EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY REMEDIATION AND REDEVELOPMENT DIVISION

REQUEST FOR EGLE REVIEW – RESPONSE ACTIVITY PLAN TO COMPLY WITH 7A(1)(B)

FOR EGLE USE ONLY SUBMITTAL REVIEW DUE	
DATE:	

This form is required for submittal of a request for the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to review a Response Activity Plan, under Section 20114b, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The Response Activity Plan to Comply with 7a(1)(b), must address the entire property, all complete pathways, and propose the necessary response activities to mitigate unacceptable exposures for all pathways determined to complete.

This form is for use by a prospective owner or operator who is not yet required to be in compliance with their Section 20107a obligations, but is requesting EGLE review of response activities under 7a(1)(b) to be conducted upon their purchase, occupancy or foreclosure that are intended to prevent or mitigate an unacceptable exposure.

This form is for use by a current owner or operator who must undertake response activities under Section 20107a(1)(b) to achieve compliance with their Section 20107a(1)(b) obligation to mitigate an unacceptable exposure. A current owner or operator of contaminated property has obligations under Section 20107a (due care) with respect to any existing contamination on the property to prevent unacceptable exposure.

If additional data or other information needs to be acquired to conduct an adequate evaluation to determine complete pathways or appropriate response activities, this is not the correct response activity plan submittal form.

EGLE will make every effort to review the response activity plan within 45 business days after receipt, but not later than 150 days per section 20114b(3) EGLE will, approve, approve with conditions, or deny the response activity plan, or will notify the submitter the plan does not contain sufficient information for EGLE to make a decision.

Current owners or operators who believe they are in compliance with all their applicable Section 20107a (due care) obligations need to use form EQP 4402, Documentation of Due Care Compliance, and request review under Section 20114g(2), Part 201 of the NREPA.

Section A: Submitter I	nformation									
Legal Entity/Person requ	esting review:		Complete if contact for questions if different from legal entity:							
The Anchor at Mariners Inn Limited Div	ridend Housing Associati	on Limited Partnership	Relationship of	contact person to the sul	omitter: Enviro Professional					
Street Address: 10 E. Do	ty Street, Suite 44	.5	Contact Name:	Nick Lieder						
City: Madison	State: WI	Zip: 53703	Contact Title:	Contact Title: Regional Manager						
Contact Name: Mr. Chris	Laurent		Street Address:	4080 W. 11 Mile						
Contact Title: President			City: Berkley	State: MI	Zip: 48072					
Phone: (608) 234-5291			Phone: (248) 336-9988							
Email: claurent@cinnaire.	com		Email:lieder@pn	nenv.com						

Section B: Property In	formation									
Street Address of Prope 445 Ledyard	rtv:		Town: NA	Range:	NA	Section: NA				
City: Detroit	State: MI	Zip: 48201	Quarter:	Quart	er-Quarter:					
County: Wayne			Decimal Degrees L Decimal Degrees L							
Property Tax ID (include	all applicable I	D's):	Reference point for latitude and longitude:							
02000618-9			Center of Site ☑	Main/F	ront Door					
Part 201 Site ID # (if known	wn):		Front gate/Main En	trance 🗆	Other \square					
City/Village/Township: D	etroit		Collection Method: Survey ☐ G	PS □	Interpola	tion 🗹				



Section C: Status of Submitter Relative to the											
Current Owner		Prospective Owner Prospective Operator Pro									
Current Operator		Prospective Operator Date Submitter anticipates becoming the owner or operator:									
Date Submitter became the owner or operator:	Date S 08/01/2		he owner or operator:								
Section D: Current or Proposed Property Use											
Current Use		Propose	d Use								
Residential		Residential									
Nonresidential		Nonresidential									
Mixed Use 🗹		Mixed Use 🗹									
Section E: The following questions assist EGL	.Ε in evalι	ating this request									
On-site Well(s) (Check all that apply):											
Drinking Water ☐ Industrial/Commercial Produc	tion 🗆 /	Agriculture/Irrigation 🗆 No We	ell on-site 🗹								
Approximate Depth of Well(s):											
Has a Baseline Environmental Assessment (BEA)	been prev	iously submitted for this propert	y? Yes □ No 🗹								
Date BEA Submitted:											
BEA Number:											
Section F: Category of Applicable Generic Clea	anup Crite	eria or Site-specific Criteria**									
Generic		Site-Specific (check all th	at apply)								
	sidential [ntial EGLE Provided									
Nonresidential ☐ Nor	nresidentia	I ☐ Submitter Developed Sec	ction 20120b(2) & (3)								
**EGLE review required within 90 days of EGLE	receipt of	-	. , , , , , , , , , , , , , , , , , , ,								
	B. Nation										
Section G: Complete Pathways (Check all that	apply)**	Baritania.	Name de la constant								
Item	apply)**	Residential	Nonresidential								
Item Drinking Water / Drinking Water Protection	apply)**		Nonresidential								
Item Drinking Water / Drinking Water Protection Direct Contact	apply)**		Nonresidential								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation	apply)**		Nonresidential								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation	apply)**		Nonresidential								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air	apply)**		Nonresidential								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation	apply)**		Nonresidential								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other:											
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation											
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of Section H: Proposed Response Activities (Chemonic Protection	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □									
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the Item Other Item	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the section H: Proposed Response Activities (Chellem Excavation)	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the Item Excavation Physical or Engineered Exposure Barrier	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all contained to the second t	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the Item Excavation Physical or Engineered Exposure Barrier Containment: Physical or Hydraulic Active Soil Remediation System	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all contained to the second t	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the Item Excavation Physical or Engineered Exposure Barrier Containment: Physical or Hydraulic Active Soil Remediation System	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the section H: Proposed Response Activities (Chember Item) Excavation Physical or Engineered Exposure Barrier Containment: Physical or Hydraulic Active Soil Remediation System Active Groundwater Remediation System	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □									
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the section H: Proposed Response Activities (Chen Item) Excavation Physical or Engineered Exposure Barrier Containment: Physical or Hydraulic Active Soil Remediation System Active Groundwater Remediation System Passive Vapor Mitigation System	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								
Item Drinking Water / Drinking Water Protection Direct Contact Soil Volatilization to Indoor Air Inhalation Groundwater Volatilization to Indoor Air Inhalation Ambient Air Particulate Inhalation Other: **Response Activities must be proposed for all of the section H: Proposed Response Activities (Chemeter Item) Excavation Physical or Engineered Exposure Barrier Containment: Physical or Hydraulic Active Soil Remediation System Active Groundwater Remediation System Passive Vapor Mitigation System Active Vapor Mitigation System	complete	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	operty.								



Section H (Continued): Propo	sed Response Activities	(Continued)(Check	k all that apply)
MIOSHA Demonstration Section	ı 20120a(18)		
Other (specify):			
		·	
Section I. Environmental Prof	faccional Cianotura		
Section I: Environmental Prof		40 d mag4a miala a ma 4 m . c	a converte and complete to the best of
my knowledge and belief.	y mat mis pian and all rela	ted materials are true	e, accurate, and complete to the best of
my knowledge and belief.			
Signature:	. /	Data: 7.45.00	
Signature.	de	Date: 7-15-22	
Printed Name: Nicholas Lieder			
Company of Environmental Prof	essional:PM Enviornmental		
Street Address: 4080 W. 11 Mile	,		
City: Berkley	State: MI		Zip: 48072
Phone: (248) 336-9988		Email: lieder@pme	nv.com
Section J: Submitter Signatur	re		
	y that this plan and all rela	ted materials are true	e, accurate, and complete to the best of
my knowledge and belief.			
Docu	ıSigned by:	_	
Signature: (Luni	is Laurent	Date: 7/14/2022	12:45 PM EDT
Printed Name: Mr. Chris Laurent	54C5FEE145C		
	and a sub-selling D		
Title and relationship of signator		it Manager	
Street Address: 10 E. Doty Street			7: 10001
City: Madison	State: MI		Zip:48201
Phone: (313) 544-4009		Email:epotas@cinn	naire.com

This form and the Response Activity Plan to Comply with 7a(1)(b) should be submitted to the EGLE Remediation & Redevelopment Division District Office for the county in which the property is located, unless the response activity is related to a property that is regulated by another EGLE Division. EGLE District Office contact information by County can be accessed at: https://www.michigan.gov/egle/0,9429,7-135-3311_4109_9846-321402--,00.html. If regulated by another division, contact should be made with that division for information on where to submit the form and plan. The Response Activity Plan is a stand-alone document and should contain all information necessary for EGLE to render a decision.

For information or assistance on this publication, please contact the (program), through EGLE Environmental Assistance Center at 800-662-9278. This publication is available in alternative formats upon request.

EGLE does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations.

This form and its contents are subject to the Freedom of Information Act and may be released to the public.



Environmental & Engineering Services Nationwide



ENVIRONMENTAL SERVICES

BUILDING ARCHITECTURE, ENGINEERING & SCIENCE

INDUSTRIAL HYGIENE SERVICES

BROWNFIELDS & ECONOMIC INCENTIVES CONSULTING

RESPONSE ACTIVITY PLAN REMEDIAL ACTION PLAN

Unit #1 and Unit #2 of Parcel ID: 0200618-9 | Detroit, Michigan PM Project Number 01-11288-1-0004

Prepared for:

The Anchor at Mariners Inn, LDHA, LP 2111 Woodward Avenue, Suite 600 Detroit, Michigan 48201

Prepared by:

PM Environmental, Inc. 4080 West Eleven Mile Road Berkley, Michigan 48072

Know Your Risk. Take Control. Work with the Experts.

www.pmenv.com



Corporate Headquarters Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906 f: 877.884.6775 Michigan Locations
Berkley Bay City
Grand Rapids Lansing
Oak Park

July 7, 2022

District Supervisor
Michigan Department of Environment, Great Lakes, and Energy
Southeastern Michigan District Office
27700 Donald Court
Warren, Michigan 48092

RE: Response Activity Plan – Remedial Action Plan for The Anchor at Mariners Inn Located at Unit #1 and Unit #2 of Parcel ID No: 0200618-9, Detroit, Michigan PM Environmental, Inc. Project No. 01-11288-1-0004

t: 517.321.3331

Dear District Supervisor:

Enclosed is a copy of a Response Activity Plan – Remedial Action Plan (ResAP – Remedial Action Plan) submitted to the Department of Environment, Great Lakes, and Energy (EGLE) as allowed under Section 20114b of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The ResAP-Remedial Action Plan is being submitted to EGLE for review and approval in order to facilitate funding through The Michigan State Housing Development Authority (MSHDA). The ResAP – Remedial Action Plan outlines the remedial actions to be taken by The Anchor at Mariners Inn, LDHA, LP, to address risks through pathways determined to be relevant at the subject property.

