6246902	0.5173594		-17.2	30
2-Butanone (MEK)	А	5.00	4.58	1.30749	1.197997		-8.4	30
Carbon Disulfide	А	5.00	4.65	2.466469	2.291731		-7.1	30
Carbon Tetrachloride	А	5.00	4.77	0.5064752	0.4835616		-4.5	30
Chlorobenzene	А	5.00	4.53	0.7751296	0.7019848		-9.4	30
Chloroethane	А	5.00	4.05	0.5001442	0.4055517		-18.9	30
Chloroform	А	5.00	4.33	2.018779	1.748219		-13.4	30
Chloromethane	А	5.00	4.45	0.6141491	0.5465518		-11.0	30
Cyclohexane	А	5.00	4.45	0.2849344	0.2536061		-11.0	30
Dibromochloromethane	А	5.00	4.81	0.6429615	0.6185409		-3.8	30
1,2-Dibromoethane (EDB)	А	5.00	4.91	0.4841019	0.4754375		-1.8	30
1,2-Dichlorobenzene	А	5.00	4.75	0.6846313	0.6505552		-5.0	30
1,3-Dichlorobenzene	А	5.00	4.99	0.7215992	0.7200117		-0.2	30
1,4-Dichlorobenzene	А	5.00	4.81	0.7134896	0.6866453		-3.8	30
Dichlorodifluoromethane (Freon 12)	А	5.00	4.11	2.507091	2.06234		-17.7	30
1,1-Dichloroethane	А	5.00	4.31	1.545303	1.333354		-13.7	30
1,2-Dichloroethane	А	5.00	4.39	1.058805	0.9295407		-12.2	30
1,1-Dichloroethylene	А	5.00	4.59	1.160287	1.065569		-8.2	30
cis-1,2-Dichloroethylene	А	5.00	4.18	1.114268	0.9326927		-16.3	30
trans-1,2-Dichloroethylene	А	5.00	4.31	1.201908	1.035146		-13.9	30
1,2-Dichloropropane	А	5.00	4.83	0.2231134	0.2155903		-3.4	30
cis-1,3-Dichloropropene	А	5.00	4.48	0.3628898	0.3254896		-10.3	30
trans-1,3-Dichloropropene	А	5.00	4.68	0.3055463	0.2857505		-6.5	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1	А	5.00	4.12	2.650055	2.185475		-17.5	30
1,4-Dioxane	А	5.00	4.59	0.139387	0.1278714		-8.3	30
Ethanol	А	5.00	4.16	0.1702165	0.1415898		-16.8	30
Ethyl Acetate	А	5.00	5.04	0.2280188	0.2298584		0.8	30
Ethylbenzene	А	5.00	4.62	1.161395	1.073599		-7.6	30
4-Ethyltoluene	А	5.00	4.58	1.262817	1.157501		-8.3	30
Heptane	А	5.00	5.01	0.1688454	0.1692536		0.2	30
Hexachlorobutadiene	А	5.00	4.59	0.6918294	0.6350314		-8.2	30
Hexane	L	5.00	4.53	0.6531603	0.5889016		-9.4	30



CONTINUING CALIBRATION CHECK

EPA TO-15

S061346-CCV1

		CONC. (ppbv)		RE	SPONSE FACTOR	1	% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
2-Hexanone (MBK)	А	5.00	5.80	0.280065	0.3247831		16.0	30	
Isopropanol	А	5.00	5.12	1.001981	1.026442		2.4	30	
Methyl tert-Butyl Ether (MTBE)	А	5.00	3.89	2.512535	1.952871		-22.3	30	
Methylene Chloride	А	5.00	5.07	0.6621826	0.6719439		1.5	30	
4-Methyl-2-pentanone (MIBK)	А	5.00	5.24	0.1531114	0.1603289		4.7	30	
Naphthalene	А	5.00	3.90	1.086932	0.8469012		-22.1	30	
Propene	А	5.00	4.30	0.4641749	0.3992781		-14.0	30	
Styrene	А	5.00	4.54	0.7056488	0.6404174		-9.2	30	
1,1,2,2-Tetrachloroethane	А	5.00	5.07	0.638583	0.6475493		1.4	30	
Tetrachloroethylene	А	5.00	4.58	0.5546794	0.5080748		-8.4	30	
Tetrahydrofuran	А	5.00	4.29	0.7143044	0.6124813		-14.3	30	
Toluene	А	5.00	4.55	0.9345011	0.8510525		-8.9	30	
1,2,4-Trichlorobenzene	А	5.00	3.58	0.4260284	0.3054852		-28.3	30	
1,1,1-Trichloroethane	А	5.00	4.92	0.4496133	0.4424098		-1.6	30	
1,1,2-Trichloroethane	А	5.00	4.75	0.3281373	0.3119718		-4.9	30	
Trichloroethylene	А	5.00	4.98	0.2979469	0.2969421		-0.3	30	
Trichlorofluoromethane (Freon 11)	А	5.00	4.16	2.536841	2.10891		-16.9	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	А	5.00	4.34	1.957735	1.701182		-13.1	30	
1,2,4-Trimethylbenzene	А	5.00	4.59	1.026744	0.9424916		-8.2	30	
1,3,5-Trimethylbenzene	А	5.00	4.85	1.080978	1.048239		-3.0	30	
Vinyl Acetate	А	5.00	3.20	1.400965	0.8956201		-36.1	30 *	
Vinyl Chloride	А	5.00	4.28	0.8554634	0.7320471		-14.4	30	
m&p-Xylene	А	10.0	9.93	0.9185043	0.9116743		-0.7	30	
o-Xylene	А	5.00	4.86	0.899786	0.8744486		-2.8	30	