If you have any questions regarding the information in this report, please contact us at 800.313.2966.

Sincerely.

PM ENVIRONMENTAL, INC.

Nicholas Lieder Regional Manager Site Investigation Services



Corporate Headquarters Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906 f: 877.884.6775 t: 517.321.3331 Michigan Locations
Berkley Bay City
Grand Rapids Lansing
Oak Park

July 7, 2022

Mr. Edward Potas The Anchor at Mariners Inn, LDHA, LP 2111 Woodward Avenue, Suite 600 Detroit, Michigan 48201

RE: Response Activity Plan – Remedial Action Plan for The Anchor at Mariners Inn Located at Unit #1 and Unit #2 of Parcel ID No: 0200618-9, Detroit, Michigan PM Environmental, Inc. Project No. 01-11288-1-0004

Dear Mr. Potas:

Enclosed is a copy of a Response Activity Plan – Remedial Action Plan (ResAP – Remedial Action Plan) submitted to the Department of Environment, Great Lakes, and Energy (EGLE) as allowed under Section 20114b of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The ResAP-Remedial Action Plan is being submitted to EGLE for review and approval in order to facilitate funding through The Michigan State Housing Development Authority (MSHDA). The ResAP – Remedial Action Plan outlines the remedial actions to be taken by The Anchor at Mariners Inn, LDHA, LP, to address risks through pathways determined to be relevant at the subject property.

THIS RESPONSE ACTIVITY PLAN WAS COMPLETED FOR THE ANCHOR AT MARINERS INN, LDHA, LP, THE ANCHOR AT MARINERS INN 4, LDHA, LP, CINNAIRE SOLUTIONS CORPORTATION, MARINERS INN, PROTESTANT EPISCOPAL CHURCH OF THE DIOCESE OF MICHIGAN, THE CITY OF DETROIT, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

If you have any questions regarding the information in this report, please contact us at 800.313.2966.

Sincerely,

PM ENVIRONMENTAL

Nicholas Lieder Regional Manager Site Investigation Services

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	DETAILED PROPERTY DESCRIPTION	1
3.0	PROPERTY USE	2
4.0	IDENTIFICATION OF RELEVANT EXPOSURE PATHWAYS	5
5.0	ASSESSMENT OF APPLICABILITY OF GENERIC CRITERIA OR NEED FOR SITE-SPECIFIC CRITERIA	5
6.0	IDENTIFCATION OF THE CATEGORY OF APPLICABLE CLEANUP CRITERIA	6
7.0	CONTAMINANT INFORMATION	6
7.1	LOCATIONS AND CONCENTRATIONS OF CONTAMINANTS OF CONCERN	6
7	.1.1 SOIL	7
7	.1.2 SOIL GAS	8
8.0	IDENTIFICATION OF REMEDIAL ACTIONS TO MITIGATE RISKS THROUGH THE RELEVANT PATHWAYS	8
9.0	SIGNATURES	9
10.0	REFERENCES	10

FIGURES

Figure 1: Property Vicinity Map

Figure 2: Site Plan

Figure 3: Soil Analytical Results
Figure 4: Soil Gas Analytical Results
Figure 5: Proposed Excavation Area

TABLES

Table 1: Summary of Soil Analytical Results –VOCs, PNAs, PCBs and Metals

Table 2: Summary of Soil Gas Analytical Results – VOCs

APPENDICES

Appendix A: Assessing Information, Legal Description, and Proposed Development Site

Concept Drawings and Renderings

Appendix B: Phase I ESA, May 22, 2022, PM

Appendix C: Soil Boring Logs/Soil Gas Logs, June and November 2021, PM

Appendix D: EGLE Site-Specific Volatilization to Indoor Air Criteria Memo, June 7, 2022

Appendix E: Laboratory Analytical Reports, June and November 2021, PM

1.0 INTRODUCTION

This Response Activity Plan – Remedial Action Plan (ResAP – Remedial Action Plan) to remediate risks was prepared on behalf of The Anchor at Mariners Inn, LDHA, LP for The Anchor at Mariners Inn (portions of Parcel ID: 02000618-9) located at 445 Ledyard Street, Detroit, Wayne County, Michigan (hereafter referred to as the "subject property") (Figures 1 and 2), and is being submitted for EGLE review and approval as allowed under Section 20114b of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

The purpose of the remedial actions proposed to be undertaken by The Anchor at Mariners Inn, LDHA, LP is to effectively address the risks through the identified relevant pathways at the portion of the subject property demonstrated to contain a "facility" as that term is defined in Part 201 of the NREPA. The Anchor at Mariners Inn, LDHA, LP is seeking Michigan Department of Environment, Great Lakes and Energy (EGLE) concurrence that the proposed remedial actions at the facility are adequate, if implemented as proposed and documented with sufficient verification data, to satisfy the cleanup criteria for unrestricted residential use. The Anchor at Mariners Inn, LDHA, LP intends to purchase the subject property at a date yet to be determined.

2.0 DETAILED PROPERTY DESCRIPTION

2.1 Property Description

The subject property is comprised of one parcel (Parcel ID: 02000618-9) totaling 1.96 acres located on the southwest corner of Ledyard Street and Cass Avenue in Detroit, Wayne County, Michigan (Figure 1). The subject parcel land will not be legally split into smaller parcels; however, the subject parcel will be subdivided into three separate condominium units. The Anchor at Mariners Inn, LDHA, LP intends to lease and redevelop Unit #1 (0.348 acres) and Unit #2 (0.563 acres) via a long-term lease from the current property owner, Diocese of Michigan Episcopal Church (Figure 2 and Appendix A). The Anchor at Mariners Inn, LDHA, LP will lease portions of the portions of the Property identified as Unit #1, Unit #2, and the General Common Element as defined on the legal description included in Appendix A.

The subject property is currently developed with asphalt paved parking in the northern portion, a concrete paved basketball court is present in the southern portion, and the western portion of the subject property is improved with three unoccupied storage sheds. The remainder of the property contains groomed grass and landscaped areas (Figure 2). The subject property is currently being used by the west adjoining property, Mariners Inn, a homeless shelter that provides shelter, meals, private and group counseling, and transitional housing for the homeless.

The subject property is currently zoned B-4: General Business District. The intended use is consistent with residential land use as defined under Part 201.

There are no land or resource use restrictions recorded against the property.

There are no response activities or corrective actions being undertaken at the Property by a liable or non-liable person.

There are no underground storage tanks (USTs) or above ground storage tanks (ASTs) present on the subject property.

There are no containers of hazardous substances on the subject property.

There are no fire and/or explosion hazards present on the subject property.

There are no abandoned containers on the subject property.

2.2 Property Features

Municipal water, municipal combined sanitary/storm sewer, natural gas, electrical, and telecommunications utilities are present in the Ledyard Street and Cass Avenue public right-of-way adjacent to the subject property. No water supply wells exist on the subject property.

3.0 PROPERTY USE

3.1 Intended Property Use

As indicated in Section 2.0, the subject property currently consists of various paved and/or landscaped areas. Three storage unoccupied storage sheds are present on the western portion of the subject property (Figure 2).

The Anchor at Mariners Inn, LDHA, LP intends to develop the subject property with a mixed-use slab-on-grade residential and commercial four-story building (Figure 2). The assessing information and Proposed Development Site Concept Drawings and Renderings for the subject property are included as Appendix A. The proposed building footprint is depicted on Figure 2.

The four-story, slab-on-grade, mixed use apartment building will be 7,126 square feet with 44 supportive housing units and 40 recovery housing units and equipped with an elevator with an elevator pit 5 feet below grade, containing a sump. The first floor will contain both commercial retail and administrative, office, and counseling spaces. The second to fourth floors will contain housing units. Following redevelopment activities, the subject property will primarily consist of concrete/asphalt paved parking, drives, and walkways, a basketball/recreation court, portions of building foundations/slabs, concrete plank paver walkways, and landscaped areas. Site plans are included in Appendix A.

The building will be heated and cooled with packaged heating cooling and ventilation (HVAC) systems that source return air from within the building.

3.2 Historical Property Use

Standard and other historical sources were able to document the Property was developed prior to 1889 with several residential dwellings and outbuildings. The southernmost dwelling also included a first-floor storefront that was occupied by a doctor's office in at least 1901, a restaurant in at least 1916, a hand laundry in at least 1921, and a shoe repair business in at least 1926. Between 1912 and 1913, the dwelling in the northern portion was demolished and replaced with the Priscilla Inn, a women's correctional center and church convention center with a kitchen and six storefronts, which were occupied by a cleaning and dying company, a clothes cleaner, a pharmacy, a church, a grocery store, a hand laundry, a tea supplier, a baker, a library, and a beauty shop. In the 1940s, two dwellings in the southern portion were demolished and replaced with a car wash, which was demolished in 1969. By 1950, most, if not all, storefronts within

Priscilla Inn were converted to shelter-related uses such as a recreation room and lobby, and the land immediately south of the inn was converted into a parking lot and was used for automotive sales in at least 1925 to 1926. The Priscilla Inn was demolished in 1984 and the northern portion has been utilized for parking since that time. Two of the three remaining dwellings in the southern portion were demolished in the 1960s and the third was demolished in the 1980s. The southern portion has been utilized for parking or a recreational lot for the west adjoining homeless shelter, Mariners Inn since at least 1987. Two of the three current sheds were constructed in the western portion between 2002 and 2005, and the third shed was constructed between 2012 and 2016.

Previous Site Investigations

Phase I ESA, PM Environmental, August 2019

PM Environmental prepared a Phase I Environmental Site Assessment (ESA) dated August 30, 2019, which included the current subject property and portions of the west adjoining properties currently occupied by the Mariners Inn homeless shelter, in conformance with the scope and limitations of ASTM Practice E1527-13. The following on-site REC associated with the current subject property was identified:

• A storefront within the former Priscilla Inn (417 Ledyard Street) was previously occupied by a clothes cleaner between at least 1935 to 1940 (and potentially from 1931 to 1945), which may have included dry cleaning operations. Dry cleaning operations during this timeframe commonly involve the usage of general hazardous substances and/or petroleum products, which, if improperly managed and/or disposed of, can be a source of contamination. This time period preceded major environmental regulations and current waste management and disposal procedures. The historical waste management practices associated with the former dry-cleaning operations are unknown and may have resulted in releases at the subject property.

The following adjoining and/or nearby REC associated with the current subject property was identified:

A baseline environmental assessment (BEA) was conducted and submitted to EGLE for the south adjoining property, identified as 2501 Cass Avenue. PM attempted to review regulatory file information for this property but did not receive a response. The property was historically occupied by a movie theater equipment company, restaurants, hair salons/barbers, bars, and a popcorn company. PM was unable to determine the source of the known contamination on the property. Based on the close proximity to the subject property (i.e., directly adjoining), the potential exists that existing contamination on this property has migrated onto the subject property.

Phase II ESA, PM, June and November 2021

On June 10, 2021, PM completed subsurface investigation activities at the Property that consisted of the advancement of eight soil borings (SB-1 through SB-8) to depths ranging from 10.0 to 20.0 feet below ground surface (bgs), the installation of four temporary soil gas wells (TSG-1 through TSG-4) at depths of 4.5 or 5.0 feet bgs, and the collection of 16 soil samples and four soil gas samples to assess the RECs identified for the Property in PM's August 2019 Phase I ESA. The soil samples were submitted for laboratory analysis of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs), polychlorinated biphenyls (PCBs), and metals

(arsenic, barium, cadmium, chromium, copper lead, mercury, selenium, silver, and zinc), or some combination thereof. The soil gas samples were submitted for laboratory analysis of VOCs by TO-15.

On November 24, 2021, PM completed subsurface activities at the subject property that consisted of the advancement of six soil borings (SB-5R and SB-6A, SB-7A, SB-8A, SB-9, and SB-10) to depths of 10.0 or 20.0 feet bgs, the installation of two temporary soil gas wells (TSG-5R and TSG-10) at a depth of 5.0 feet bgs, and the collection of 13 soil samples and two soil gas samples to further assess the concentrations identified during PM's June 2021 site investigation. The soil samples were submitted for laboratory analysis of VOCs and PNAs. The soil gas samples were submitted for laboratory analysis of VOCs.

The sample locations and analytical summaries from PM's June and November 2021 site investigations are included on Figures 3 and 4 and in Tables 1 and 2.

Phase I ESA, PM, May 20, 2022

PM prepared a Phase I ESA dated May 20, 2022, for the Property in conformance with the scope and limitations of ASTM Practice E1527-13. A copy of the May 2022 Phase I ESA, including photographs of the subject property, is included in Appendix B. The following on-site REC was identified:

• Concentrations of benzo(a)pyrene, benzo(b)fluoranthene fluoranthene, naphthalene, phenanthrene, and mercury were identified during PM's 2021 subsurface investigation in soil samples collected from the central portion of the proposed condominium Unit #1 on the subject property exceeding Residential Part 201 Generic Cleanup Criteria (GCC). The concentrations of naphthalene and mercury detected also exceed EGLE Residential VIAP Screening Levels. The impacted area appears to be associated with backfill associated with former dwellings. Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. Based on these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan NREPA, as amended.

No adjoining and/or nearby RECs have been identified.

3.3 Property Geology/Hydrogeology/Topography

Based on review of the soil boring logs from PM's June and November 2021 site investigations, the site-specific geology generally consists of sand, sandy clay, or clay to depths between 4.5 and 8.0 feet below ground surface (bgs), underlain by clay to a depth of at least 20.0 feet bgs, the maximum depth explored. Various debris (concrete and brick) was identified at depths between 0.5 and 6.0 feet bgs. A copy of PM's June and November 2021 soil boring logs are included in Appendix C.

Groundwater was not encountered in any of the soil borings advanced on the subject property to a depth of 20.0 feet bgs, the maximum depth explored.

The site is 610 feet above mean seal level (msl) according to the United States Geological Survey (U.S.G.S.) 7.5-Minute Topographic Map of the Detroit, Michigan, Quadrangle. The topographic

gradient is relatively flat. The closest surface water is the Detroit River, which is located approximately 1.10 miles south-southeast of the subject property at an elevation of 575 feet above msl.

The subject property is not located in a Wellhead Protection Area (WHPA).

4.0 IDENTIFICATION OF RELEVANT EXPOSURE PATHWAYS

Drinking Water/Drinking Water Protection – Not Relevant. No groundwater was observed at the property to a depth of 20' below ground surface and no water wells are present on the Property.

- Groundwater Surface Water Interface/Groundwater Surface Water Interface Protection –
 Not Relevant. The property is serviced with a combined sanitary/storm sewer system.
 There is no groundwater at the property and therefore no hydraulic connection between
 groundwater and a surface water body.
- Direct Contact Relevant. This pathway is relevant for all residential land uses. The criteria are applicable to all soil depths.
- Soil Volatilization to Indoor Air Relevant. This pathway is relevant for all residential land
 uses for hazardous substances that are volatile. The generic criteria are not applicable if
 the physical conditions are inconsistent with the model assumptions used to calculate the
 generic criteria. The generic criteria are also not applicable in the presence of mobile or
 migrating non-aqueous phase liquids (NAPL) or residual NAPL (diesel range organic or
 gasoline range organic) EGLE established screening levels.
- Volatile Soil Inhalation Source Relevant. This pathway is relevant for all residential land uses. The criteria are applicable to all soil depths.
- Particulate Soil Inhalation Relevant. This pathway is relevant for all residential land uses. The criteria are applicable to all soil depths.

5.0 ASSESSMENT OF APPLICABILITY OF GENERIC CRITERIA OR NEED FOR SITE-SPECIFIC CRITERIA

PM evaluated site conditions to determine whether the generic residential criteria for all relevant pathways are applicable. It should be noted that soil samples were not analyzed for diesel range organics (DRO) or gasoline range organics (GRO). Therefore, PM is not able to determine that residual NAPL is not present within the soil matrix at concentrations that would preclude the use of the generic residential criteria for either the volatilization to indoor air inhalation pathway or the direct contact pathway due to the potential presence of residual NAPL.

PM further evaluated the applicability of the generic soil volatilization to indoor air criteria in accordance with Appendix C.1 of the EGLE Guidance Document for the Vapor Intrusion Pathway (May 2013 and updated 2020). In addition to the potential presence of residual NAPL, the proposed building will primarily consist of poured slab-on-grade concrete floors, that includes an elevator pit with a sump which precludes the use of the generic soil volatilization to indoor air criteria. PM has also identified the presence in soil of hazardous substances with acute, short-term risks that are not addressed by the generic criteria.

To evaluate the soil volatilization to indoor air pathway, PM requested and received from EGLE site-specific volatilization to indoor air criteria (SSVIAC). Refer to Appendix D for a copy of the SSVIAC developed by EGLE.

A source area determination was conducted in accordance with EGLE's July 2007 RRD Operational Memorandum Number 1. Attachment 7, Part 201 Generic Soil Inhalation Criteria for Ambient Air, Part 213 Tier 1 Soil Inhalation Risk-Based Screening Levels for Ambient Air document. Using a 2,700 square foot (0.06 acre) source area, a source size modifier of 1.15 was used to determine the soil inhalation criteria for ambient air. The modifier of 1.15 was multiplied by the generic soil inhalation criteria shown in the table of generic cleanup criteria to determine the applicable criteria for the Property and was used to evaluate whether detected concentrations in soil exceeded the Part 201 Residential Particulate Soil Inhalation (PSI) and Volatile Soil Inhalation (VSI) cleanup criteria.

6.0 IDENTIFCATION OF THE CATEGORY OF APPLICABLE CLEANUP CRITERIA

The subject property is currently zoned B-4: General Business District. Based on the proposed mixed use (i.e., an apartment building with commercial and residential tenants utilizing the proposed subject building) the residential category of cleanup criteria is appropriate..

7.0 CONTAMINANT INFORMATION

As discussed in Section 5.0, the generic criteria are not applicable to evaluate risk for one or more of the relevant pathways for the portion of the property that is a facility. For the VIAP PM compared the soil and soil gas analytical results with the EGLE developed SSVIAC.

The analytical results for the soil samples collected from the subject property were compared to the Part 201 generic residential cleanup criteria as presented in the December 2013 Cleanup Criteria Requirements for Response Activity (R299.1 to 299.50) for the following relevant pathways:

- Volatile Soil Inhalation
- Particulate Soil Inhalation

For the direct contact pathway, the generic residential criteria are not applicable, and PM has not developed site-specific criteria to evaluate this pathway.

7.1 LOCATIONS AND CONCENTRATIONS OF CONTAMINANTS OF CONCERN

The soil and soil gas sample locations and analytical results are summarized in Tables 1 and 2 and on Figures 3 and 4. The table below summarizes exceedances of the residential cleanup criteria and SSVIAC. The laboratory analytical reports and associated chain of custody documentation are included in Appendix E.