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits



## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA



## CERTIFICATIONS

## Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2021
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2021
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2021

7 9 Spruce Street Page <u>1</u> of <u>(</u> ast Longmeadow, MA 01028 EQUESTED	"Hg Please fill out completely, sign, date and retain the yellow copy for your	Tecords Tecords Fape Famma canisters and from controllops and the control from control from control from control from control from control from control from control from control from control from control from control from control from control from control from control from control from c	inv seal function of the second of the secon	For summa canister and for summa canister and for controller for controller for controller	to Con-Tests Air Media Agreement	Summa Can ID Controller ID	-20 -7 5,8 2057 4067	2502 1 PUI V. 4-85-	115 h Soer 54 h- 6e-	-28-5 JV 2010 4313			imple Matrix Codes: e: Matrix Codes: own comon	AMB = AMBIENT	SS = SUB SLAB D = DUP D = DUP BL = BLANK	MALYTICAL LARORATORY 0 = Other		Other PCB ONLY	Chromatogram     Soxhlet       AlHA-LAP,LLC     Non Soxhlet
Doc #378 Rev 1_032420				S was done f	tx Volume			)	(e				codes to indicate possible s the Conc Code column abov - Low; C - Clean; U - Unkn	ements MCP Required	Form Required	Form Required	Other		мика 📋 WKIA School MBTA
<u>-//www.contestiabs.com</u> DF CUSTODY RECORD (AIR) Issteed Firestanting (Three	J 10-Day X ANDURANNAM	3-Day 4-Day	F 🔀 EXCEL 🛛	Pkg Required:	uration Flow Rate Matr	Total m <sup>3</sup> /min Cod Minutes L/min Cod	30 0.3 L/MINSS	20 O.J. LIMIN SS	30 NIJULINIAS	30 0.2 LIMIN SS			Please use the following concentration within H - High; M - Medium; L	Nents Special Require MA /	MCP Certification	RCP Certification			21 J Brownfield
CHAIN C CHAIN C	Due Date: St	1-Day 2-Day	Format: PDI Other:	LL CLP Like Data	Collection Data D	Beginning Ending M Date/Time Date/Time Se	12/22/21/20/20/20/20/20/20/20/20/20/20/20/20/20/	121201 10210 120101	17/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251 12/251	152 K 1558 3				Detection Limit Requires MA		182	Sitter .	Project Entity	City
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DD-test <sup>®</sup> dig	0101S	101: BAStol RC	BET: 20955100,	te Name/Number: ient: Arrounts 1	Lab Use	Con-Test ork Order#	5	ea St	2	CT SC			K	y (signature)	signature,	y: (signature)	signature)	W/(Signature)	słgnature)
Ŭ	Address: No.	Project Locat	Project Numt Project Mana	Con-Test Quo Invoice Recip Sampled By:		ž							Comments:	Keynpulshed	Received by: (	Retification of the second	Received by:	2 Relinquished b	Received by: (

# Table of Contents

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I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples\_\_\_\_\_



Doc# 278 Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client <u>DCDD</u>				
Received By	RLF	Date	7116	Time $1605$
How were the samples	In Cooler	-	On Ice	No Ice
received?	In Box		Ambient	Melted Ice
Were samples within Temperate	lte	By Gun #		Actual Temp -
Compliance? 2-6°C	LA	By Blank #		Actual Temp -
Was Custody Seal Intact?	NA		Were San	nples Tampered with?
Was COC Relinquished ?			Does Chair	Agree With Samples?
Are there any loose caps/va	alves on any sa	mples?	F	
Is COC in ink/ Legible?				-
Did COC Include all Client	<u> </u>	Analysis	Τ	Sampler Name
Pertinent Information? Projec	tT	ID's	1	Collection Dates/Times ⊤
Are Sample Labels filled out and	legible?	T		
Are there Rushes?		Who wa	s notified?	
Samples are received within hold	ling time?	7		
Proper Media Used?			Individually Ce	rtified Cans?
Are there Trip Blanks	s?		Is there enoug	h Volume?

Containers:	#	Size	Regulator	Duration		Acce	ssories:
Summa Cans	5	lel	5	130 min	Nut/Ferrule	5	IC Train
Tedlar Bags					Tubing		
TO-17 Tubes				1	T-Connector		Shipping Charges
Radiello					Syringe		
Pufs/TO-11s					Tedlar		

Can #'s	Reg #'s
2057	40107
11041	4076
2305	4311
2010	4213
Unused Media	Pufs/TO-17's
2144 (29.5) 4029	

Comments:

A P P E N D I X C

# **Conceptual Site Model and Proposed Future Redevelopment**

Contaminants consist of oil (as petroleum) and polyaromatic nuclear hydrocarbons (PAHs) and metals (primarily arsenic and lead). These contaminants are associated with filling of the land with unknown fill mixed with quarry gravel to expand the buildable waterfront coupled with the long-time (100 + years) of industrial use of the main portion of the Site and incidental releases which occurred over time.

These contaminants are present in subsurface soils above the residential direct exposure criteria (RDEC) and/or the industrial/commercial DEC (ICDEC) on two of the Main Mill parcels (west of Thames Street) and on two of the parking lots (east of Thames Street). A summary of soil exceedances of the RDEC and/or ICDEC are summarized in Table 8 (See Attached). Thus, the direct contact/dermal absorption pathway is the only complete exposure pathway identified at the Site. Regarding groundwater: 1) no significant concentration of VOCs were detected in groundwater, 2) groundwater beneath the Site and surrounding areas is designated a GB Resource Area, and 3) the Site and surrounding area is serviced by a public municipal drinking water supply. Thus, the drinking water pathway is considered incomplete and not a concern. No significant detections of VOCs were detected in soil gas beneath the subslab of the Main Mill parcel and no residential units are planned on the basement and/or first/ground floor level. Thus, the indoor air pathway (vapor intrusion) is incomplete and also not a concern. The past, current and proposed future use of the west and east portions of the Site are described as follows:

<u>Main Mill Parcels (West of Thames Street)</u> The large multi-story Main Mill building is mostly unoccupied and is largely underutilized and has been for several years. Current activities involve light industrial work (braided rug manufacturing) primarily on the ground and first floor in the northernmost building of the Mill Complex only. The future proposed use of the Main Mill Parcels will include redevelopment of the existing Mill Buildings into residential apartments/condominiums. Most of these parcels are covered by either a building and/or asphalt. A small portion of the western portion of these parcels (the area between the buildings and Bristol Harbor) is unpaved.

<u>Parking Lot Parcels (East of Thames Street)</u> – These parcels have had more of a residential use and most recently have been used as vehicular parking for adjacent residential properties. The future proposed use of the Parking Lot Parcels is the same as the current use (parking) but will be upgraded and improved with new features including: an asphalt cap, curbing and perimeter landscaping, security lighting and stormwater management features.

Brady Sullivan is proposing to redevelop the Robin Rug Mill Complex. The proposed project will be named the Bristol Yarn Mill. The existing multi-story Main Mill building are proposed to be converted into 127 loft-style residential apartments (mostly 2-bedroom rentals) and approximately 6,300 SF of leasable space for commercial use will be provided on the ground/first floor. The development will include 150 interior parking spaces (on Main Mill parcels) and 150 exterior spaces (east of Thames Street). A riverwalk will be constructed along the Harbor which will connect to Independence Park and provide public access to the waterfront. Concept plans for the proposed project and that were submitted as part of the recent (June 2021) pre-application/concept review to the Town of Bristol Department of Community Development are attached.

Brady Sullivan has successfully redeveloped serval historic mill properties (like Robin Rug). Examples of previous mill building to residential loft conversions completed by Brady Sullivan have included: Harris Mill Lofts in Coventry, Pocasset Mill Lofts in Johnston and US Rubber Lofts in Providence, Rhode Island.

# **Remedial Alternatives Analysis Objectives**

As part of this SIR Addendum, Nobis conducted a Remedial Alternatives Analysis (RAA) to address the presence of oil (petroleum) and hazardous materials present in subsurface soils and which exceeds the RDEC and ICDEC at the Site. The purpose of the RRA is to identify a minimum of two (2) potential alternatives (excluding no action or natural attenuation) that will reduce or limit risk to human health associated with the direct contact exposure pathway associated with soil.

# **Description of Remedial Alternatives**

The soil data and remedial alternatives for soil were evaluated against based upon several factors including: cost effectiveness, permanency of the alternative, risk management under current and/or future use scenarios (per Section 1.9.2 – Soil Objectives) and technical feasibility. Additionally, compliance with state and local laws or other public concerns, the Performing Party's ability and site background conditions were also considered for each alternative.

Each alternative was separately evaluated with respect to the Main Mill Parcels (west of Thames Street) and the Parking Lot Parcels (east of Thames Street) against each proposed alternative, which are as follows:

Alternative No. 1	Soil Excavation and Off-Site Disposal
Alternative No. 2	Engineered Controls
Alternative No. 3	Environmental Land Use Control and Soil Management Plan

## Alternative No. 1 Soil Excavation and Off-Site Disposal

## **Description of Alternative**

This alternative involves the excavation and off-site disposal off-site to a licensed facility.