7.1.1 SOIL

Summary of Soil Analytical Results

Location (date)	Sample Depth (feet bgs)	Analysis	Compounds Exceeding the Residential Criteria and or SSVIAC
SB-1 (06/2021)	Soil: 4.0-5.0 and 8.0-9.0	VOCs and PNAs	None
SB-2 (06/2021)	Soil: 4.0-5.0 and 8.0-9.0	VOCs and PNAs	None
SB-3 (06/2021)	Soil: 1.0-2.0 and 5.0-6.0	VOCs and PNAs	None
SB-4 (06/2021)	Soil: 3.5-4.5 Soil:	VOCs, PNAs, PCBs, and MI-10 metals VOCs, PNAs, PCBs,	None
SB-5	6.0-7.0 Soil: 3.5-4.5	and MI-10 metals VOCs, PNAs, PCBs, and MI-10 metals	None Direct Contact – PNAs VIAP – PNAs and Mercury
(06/2021)	Soil: 7.0-8.0	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-6 (06/2021)	Soil: 5.5-6.5 and 14.0-15.0	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-7 (06/2021)	Soil: 1.0-2.0 and 5.5-6.5	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-8 (06/2021)	Soil: 1.0-2.0 and 7.0-8.0	VOCs, PNAs, PCBs, and MI-10 metals	None
	Soil: 0.5-1.5	VOCs and PNAs	Direct Contact – PNAs VIAP – VOCs and PNAs
SB-5R (11/2021)	Soil: 4.5-5.5 and 5.5-6.5	VOCs and PNAs	None
SB-6A (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None
SB-7A (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None
SB-8A (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None
SB-9 (11/2021)	Soil: 4.5-5.5	VOCs and PNAs	Direct Contact – PNAs VIAP – PNAs

Location (date)	Sample Depth (feet bgs)	Analysis	Compounds Exceeding the Residential Criteria and or SSVIAC
	Soil: 4.5-5.5	VOCs and PNAs	Direct Contact - PNAs
SB-10 (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	Direct Contact – PNAs VIAP – PNAs

DC - Direct Contact

VIAP - Volatilization to Indoor Air Pathway

No other concentrations of VOCs, PNAs, PCBs, and/or Michigan ten metals were identified in any of the remaining soil samples analyzed during the June and November 2021 site investigations above the laboratory MDLs and/or the most restrictive Part 201 Residential cleanup criteria.

7.1.2 SOIL GAS

Soil Gas Analytical Results

VOCs - No concentrations of VOCs were detected in the soil gas samples analyzed from the subject property above laboratory MDLs and/or the EGLE provided SSVIAC.

PNAs – Soil gas samples were not analyzed for volatile PNAs.

Mercury – Soil gas samples were not analyzed for Mercury.

8.0 IDENTIFICATION OF REMEDIAL ACTIONS TO MITIGATE RISKS THROUGH THE RELEVANT PATHWAYS

PM has compared the laboratory analytical results for all soil samples collected from the portion of the property that is demonstrated to be a facility and determined the following:

- There are no hazardous substances present that exceed the applicable generic residential
 criteria for the volatile soil inhalation (ambient air) or particulate soil inhalation pathways.
 There are no identified risks through these exposure pathways. No remedial actions are
 necessary.
- Hazardous substances are present at the facility at concentrations that present a risk through the direct contact and soil volatilization to indoor air pathways. Remedial actions are necessary to allow for unrestricted residential use of the portion of the property that is a facility.

The planned remedial actions at the portion of the subject property demonstrated to be a facility include the excavation of contaminated soils with proper landfill disposal. The "facility" to be excavated is identified on Figure 5. The extent of soil concentrations representative of a soil volatilization to indoor air and direct contact risk have been identified in soils bounded by SB-6 to the north, to the south by SB-6A, to the east by SB-7A, and to the west by SB-8A. Following soil removal activities, verification of soil remediation (VSR) samples will consist of using biased sampling strategies and field screening the floors and sidewalls prior to sample collection (to the extent possible) to document the removal of contaminated soils to concentrations below applicable residential generic and or site-specific cleanup criteria, and that the identified portion of the property is no longer a facility. VSR soil samples will be analyzed for VOCs (full 8260), PNAs, and mercury.

VSR Sampling Protocol:

- VSR sampling will be conducted in accordance with Section 1.3 of the EGLE Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria dated 2002. In addition, the VSR sampling will be conducted in a biased manner that documents the removal of the contamination source and contaminated soils to below applicable residential generic and or site-specific cleanup criteria.
- The VSR samples will be collected using biased sampling strategies that will incorporate all pertinent biases, including 1) source areas, 2) stained/olfactory soils, 3) preferential pathways for contaminant migration, 4) changes in soil characteristics such as sand/clay interfaces and fractures in clay and 5) soil types and characteristics.
- VSR sampling will include justification for the sample locations and field screening of the
 walls and floors of the excavation based on likely source depths, visual/olfactory evidence
 of impact, vertical profiling, and photoionization detector (PID) readings to demonstrate
 that the areas with the highest potential for contamination are sampled.
- Excavation activities will cease following the receipt of analytical results from VSR samples collected from the excavation that document the removal of the contamination source and contaminated soils to below applicable residential generic and or site-specific cleanup criteria, and that the portion of the property as depicted on Figure 5 is no longer a facility.

9.0 SIGNATURES

PM requests that EGLE approve the response activities identified within this ResAP – Remedial Action Plan that will allow the subject property to be utilized for Residential purposes with no unacceptable exposures relating to the current and proposed use of the property.

If you have questions regarding this report, please contact PM at (800) 313.2966.

Sincerely,

PM ENVIRONMENTAL

Nicholas Lieder Regional Manager

Site Investigation Services

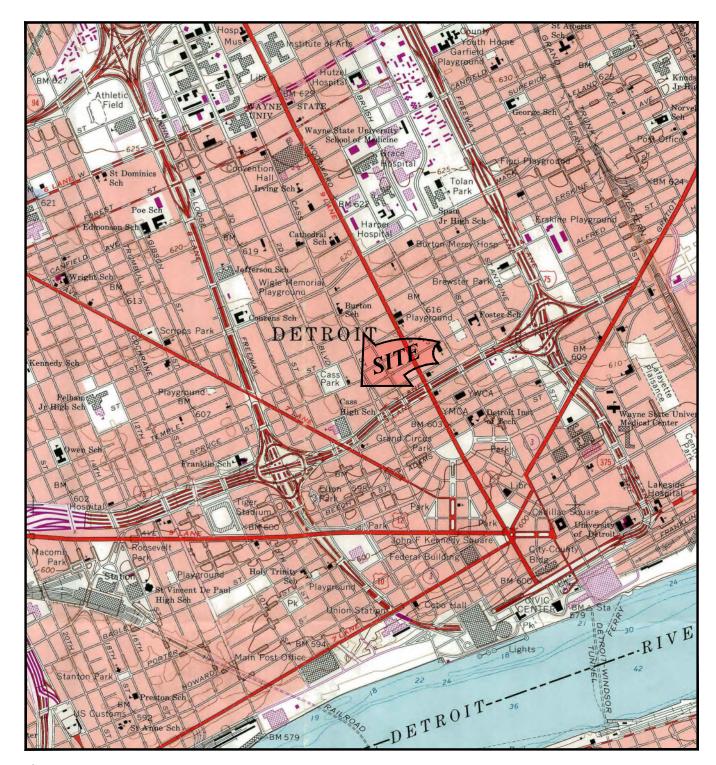
10.0 REFERENCES

- Table 1. Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, Updated December 21, 2020.
- Table 2. Soil: Residential, Part 201 Generic Cleanup Criteria and Screening Levels and Part 213 Risk-Based Screening Levels, Updated June 25, 2018.
- Table 3. Soil: Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels and Part 213 Risk-Based Screening Levels, Updated June 25, 2018.
- EGLE Volatilization to Indoor Air Pathway Screening Levels, September 4, 2020.
- EGLE Operational Memorandum No. 4 "Site Characterization and Remediation Verification

 Attachment 10, Peer Review Draft Groundwater Not in an Aquifer," February 2007.
- EGLE Operational Memorandum No. 2 "Sampling and Analysis," October 22, 2004, Revised July 5, 2007.
- EGLE Guidance Document for the Vapor Intrusion Pathway, May 2013, updated March 2021.
- Phase I ESA, August 30, 2019, PM.
- Phase I ESA, May 20, 2022, PM.

Figures





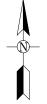


WAYNE COUNTY

FIGURE 1

PROPERTY VICINITY MAP

UNITED STATES GEOLOGICAL SURVEY, 7.5 MINUTE SERIES DETROIT, MI QUADRANGLE, 1968. PHOTO REVISED 1973 AND 1980.