On the Main Mill Parcel, the contaminants exceeding the RDEC and/or IDEC on the Main Mill parcels include PAHs, petroleum, lead and arsenic are located at depths from ground surface (0 feet) in the unpaved western portion of the site to depth up to 4 feet below grade located beneath paved areas. It is likely that these contaminants are located at similar depths within multiple subsurface utility corridors between the Mill buildings and beneath the footprint of the entire mill building complex. This alternative would be an enormous undertaking and would take a very long time. Excavation of soils from beneath the existing buildings would require demolition of the structure and removal of an enormously large volume of soil and backfilling, rebuild of existing structures (some subject to historical preservation), the associated subsurface utility corridors and asphalt and/or concrete pavements in order to achieve the end goal of the project.

On the Parking Lot Parcels, excavation up to depths of 9 to 10 feet in areas around SB-8 and TP-6 would need to be conducted to remove petroleum and arsenic above the RDEC. Exceedance of the ICDEC are located at mixed depths including 0 – 3.5 feet (lead a TP-7) and 7 to 9 feet (arsenic at SB-8). Further delineation around TP-7 would be needed around TP-7 which appears to be a "hot spot" (lead = 4.600 m/kg). Concentrations of arsenic are low (8 to 8.5 mg/kg) in soil and slightly above the RDEC and ICDEC of 7.0 mg/kg. Arsenic is presumed to be consistent with background concentrations on the Parking Lot Parcels. Excavation of soils on the unpaved parking lot parcels would generate a relatively large volume of soil (but less than at the Main Mill Parcels), management off-site and backfilling. The subgrade would need rebuild and restoration to support new parking lot construction which is the end goal of the project.

## Compliance with Section 1.8 of the Remediation Regulations

This alternative would provide compliance with Section 1.8 of the Remediation Regulations, however, the cost to execute this alternative on the Main Mill Parcel would be cost prohibitive for the end goal of the project. On the Parking Lot Parcels, full soil excavation and off-site disposal across the entire Lots 10-43 and 10-76 would be cost prohibitive to the end goal of the

PN 095560.261 Page 3 of 7

project. Localized soil excavation for the elevated lead in shallow soil (0 to 3.5 feet) around TP-7 on Lot 10-76 is suggested as these shallow lead impacted soils could be removed (in association with improvement to the parking lot sub-base) during rebuilding of the parking lot during project implementation. However, potential exposures to lead-impacted soils at TP-7 which are above the ICDEC could be managed via Alternative No. 2 (Capping) and Alternative No. 3 (ELUR with SMP). The full extent of lead impacted soils and volumes around TP-7 can be assessed during project execution.

# Technical Feasibility

Implementation of soil excavation and off-site disposal is not considered to be technically or financially feasible on the Main Mill Parcels. Fill material with quarry gravel from an unknown source was historically used to expand the land area upon which the present Mill Complex is situated. Thus, soil on the Main Mill Parcels with RDEC and/or ICDEC exceedances is relatively inaccessible "as is" and covered by either a large building structure or pavement. Excavation of soils from the western portion of the Main Mill parcels (around TP-1, TP-2 and TP-3) where building and pavement are absent) would consist of a very large volume of impacted fill/quarry gravel materials (with unknown depths) as the depth of the fill/quarry gravel mix is unknown. Soils in this unpaved area would be best left in place as soil removal could impact the stability of the shoreline along Bristol Harbor and impact future construction of the proposed Harbors' Edge Walk. Exposure to near surface contaminated soils in the unpaved portion of the Main Mill can be managed via other means (i.e. Alternative No. 3).

## Compliance with State and Local Laws and Other Public Concerns

This alternative would comply with state laws, including the Remediation Regulations. However, any proposed excavation from within the boundaries of most of the Main Mill Parcels would require approvals from the Coastal Resource Management Council (CRMC) and likely the Town. No specific local law or public concerns are known to be violated by this alternative. On the Parking Lot Parcels, this alternative is not anticipated to violate a specific local law or public concern.

## Ability to Perform

Brady Sullivan, the Performing Party, is not able to perform this alternative to the full extent on the Main Mill Parcel and/or to the full extent on the Parking Lot Parcels as it would be cost prohibitive to the end goal of the project.

## Alternative No. 2 Engineered Controls

Engineered controls would involve the use of a combination of strategies or "controls" designed to protect future site receptors from the contaminants in near and subsurface soil. Engineered controls can take the from of a number of various strategies and depend on the contamination present at the site. Engineered Controls can include, but not be limited to, such strategies as:

- Use of two feet of clean fill,
- Use of one foot of clean fill over geotextile liner (or marker barrier),
- Asphalt (minimum six inches of clean fill and four inches of asphalt),
- Concrete (minimum six inches of clean fill and four inches of concrete),
- Building foundation(s),
- Fencing,
- Restricted access,
- Impermeable cap (to prevent infiltration), and,
- Passive SSDS vapor barrier (for sites with vapor intrusion issues).