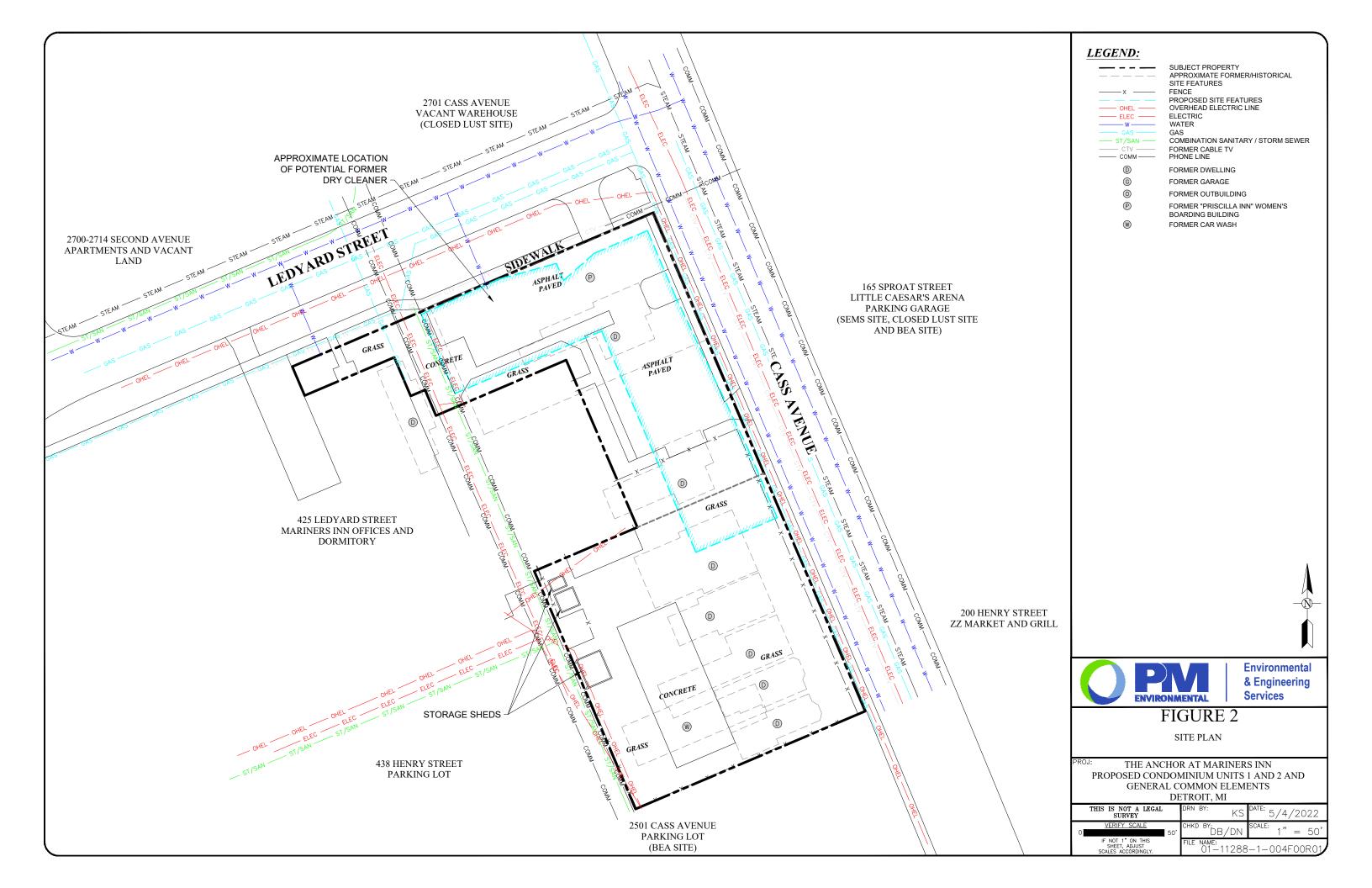


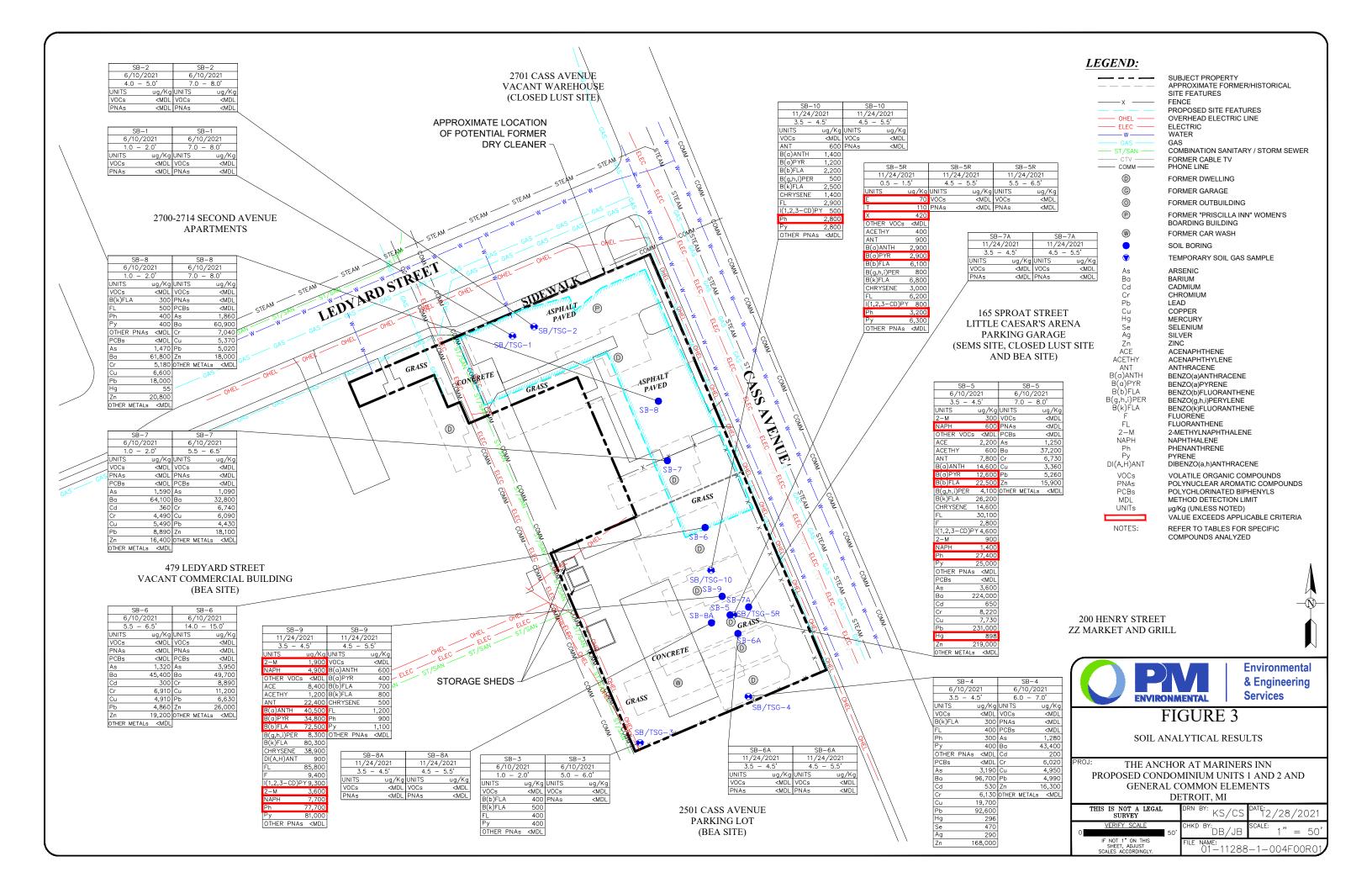


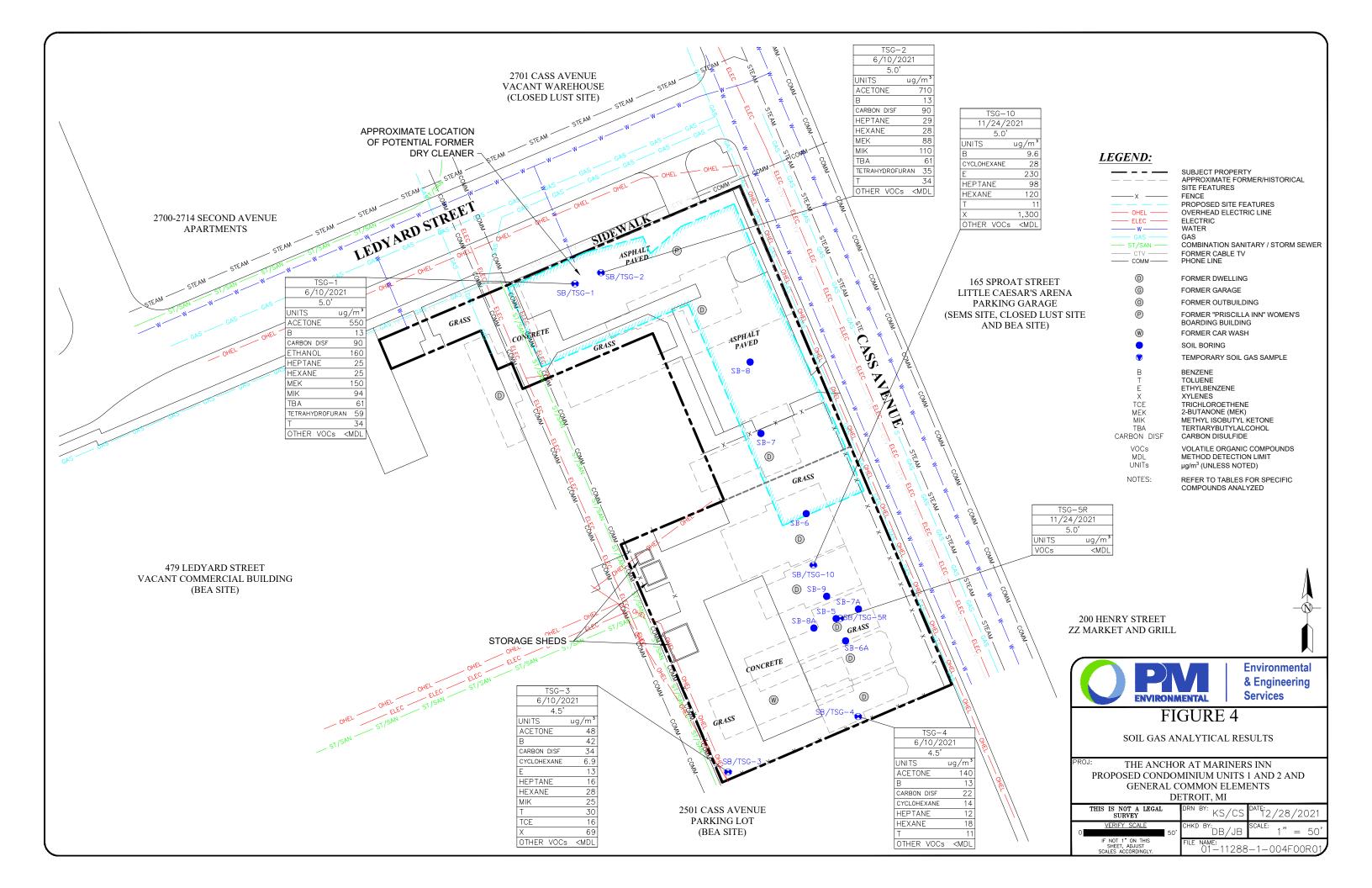
Environmental & Engineering Services

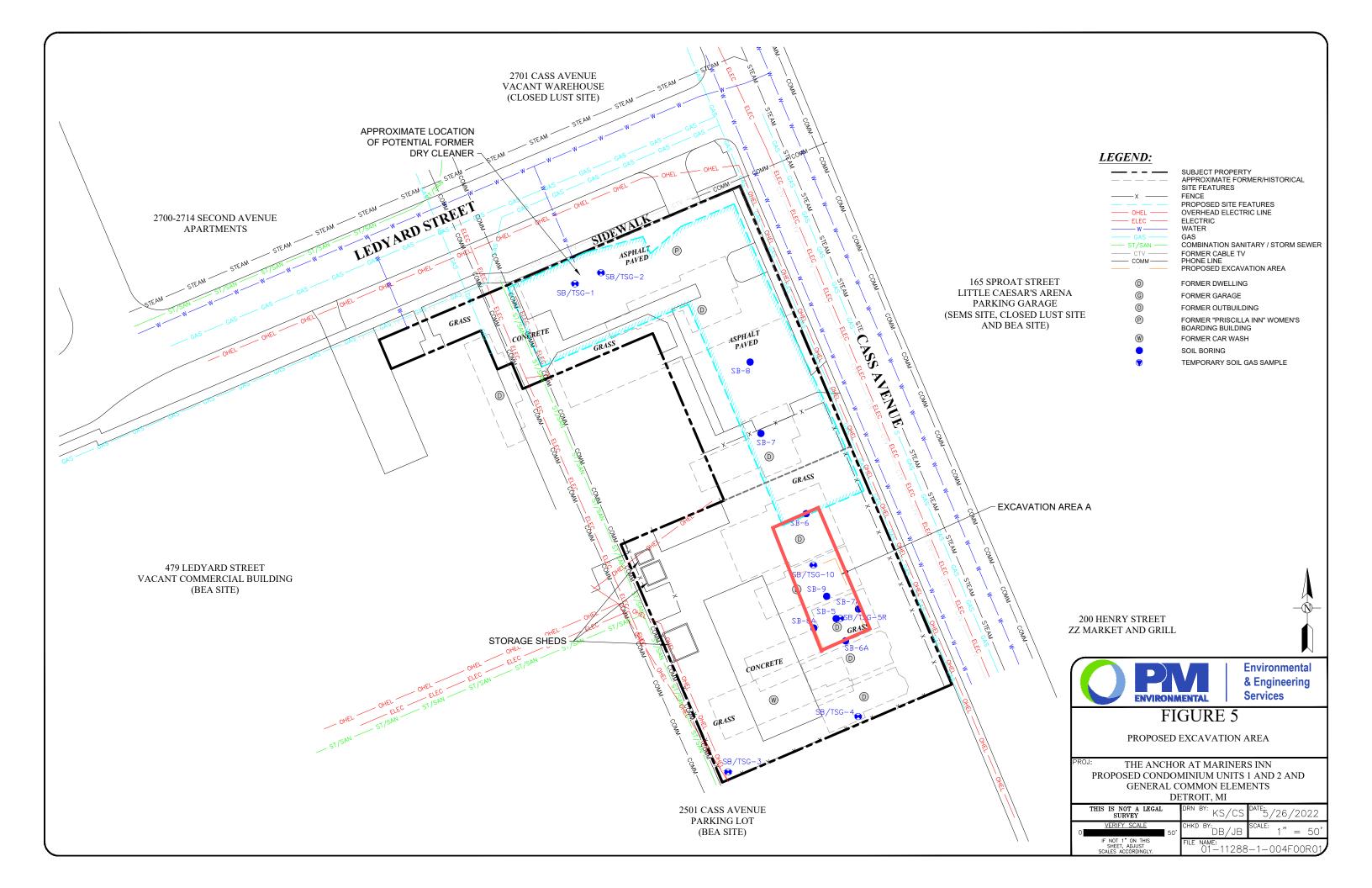
PROJ:
THE ANCHOR AT MARINERS INN
PROPOSED CONDOMINIUM UNITS 1 AND 2
AND GENERAL COMMON ELEMENTS
DETROIT, MI

	THIS IS NOT A LEGAL SURVEY		DRN BY	" KS	DATE: 5	/4/	2022
0	<u>VERIFY SCALE</u>	2,000'	CHKD E	BP/DN	SCALE: "	=	2,000'
	IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.		FILE NA	ъме:)1—1128	8-1-0	04F	00R01









Tables



TABLE 1 SUMMARY OF SOIL ANALYTICAL RESULTS VOCs, PNAs, PCBs, AND METALS EASTERN AND SOUTHERN PORTION OF 445 LEDYARD, DETROIT, MICHIGAN PM PROJECT #01-11288-1-0004

	Polynuclear Arom Polychlorinated Bip	c Compounds (VOCs), natic Compounds (PNAs) phenyls (PCBs), and Meta (µg/Kg)	als	Ethylbenzene	2-Methylnaphthalene 9	Naphthalene	Toluene 108883	səuəl XX 1330207	Other VOCs	Acenaphthene 62888	908 Acenaphthylene	Anthracene	ල ය රි රි රි	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	193395 Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene 94	Naphthalene 91203	Phenanthrene Phenanthrene	Dyrene	88 Od 1336363	Arsenic Arsenic	Жаціп Ваціп 7440393	ш о о о о о о о о о о	Chromium Chromium	7440508	Lead 2430021	Mercury	Selenium Selenium	Ja. Niver 7440224	Zinc
		-	Sample Depth	100414	91370	1	ı	1330207	various	03329	200900	120121	30333	30320	203992	191242	207009		33703	200440	00/3/	193393	91370	91203	83016	129000		7440302	7440393	7440439	10003031			7439970	1102492	7440224	7440000
Samp	DIE ID	Sample Date	(feet bgs)			VC	OCs											PNAs									PCBs					Meta	ais 				
					l	l 400	Ι	T	1		000						e Investigatio					I	l I					[1	T					T		
SB	3-1	06/10/2021	4.0-5.0	<80	<100	<400	<80	<280	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
			7.0-8.0	<60	<100	<300	<60	<160	<mdl< th=""><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA</th><th>NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
SB	3-2	06/10/2021	4.0-5.0	<70	<100	<300	<70	<170	<mdl< th=""><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th>NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA</th><th>NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
			7.0-8.0	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
SB	3-3	06/10/2021	1.0-2.0	<60	<200	<400	<60	<160	+	<300	<300	<300	<300	<300	400	<300	500	<300	<300	400	<300	<300	<300	<300	<300	400	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
			5.0-6.0	<70	<100	<300	<70	<170	<mdl< th=""><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th><300</th><th>NA 1330</th><th>NA 3.400</th><th>NA 06.700</th><th>NA 530</th><th>NA 6.120</th><th>NA 10.700</th><th>NA 02.600</th><th>NA 206</th><th>NA 470</th><th>NA 200</th><th>NA</th></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA 1330	NA 3.400	NA 06.700	NA 530	NA 6.120	NA 10.700	NA 02.600	NA 206	NA 470	NA 200	NA
SB	3-4	06/10/2021	3.5-4.5	<70	<100	<400	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>300</td><td><300</td><td><300</td><td>400</td><td><300</td><td><300</td><td><300</td><td><300</td><td>300</td><td>400</td><td><330</td><td>3,190</td><td>96,700</td><td>530</td><td>6,130</td><td>19,700</td><td>92,600</td><td>296</td><td>470</td><td></td><td>168,000</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	300	<300	<300	400	<300	<300	<300	<300	300	400	<330	3,190	96,700	530	6,130	19,700	92,600	296	470		168,000
			6.0-7.0	<60	<100	<300	<60	<160		<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	1,280	43,400	200	6,020	4,950	4,990	<50	<400	<200	16,300
SB	3-5	06/10/2021	3.5-4.5	<70	300	600	<70	<170	<mdl< td=""><td>2,200</td><td>600</td><td>7,800</td><td>14,600</td><td>12,600</td><td>22,500</td><td>4,100</td><td>26,200</td><td>14,600</td><td><300</td><td>30,100</td><td>2,800</td><td>4,600</td><td>900</td><td>1,400</td><td>27,400</td><td>25,000</td><td><330</td><td>3,600</td><td>224,000</td><td>650</td><td>8,220</td><td>7,730</td><td>231,000</td><td>898</td><td><400</td><td><200</td><td>219,000</td></mdl<>	2,200	600	7,800	14,600	12,600	22,500	4,100	26,200	14,600	<300	30,100	2,800	4,600	900	1,400	27,400	25,000	<330	3,600	224,000	650	8,220	7,730	231,000	898	<400	<200	219,000
			7.0-8.0	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><330</td><td>1,250</td><td>37,200</td><td><200</td><td>6,730</td><td>3,360</td><td>5,260</td><td><50</td><td><400</td><td><200</td><td>15,900</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	1,250	37,200	<200	6,730	3,360	5,260	<50	<400	<200	15,900
SB	3-6	06/10/2021	5.5-6.5	<70	<100	<400	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><330</td><td>1,320</td><td>45,400</td><td>300</td><td>6,910</td><td>4,910</td><td>4,860</td><td><50</td><td><400</td><td><200</td><td>19,200</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	1,320	45,400	300	6,910	4,910	4,860	<50	<400	<200	19,200
			14.0-15.0	<60	<100	<300	<60	<160	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><330</td><td>3,950</td><td>49,700</td><td><200</td><td>8,890</td><td>11,200</td><td>6,630</td><td><50</td><td><400</td><td></td><td>26,000</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	3,950	49,700	<200	8,890	11,200	6,630	<50	<400		26,000
SB	3-7	06/10/2021	1.0-2.0	<60	<100	<300	<60	<160	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><330</td><td>1,590</td><td>64,100</td><td>360</td><td>4,490</td><td>5,490</td><td>8,890</td><td><50</td><td><400</td><td><200</td><td>16,400</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	1,590	64,100	360	4,490	5,490	8,890	<50	<400	<200	16,400
			5.5-6.5	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><330</td><td>1,090</td><td>32,800</td><td><200</td><td>6,740</td><td>6,090</td><td>4,430</td><td><50</td><td><400</td><td></td><td>18,100</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	1,090	32,800	<200	6,740	6,090	4,430	<50	<400		18,100
SB	3-8	06/10/2021	1.0-2.0	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>300</td><td><300</td><td><300</td><td>500</td><td><300</td><td><300</td><td><300</td><td><300</td><td>400</td><td>400</td><td><330</td><td>1,470</td><td>61,800</td><td><200</td><td>5,180</td><td>6,600</td><td>18,000</td><td>55</td><td><400</td><td></td><td>20,800</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	300	<300	<300	500	<300	<300	<300	<300	400	400	<330	1,470	61,800	<200	5,180	6,600	18,000	55	<400		20,800
			7.0-8.0	<60	<100	<300	<60	<160	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><330</td><td>1,860</td><td>60,900</td><td><200</td><td>7,040</td><td>5,370</td><td>5,020</td><td><50</td><td><400</td><td><200</td><td>18,000</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<330	1,860	60,900	<200	7,040	5,370	5,020	<50	<400	<200	18,000
			0.5.4.5		400	000	140	100	MDI	000	400	000	0.000	Т			Site Investiga	Т	000	0.000	000	000	000	000		0.000	A.I.A	N/A	NIA I	210	NIA.	N 10	l NA	NIA	NIA I		
SB-	FD.	44/04/0004	0.5-1.5	70	<100	<300	110	420	<mdl< td=""><td><300</td><td>400</td><td>900</td><td>2,900</td><td>2,900</td><td>6,100</td><td>800</td><td>6,800</td><td>3,000</td><td><300</td><td>6,200</td><td><300</td><td>800</td><td><300</td><td><300</td><td>3,200</td><td>6,300</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	400	900	2,900	2,900	6,100	800	6,800	3,000	<300	6,200	<300	800	<300	<300	3,200	6,300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
28-	-5K	11/24/2021	4.5-5.5	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA
			5.5-6.5	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
SB-	-6A	11/24/2021	3.5-4.5	<70	<100	<400	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
			4.5-5.5	<70	<100	<300	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA</td><td>NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA
SB-	-7A	11/24/2021	3.5-4.5	<70	<100	<400	<70	<170	<mdl< td=""><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300 <300</td><td><300</td><td><300</td><td><300</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300 <300	<300	<300	<300	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
			4.5-5.5 3.5-4.5	<70 <60	<100 <100	<300 <300	<70 <60	<170 <160	<mdl< td=""><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td><300</td><td><300 <300</td><td><300 <300</td><td><300 <300</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300 <300	<300	<300 <300	<300 <300	<300 <300	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
SB-	-8A	11/24/2021				-		<160	<mdl< td=""><td></td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td></td><td></td><td></td><td></td><td><300</td><td><300</td><td><300</td><td><300</td><td></td><td><300</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>		<300	<300	<300	<300	<300	<300					<300	<300	<300	<300		<300	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
			4.5-5.5	<60	<100	<300	<60	<170	<mdl< th=""><th><300</th><th></th><th>22,400</th><th></th><th></th><th></th><th>8,300</th><th><300</th><th><300</th><th><300 900</th><th><300</th><th></th><th></th><th></th><th></th><th><300</th><th></th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th>NA NA</th><th></th><th>NA NA</th><th>NA NA</th><th>NA NA</th></mdl<>	<300		22,400				8,300	<300	<300	<300 900	<300					<300		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		NA NA	NA NA	NA NA
SB	3-9	11/24/2021	3.5-4.5 4.5-5.5	<70	1,900	4,900	<70	<280	<mdl< td=""><td>8,400</td><td>1,200</td><td><300</td><td>40,500</td><td>34,800</td><td>72,500</td><td></td><td>80,300</td><td>38,900 500</td><td></td><td>85,800</td><td>9,400</td><td>9,300</td><td>3,600 <300</td><td>7,700 <300</td><td></td><td>81,000 1.100</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	8,400	1,200	<300	40,500	34,800	72,500		80,300	38,900 500		85,800	9,400	9,300	3,600 <300	7,700 <300		81,000 1.100	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
			3.5-4.5	<80 <70	<200 <100	<400 <300	<80 <70	<170	<mdl< td=""><td><300 <300</td><td><300 <300</td><td>600</td><td>1 400</td><td>400 1,200</td><td>700 2,200</td><td><300 500</td><td>800</td><td>1,400</td><td><300 <300</td><td>1,200 2,900</td><td><300 <300</td><td><300 500</td><td><300</td><td><300</td><td>900</td><td>2,800</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300 <300	<300 <300	600	1 400	400 1,200	700 2,200	<300 500	800	1,400	<300 <300	1,200 2,900	<300 <300	<300 500	<300	<300	900	2,800	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
SB-	-10	11/24/2021	4.5-5.5	<60	<100	<300	<60	<160	<mdl< td=""><td><300</td><td><300</td><td><300</td><td>1,400</td><td><300</td><td><300</td><td><300</td><td>2,500 <300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td><300</td><td>2,800 <300</td><td><300</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td><td>NA NA</td></mdl<>	<300	<300	<300	1,400	<300	<300	<300	2,500 <300	<300	<300	<300	<300	<300	<300	<300	2,800 <300	<300	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	'						1 22	l					Cleanu	ıp Criteria R on-Residen	equiremential Part 20	its for Resp 1 Generic (n to Indoor	oonse Activ Cleanup Cri r Air Criteria	ity (R 299.1	R 299.50) reening Lev	vels/Part 2			ng Levels, J														
						1										esidential (1															
	Background Levels			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,800	75,000	1,200	18,000	32,000	21,000	130	410	1,000	47,000
	Glacial Lobe (2005 Backg	ound Soil Survey)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19,600	612,000	2,000	20,300	29,700	25,300	400	500	ID	65,800
	otection (Res DWP)			1,500	57,000	35,000	16,000	5,600	Various	3.00E+05	5,900	41,000	NLL	NLL	NLL	NLL	NLL	NLL	NLL	7.30E+05	3.90E+05	NLL	57,000	35,000	56,000	4.80E+05	NLL	4,600	1.30E+06	6,000	30,000	5.80E+06	5.05.0(O.V	1,700	4,000	,	2.40E+06
	face Water Interface Prote			360	4,200	730	5,400	980	Various	8,700	ID	ID	NLL	NLL	NLL	NLL	NLL	NLL	NLL	5,500	5,300	NLL	4,200	730	2,100	ID	NLL	4,600		3.7E+5{G,X}	3,300	1.2E+5 {G}	}	50 (IVI), 1.2	400	100 (M); 27	
	to Indoor Air Inhalation (•	/4 acre 1.15 source	87,000	2.70E+06		3.3E+05 {C}		Various	1.9E+08	1.60E+06	1.0E+9 {D}	NLV	NLV	ID	NLV	NLV	ID	NLV	1.0E+9 {D}	5.8E+08	NLV	2.70E+06	2.50E+05	2.8E+06	1.0E+9 {D}	1.2E+03	NLV	NLV	NLV	NLV	NLV	NLV	48,000	NLV	NLV	NLV
multiplier		. ,		8.28E+05	1.73E+06		3.22E+06		Various	9.3E+07	2.5E+06	1.6E+09	NLV	NLV	ID	NLV	NLV	ID	NLV	8.5E+08	1.5E+08	NLV	1.7E+06	3.5E+05		7.5E+08	2.8E+05	NLV	NLV	NLV	NLV	NLV	NLV	52,001	NLV	NLV	NLV
	culate Soil Inhalation (Res	s PSI) with 1/4 acre 1.15 s	source multiplier		7.71E+08	-	3.11E+10	-	Various	1.61E+10	2.65E+09	7.71E+10	ID	1.73E+06	ID	9.20E+08	ID	ID	ID	1.07E+10	1.07E+10	ID	7.71E+08	2.30E+08	7.71E+06	7.71E+09	5.98E+06	8.28E+05	3.80E+08	1.96E+06	2.99E+05	1.50E+08		2.30E+07	1.50E+08	7.71E+06	ID
Direct Contact (Re	es DC)			2.2E+07 {C}	8.10E+06	1.60E+07	5.0E+07 {C}	4.1E+08 {C}	Various	4.1E+07	1.6E+06	2.3E+08	20,000	2,000	20,000	2.5E+06	2.00E+05	2.0E+06	2,000	4.6E+07	2.7E+07	20,000	8.10E+06	1.6E+07	1.6E+06	2.9E+07	4,000 {T}	7,600	3.70E+07	5.50E+05	2.50E+06	2.00E+07	4.00E+05	1.60E+05	2.60E+06	2.50E+06	1.70E+08
		:				I	T	T						ı		Γ	SVIAC (µg/l	П	T			I		ı	ı	-		Г	ı	Т					Г		
	oncentration Screening L			1.40E+05	NA	NA	2.50E+05	-	Various	NA	NA	NA	NA 1.60E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA
Residential Site-S	pecific Volatilization to Ir	ndoor Air Criteria (VIAC)		12 (M)	1,700	67 (M)	3,700	280 (J)	Various	2.10E+05	ID	1.30E+07	(MM)	NA	NA	NA	NA	NA	NA	NA	4.70E+05	NA	1,700	67 (M)	1,700	2.50E+07	NA	NA	NA	NA	NA	NA	NA	22 (M)	NA	NA	NA

Applicable Criteria Exceeded

BOLD Value Exceeds Applicable Cleanup Criteria

bgs Below Ground Surface

μg/Kg Micrograms Per Kilogram
<MDL Not detected at levels above the laboratory Method Detection Limit (MDL)

NA Not Applicable

NL Not Listed

NLL Not Likely to Leach

NLV Not Likely to Volatilize

ID Insufficient Data

{G} Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 146 mg/L CaCO3 Hardness: Station ID 259010, Station Detroit River, near Detroit, MI.