Several of these engineered controls will help to prevent direct contact to soil and minimize the leachability of the COCs (primarily metals) to groundwater. The identified COCs in soil on the Main Mill Parcels have shown little leaching and negative impacts on groundwater quality due to the presence of many of these controls, which currently exist. On the Parking Lot Parcels (most of which is currently unpaved), the construction of a new paved parking lot and maintenance of a capped surface would achieve the project risk management goals. Engineered Controls is recommended in conjunction with Alternative No. 3 for both the Main Mill Parcels and the Parking Lot Parcels.

## Compliance with Section 1.8 of the Remediation Regulations

This alternative would provide compliance with Section 1.8 of the Remediation.

## Technical Feasibility

Implementation of this alternative is technically feasible.

## Compliance with State and Local Laws and Other Public Concerns

This alternative would comply with state laws, including the Remediation Regulations. This alternative is not anticipated to violate a specific local law or public concern for the Parking Lot Parcels. However, the use of asphalt or concrete pavement directly along the harbor front and west of the Main Mill Buildings may violate law or public concern and would not be consistent

PN 095560.261 Page 5 of 7

with planned redevelopment of this portion of the site. This portion of the Site (adjacent to the harbor) is within the boundary of the CRMC and is proposed for construction of a public access harbor walk and thus will remain unpaved and surrounded by new and improved landscaping (i.e. wild grasses and flowers and small shrubs), etc.. The use of fencing and restricted access signage around the unpaved soil areas adjacent to the riverwalk (to prevent contact with near surface soils) will be utilized as engineered controls.

# Ability to Perform

Brady Sullivan, the Performing Party, is able to perform this alternative.

# Alternative No. 3 Environmental Land Use Control and Soil Management Plan

Environmental Land Use Control (ELUR) is a form of Institution Control that would be placed upon the land and recorded against the property deed (s). An ELUR would allow soil exceeding the Method 1 RDEC and/or ICDEC to remain in-place but under the Institutional Control of an ELUR. An Environmental Land Usage Restriction (ELUR) and an associated Soils Management Plan (SMP) would be placed on the property allowing certain activities and uses (i.e residential use with apartment style management) and future utility or construction work with conditions and prohibit certain activities and uses (i.e. single family residential use) provided that certain obligations and conditions are met. Obligations and conditions would include such things as: no gardening or growing of vegetables, annual inspections of restricted areas and any excavation work to be done under a Soil Management Plan (SMP). The ELUR would include an annual Site inspection and self-certification and reporting to RIDEM that the ELUR was being complied with.

## Compliance with Section 1.8 of the Remediation Regulations

This alternative would comply with state laws, including the Remediation Regulations. This alternative would be used to allow residential apartment-condominium style use of the Main Mill Parcels only.

## Technical Feasibility

Implementation of this alternative is considered technically and financially feasible on both the Main Mill Parcels and for the Parking Lot Parcels.

## Compliance with State and Local Laws and Other Public Concerns

This alternative would comply with state laws, including the Remediation Regulations. This alternative is not anticipated to violate a specific local law or public concern. This alternative may require notification to easement holders and notification to utilities which may conduct excavation work within the ELUR-restricted areas in the future.

# Ability to Perform

Brady Sullivan, the Performing Party is able to perform this alternative.

# **Recommended Remedial Alternatives**

For the Main Mill Parcels Lots 10-42, 10-60, 10-61, 10-62 and 10-73 which are located west of Thames Street, the selected remedial alternative(s) include:

Alternative No. 2	Engineered Controls, and
Alternative No. 3	ELUR with SMP.

Engineered controls to be used on the Main Mill Parcels will include a combination of controls, including: 2 feet of clean fill in utility corridors, capping via use of asphalt pavement in vehicular parking areas, capping via use of concrete/pavers in walkway areas, maintenance of existing buildings/foundations and restricted access via the use of fencing and signage in portions to remain unpaved and where soil could be deemed "accessible" or "potentially accessible".

For the Parking Lot Parcels (Lots 10-41, 10-43, 10-44, 10-39, 10-68, 10-74 and 10-76) which are located east of Thames Street, the selected remedial alternative(s) include:

Alternative No. 1	Soil Excavation and Off-Site Disposal (To remove lead-impacted soils around TP-7 only on Lot 10-76), and,
Alternative No. 2	Engineered Controls, and
Alternative No. 3	ELUR with SMP.

Engineered controls to be used on the Parking Lot Parcels will include: the use of new asphalt pavement as a cap for construction of the new parking lot, including 2 feet of clean fill beneath the new paved parking lot.

A P P E N D I X D



# 2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BRISTOL COUNTY, RHODE ISLAND 9ALL

MAP ENTITLED "BOUNDARY SURVEY PLAN AP 10 - LOTS 60, 61, 62 & 73 THAMES STREET & CONSTITUTION STREET BRISTOL, RHODE ISLAND

RUSS - RUSS REALTY CO. C/O ROBIN RUG COMPANY 125 THAMES STREET P.O. BOX 656 BRISTOL, RHODE ISLAND 02809", PREPARED BY:

MAP ENTITLED "BOUNDARY SURVEY PLAN A.P. 10, LOTS 43, 71, 74 & 76 HOPE STREET BRISTOL RHODE ISLAND KARIAN REALTY CO. P.O. BOX 656 BRISTOL, RHODE ISLAND", PREPARED BY: WATERMAN ENGINEERING CO., DATED: FEBRUARY 26, 2021, PROVIDED BY CLIENT. 5. MAP ENTITLED "PLAN OF LAND: THEODORE J. & HELEN T. ALIGLET, LOCATION: 12 BUTTERWORTH AVENUE BRISTOL, RHODE ISLAND",

MAP ENTITLED "EXISTING CONDITIONS PLAN, BRISTOL YARN MILL, PLAT 10 LOTS 42, 60, 61, 62, 68, 73, 41, 43, 44, 49, 74 AND 76, 125 THAMES

9. MAP ENTITLED "SURVEY OF LAND KARIAN REALTY, INC.", PREPARED BY: WATERMAN ENGINEERING CO., DATED: AUGUST 1990, ON FILE

10. MAP ENTITLED "RUSS-RUSS REALTY CO. ROBIN RUG COMPLEX MASTER PLAN A.P. 10 / LOTS 41, 42, 44, 60, 61, 62, 68 & 73 125 THAMES STREET BRISTOL RHODE ISLAND", PREPARED BY: FUSS 7 O'NEILL, DATED: APRIL 18, 2008, PROVIDED BY CLIENT.

11. RECIPROCAL EASEMENT AGREEMENT, DATED MAY 6, 2010, AND RECORDED WITH THE BRISTOL COUNTY LAND RECORDS IN BOOK 1550,



© 2013 ESRI WORLD STREET MAPS NOT TO SCALE





	LEGEND
<u> </u>	EXISTING CONTOUR
— — 125  — —	
× 123.45	EXISTING SPOT ELEVATION
× TC 123.45	EXISTING TOP OF CURB ELEVATION
× G 122.95	EXISTING GUTTER ELEVATION
× TW 123.45	EXISTING TOP OF WALL ELEVATION
×BW 122.95	EXISTING BOTTOM OF WALL ELEVATION
× T/ 123.45	EXISTING TOP OF ISLAND ELEVATION
× Bl 122.95	EXISTING BOTTOM OF ISLAND ELEVATION
× FF 123.45	EXISTING FINISHED FLOOR ELEVATION
× DS 123.45	EXISTING DOOR SILL ELEVATION
× [LG 125.45]	EXISTING LEGAL GRADE ELEVATION
V	HYDRANT
$\bowtie$	WATER VALVE
VALVE M	UNKNOWN VALVE
GV M	GAS VALVE
GM	GAS METER
EM	ELECTRIC METER
ОН	
G	APPROX LOC UNDERGROUND GAS LINE
F	APPROX. LOC. UNDERGROUND ELECTRIC LINE
	FLOOD HAZARD ZONE LINE       FLOOD HAZARD ZONE LINE         APPROX LOC UNDERGROUND WATER LINE       (BY GRAPHIC PLOTTING ONLY)         P       P         P       P
s	$(PER REF /2) \qquad (PER
 _	
	APPROX LOC OF -
500	EDGE OF ON ODETE (BK. 1550, PG. 39)
EOC	EDGE OF CONCRETE (CROSSHATCHED)
EOP	EDGE OF PAVEMENT
LSA	LANDSCAPED AREA
МС	METAL COVER (BK. 1550, PG
(TYP)	TYPICAL (SHADED)
E EMH	ELECTRIC MANHOLE  EASEMENT  CANITA DY/SEIN/ED MANHOLE  EASEMENT
S SMH M MU	SANTART/Sever MAINHOLE $(BK. 1550, PG)$
	WATED MANHOLE 170.00'
	CATCH BASIN OR INLET $ \begin{bmatrix}     + 4.2 \\     + 4.2 \\      + 4.2 \\      + 4.2 \\      + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\       + 4.2 \\        + 4.2 \\        + 4.2 \\        + 4.2 \\        + 4.2 \\        + 4.2 \\                                    $
7# € • }	TREE & TRUNK SIZE
<u>/10\</u>	PARKING SPACE COUNT
	DEPRESSED CURB
SWL	
DYL	DOUBLE YELLOW LINE $1823$
HT	HEIGHT 2 STORY + 6 T + 6
BLDG	BOILDING BEPA=3,373± SF
BEPA	BUILDING FOOTPRINT AREA
NVP	NO VISIBLE PIPE $(1 6^{65} \text{ CONC WALK } 22)$
DHF	
PVC <sup>.</sup>	POLYVINYL CHLORIDE PIPE
וט	
UI INV	
CPT	
MDW	RIM=6.07 - CURB
	$SUMP = (-1.2\pm)$
	$\int \frac{r_{AME}}{SHED} = \int \frac{1}{124} \int \frac{1}{$
	$6.9^{+}+$ SHED $+1.36^{-}$
	U.G. SAN. SEWER LINE
	(Per ref. #5) <b>→ FRAME</b> (NOT FIELD VERIFIED
	SHED - SEE NOTE 3)
	2 STORY
	//////////////////////////////////////
	+7.74 $+7.23$ FI DOD HAZARD ZONE UNE $+7.49$
	(BY GRAPHIC PLOUD THE LINE (BY GRAPHIC PLOUD TO A CONTRACT OF THE CONTRACT.
	(PER REF #2)



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(CAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.







L	SCALE:		7 . 4"- 40'		
	DATUM	VER1	2.: T = 40 T.:		FUISS & O'
		HOR	Z.:NAD 1983 T.: NAD 1988		317 IRON HORSE WAY, SU
	40	20 GRAPH	0 HIC SCALE	40	401.861.3070 www.fando.com

ZONING DIMENSION TABLE										
REQUIRED PER ZONING DISTRICT PROPOSED										
CRITERIA	w	D	WPUD	(BUILDING SITE - LOTS 42,60,61,62,73)						
MINIMUM LOT AREA		5,000 SF	•	142,226± SF (3.265 AC)						
MINIMUM LOT AREA PER DWELLING UNIT	4,000 SF	2,500 SF	2,900 SF*	1,748 SF (227,286 SF/130 UNITS)						
MINIMUM FRONTAGE		50'	•	149.25' CONSTITUTION STREET (MIN.)						
MIMIMUM LOT WIDTH		50'		149.25' CONSTITUTION STREET (MIN.)						
FRONT SETBACK		0'		-0.90'						
SIDE SETBACK		0'		0.0'						
REAR SETBACK		10'		30±' (TO APPROX. MEAN HIGH WATER)						
MAX. BUILDING HEIGHT	3	5' (3 STOR	RIES)	55' MAX4 STORIES (EXISTING)						
MAX. LOT COVERAGE BY STRUCTURES		70%		83,153 S.F./142,226 S.F. = 58.5% (PROP.) 87,296 S.F./142,226 S.F. = 61.4% (EXIST.)						
MAX. TOTAL COVERAGE	85%	95%	N/A	97,606 S.F./142,226 S.F. = 68.6%						
MAX. FLOOR AREA RATIO	1.5 1.4		N/A	227,286 S.F./142,226 S.F. = 1.6±						
IMPERVIOUS COVER	IMPERVIOUS COVER PARKING LOT SITE 51,237 S.F./66,327 S.F. = 77.2%									

\*TOWN COUNCIL ZONE CHANGE APPROVAL FROM JUNE 23, 2008 ALLOWED A DENSITY OF 98 UNITS BASED ON A GROSS FLOOR AREA TO UNIT RATIO OF 2,900 SQUARE FEET.

PARKING SUMMARY								
		USE	REQUIRED	PROPOSED				
RESIDENTIAL PARKING SPACES (ON-SI	TE)		127	137				
RESIDENTIAL PARKING SPACES (OFF-S	SITE)		0	148				
COMMERCIAL PARKING SPACES (ON-SI	TE)		11	11				
317 HOPE STREET (LOT 71) - ZONE I	2	RES/COMM	0	0				
325 HOPE STREET (LOT 43) - ZONE	D	СОММ	0	0				
60 THAMES STREET (LOT 50) - ZONE	W	SF RES	1	1				
70 THAMES STREET (LOT 49) – ZONE	W	MF RES	2	2				
TOTAL PARKING SPACES:			141	299				
RESIDENTIAL PARKING REQUIREMENT:       1 SPACE/D.U. (127 RESIDENTIAL W AND REHAB LDP ZONES)         COMMERCIAL PARKING REQUIREMENT:       1 SPACE/600 S.F. GFA (0 SPACES REQ'D FOR RESIDENTIAL, OFFICE, SERVICE, RETAIL, OR INSTITUTIONS WITHIN D ZONE) (6,292 S.F. / 600 S.F. = 11 SPACES         LOADING SPACE REQUIREMENT:       1 SPACE/3,000–19,999 S.F. OF GFA (6,292 S.F. = 1 SPACE								
<ol> <li>NOTES:</li> <li>PARKING AND LOADING REQUIREME</li> <li>ON-STREET PARKING ON THAMES</li> <li>THERE ARE 42 TOTAL COMPACT V MOTORCYCLE SPACES AND 24 BIC THAMES STREET. COMPACT PARKIN PARKING COUNT. MOTORCYCLE AN CALCULATIONS.</li> </ol>	ENTS SHALL STREET IS N (EHICLE PARK YCLE SPACES NG SPACES A D BICYCLE P	COMPLY WITH OT INCLUDED (ING SPACES, S WITHIN THE ACCOUNTS FO ARKING IS NO	ARTICLE VIII IN THE CAL 9 DESIGNAT BASEMENT I R 13.5% OF DT INCLUDED	SEC. 28–251. CULATIONS. ED _EVEL OF 125 TOTAL IN THE				

ZONING RELIEF:

- 1. ARTICLE VIII SEC. 28-251(1): OFF-STREET PARKING IS REQUIRED ON THE SAME PROPERTY AS THE DEVELOPMENT EXCEPT AS PERMITTED UNDER SEC. 28-255.
- 2. ARTICLE VIII SEC. 28-251(2)(a): OFF-STREET PARKING SPACE DIMENSIONS MUST BE 10' WIDE BY 18' LONG. PROPOSED RESIDENTIAL PARKING SPACES ARE 9' WIDE BY 18' LONG.
- 3. ARTICLE VIII SEC. 28-251(2)(a): DOUBLE LINE PARKING SPACE STRIPES ARE REQUIRED IN PARKING LOTS WITH MORE THAN 20 SPACES.
- 4. ARTICLE IX SEC. 28-284(d)(1): REQUIRED TO USE AT LEAST 25 PERCENT OF THE SITE FOR COMMERCIAL, INSTITUTIONAL, AND/OR PUBLIC USE.
- 5. ARTICLE IX SEC. 28-284(d)(2)RESIDENTIAL DENSITY FOR HISTORICAL BUILDINGS GREATER THAN 100,000 SQUARE FEET IN THE W ZONE. CONTRIBUTING BUILDINGS ON THE NATIONAL HISTORICAL REGISTER LOCATED IN THE W ZONE THAT ARE IN EXCESS OF 100,000 SQUARE FEET OF GROSS FLOOR AREA SHALL HAVE A MINIMUM GFA/DU (GROSS FLOOR AREA PER DWELLING UNIT) OF 2,250 SQUARE FEET PER DWELLING UNIT.
- 6. ARTICLE IX SEC. 28-284(g): AT LEAST 10 PERCENT OF THE LAND AREA MUST BE ALLOCATED FOR PUBLIC OR INSTITUTIONAL USE INCLUDING, BUT NOT LIMITED TO, PUBLICLY ACCESSIBLE PARKS, SQUARES, GREEN SPACES, WATERFRONT ACCESS, INTERIOR SPACES, PUBLIC VIEW CORRIDORS AND BUFFER AREAS. PROPOSED PUBLIC ACCESS EASEMENT IS 9.3 PERCENT OF LAND AREA (13,257 SF / 142,226 SF MILL LOTS ONLY: LOTS 42, 60, 61, 62, AND 73).

NOTES:

- 1. ARTICLES AND SECTIONS REFER TO THE BRISTOL, RI CODE OF ORDINANCES CHAPTER 28 "ZONING" (MUNICODE VERSION DECEMBER 14, 2020).
- 2. REFERENCE BRISTOL TOWN COUNCIL DECISION FOR "PETITION TO CHANGE OF ZONE ORDINANCE RELATIVE TO DENSITY AND COMMERCIAL USES FOR ROBIN RUG" DATED JUNE 23, 2008 (BK. 1457 PG. 177) THAT APPLIES TO SPECIFIC DEVELOPMENT CONDITIONS ON THE ROBIN RUG MILL COMPLEX.
- 3. THIS CONCEPT PLAN IS INTENDED TO BE USED FOR PLANNING PURPOSES ONLY AND IS NOT SUITABLE FOR PERMITTING OR CONSTRUCTION.

BRADY SULLIVAN PROPERTIES, LLC MASTER PLAN **BRISTOL YARN MILL** ALTERNATIVE PARKING PLAN

PROJ. No.: 20061150.A22 DATE: APRIL 13, 2021

C1.01

**125 THAMES STREET** 

BRISTOL, RHODE ISLAND

A P P E N D I X E

## APPENDIX E – CERTIFICATION Site Investigation Report

In accordance with RIDEM's Office of Land Revitalization and Sustainable Materials Management Regulations under 250-RICR-140-30-1, Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (aka the Remediation Regulations), the following statement of certification for the <u>Site Investigation Report for the Robin Rug Manufacturing</u> <u>Facility Site located at 125 Thames Street and auxiliary Parking Lot Parcels located east of</u> <u>Thames Street, Bristol, Rhode Island</u> is provided:

## **CERTIFICATION OF CONSULTANT:**

Nobis Group, certifies to the best of its knowledge that the **Site Investigation Report** is complete and accurate:

etting or

Name: Bettina Eames, P.G Senior Project Manager Nobis Group, Concord, NH Date: August 1, 2022

## CERTIFICATION OF PERFORMING PARTY:

Brady Sullivan Properties certifies to the best of its knowledge that the **Site Investigation Report** is complete and accurate:

Name: Chris Reynolds, PEDate: August 1, 2022Senior Project ManagerBrady Sullivan Properties

July 2022 Nobis Group