{G} Metal GSIP Criteria for Surface Water Not Protected for Drinking Water Use based on 146 mg/L CaCO3 Hardness: Station ID 259010, Station Detr {} Other Alpha notation, please refer to EGLE Footnotes R 299.49 Footnotes for Generic Cleanup Criteria Tables, December 21, 2020

TABLE 2 SUMMARY OF SOIL GAS ANALYTICAL RESULTS

EASTERN AND SOUTHERN PORTION OF 445 LEDYARD, DETROIT, MICHIGAN PM PROJECT #01-11288-1-0004

	olatile Organic Compoun (μg/m³)		Acetone	Benzene	Carbon disulfide	Cyclohexane	Ethanol	Ethylbenzene	Heptane	Hexane	Methyl ethyl ketone	Methyl Isobutyl Ketone	Tertiary Butyl Alcohol	Tetrahydrofuran	Toluene	Trichloroethylene	Xylenes (total)	Other VOCs
	mical Abstract Service Nu	umber (CAS#) Sample Depth	67641	71432	75150	110827	64175	100414	142825	110543	78933	108101	75650	109999	108883	79016	1330207	Various
Sample ID	Sample Date	(feet bgs)								VC)Cs							
					T	PM's .	June 2021 Sit	te Investigation	n		T	T	T	T				
TSG-1	06/10/2021	5.0	550	13	90	<6.9	160	<8.7	25	25	150	94	61	59	34	<11	<26	<mdl< td=""></mdl<>
TSG-2	06/10/2021	5.0	710	13	90	<6.9	<110	<8.7	29	28	88	110	61	35	34	<11	<26	<mdl< td=""></mdl<>
TSG-3	06/10/2021	4.5	48	42	34	6.9	<47	13	16	28	<59	25	<30	<5.9	30	16	69	<mdl< td=""></mdl<>
TSG-4	06/10/2021	4.5	140	13	22	14	<47	<8.7	12	18	<59	<20	<30	<5.9	11	<11	<26	<mdl< td=""></mdl<>
						PM's No	vember 2021	Site Investiga	ation									
TSG-5R	11/24/2021	5.0	<48	<6.4	<16	<6.9	<47	<8.7	<8.2	<7.0	<17	<20	<30	<5.9	<7.5	<11	<26	<mdl< td=""></mdl<>
TSG-10	11/24/2021	5.0	<48	9.6	<16	28	<47	230	98	120	<17	<20	<30	<5.9	11	<11	1,300	<mdl< td=""></mdl<>
				EG	SLE Site-Spe	fic Volatilizat	ion to Indoo	r Air Criteria	(SSVIAC), Ju	ıne 7, 2022								
			EG	LE Resident	ial/Nonreside	ential Volatili	zation to Ind	oor Air Path	way (VIAP) S	creening Lev	/els (μg/m3)							
Residential Site-Specif	fic Volatilization to Indoo	r Air Criteria (VIAC)	1.0E+06 (EE)	110	24,000	2.10E+05	6.3E+05 (EE)	340	1.20E+05	24,000	1.7E+05 (DD)	27,000	2,500	70,000	1.70E+05	67 (DD)	7,600 (J)	Various

Screening Level Exceeded

BOLD Value Exceeds Applicable Screening Level

<MDL Not detected at or above laboratory reporting or detection limits

NA Not Available/Not Applicable

bgs Below Ground Surface

NL Not Listed

ID Insufficient Data

μg/m³ micrograms per cubic meter

{} Other Alpha notation, please refer to EGLE Footnotes R 299.49 Footnotes for Generic Cleanup Criteria Tables, December 21, 2020

Appendix A



WAYNE COUNTY CONDOMINIUM SUBDIVISION PLAN NO.______EXHIBIT "B" TO THE MASTER DEED OF

MARINERS INN CONDOMINIUM

CITY OF DETROIT, WAYNE COUNTY, MICHIGAN

DEVELOPER

SCRIPPS PARK ASSOCIATES, L.L.C. 32500 TELEGRAPH, SUITE #222 BINGHAM FARMS, MI 48025 ENGINEERS & SURVEYORS

GIFFELS WEBSTER 28 W. ADAMS, SUITE 1200 DETROIT, MICHIGAN 48226

PROPERTY DESCRIPTION

PARCEL 1

LOTS 3 THROUGH 12, CASS FARM SUBDIVISION OF BLOCKS 79 AND 80, AS RECORDED IN LIBER 1, PAGE 93 OF PLATS, WAYNE COUNTY RECORDS. TOGETHER WITH ALL THAT PART OF THE NORTH—SOUTH VACATED PUBLIC ALLEY, (20 FEET WIDE) IN BLOCK BOUNDED BY SECOND BOULEVARD, CASS AVENUE, HENRY AND LEDYARD STREETS WESTERLY OF AND ABUTTING THE WEST LINE OF THE NORTH 22.83 FEET OF LOT 5, AND LOTS 6 THROUGH 9; ALSO LYING EASTERLY OF AND ABUTTING THE EAST LINE OF LOT 10 OF THE "PLAT OF THE SUBDIVISION, BLOCKS 79, 80, 81 AND 82 OF THE CASS FARM", AS RECORDED IN LIBER 1 OF PLATS, PAGES 92 AND 93, CITY OF DETROIT, WAYNE COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT THE INTERSECTION OF THE WESTERLY LINE OF CASS AVENUE (71' WIDE) AND THE SOUTHERLY LINE OF LEDYARD STREET (100' WIDE), ALSO BEING THE NORTHEAST CORNER OF LOT 9 OF BLOCK 79 OF SAID SUBDIVISION OF THE CASS FARM; THENCE ALONG SAID WESTERLY LINE, SOUTH 23 DEGREES 48 MINUTES 35 SECONDS EAST 334.34 FEET RECORD, 334.95 FEET MEASURED; THENCE SOUTH 66 DEGREES 11 MINUTES 25 SECONDS WEST 150.00 FEET; THENCE NORTH 23 DEGREES 48 MINUTES 35 SECONDS WEST 170.00' RECORD, 170.15 FEET MEASURED; THENCE NORTH 23 DEGREES 48 MINUTES 35 SECONDS WEST 207.17 FEET RECORD, 207.41 FEET MEASURED TO THE SOUTHERLY LINE OF SAID LEDYARD STREET; THENCE ALONG SAID SOUTHERLY LINE, NORTH 66 DEGREES 06 MINUTES 12 SECONDS EAST 320.00 FEET RECORD, 320.15 FEET MEASURED TO THE POINT OF BEGINNING, AND CONTAINING 1.96 ACRES.

ATTENTION: WAYNE COUNTY REGISTER OF DEEDS

THE CONDOMINIUM SUBDIVISION PLAN NUMBER MUST BE ASSIGNED IN CONSECUTIVE SEQUENCE. WHEN A NUMBER HAS BEEN ASSIGNED TO THIS PROJECT, IT MUST BE PROPERLY SHOWN IN THE TITLE (SHEET 1) AND THE SURVEYOR'S CERTIFICATE (SHEET 2).

	SHEET INDEX
1	COVER SHEET
2	SURVEY PLAN
3	SITE PLAN
4	UTILITY PLAN
5	COORDINATES AND UNIT INFORMATION

NOTE:

THIS CONDOMINIUM SUBDIVISION PLAN IS NOT REQUIRED TO CONTAIN DETAILED PROJECT DESIGN PLANS PREPARED BY THE APPROPRIATE LICENSED DESIGN PROFESSIONAL. SUCH PROJECT DESIGN PLANS ARE FILED, AS PART OF THE CONSTRUCTION PERMIT APPLICATION, WITH THE ENFORCING AGENCY FOR THE STATE CONSTRUCTION CODE IN THE RELEVANT GOVERNMENTAL SUBDIVISION. THE ENFORCING AGENCY MAY BE A LOCAL BUILDING DEPARTMENT OR THE STATE DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS.

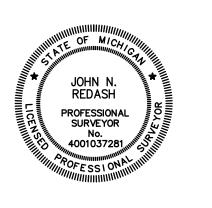
giffels webster

ENGINEERS
SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS

28 W. ADAMS STREET SUITE 1200 DETROIT, MI 48226 P (313) 962-4442 www.giffelswebster.com

MK
JNR
MPM
JNR

SEAL:





KNOW WHAT'S BELOW.

CALL BEFORE YOU DIG

DATE: ISSUE:

MARINERS INN
CONDOMINIUM
CITY OF DETROIT
WAYNE COUNTY
MICHIGAN

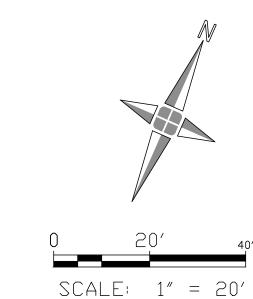
 DATE:
 12.03.2020

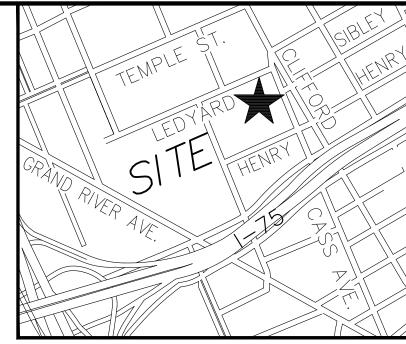
 SCALE:
 NO SCALE

 SHEET:
 1

PROJECT: 19535.05D

Copyright © 2020 Giffels Webster. No reproduction shall be made without the BENCHMARK NO.1 ELEV. 133.77'





LOCATION MAP (NOT TO SCALE)

giffels webster **ENGINEERS** SURVEYORS **PLANNERS** LANDSCAPE ARCHITECTS 28 W. ADAMS STREET **SUITE 1200**

> P (313) 962-4442 www.giffelswebster.com

> > EXECUTIVE: MK MANAGER: JNR DESIGNER: MPM Q. CTRL: JNR SECTION:

DETROIT, MI 48226

SEAL:

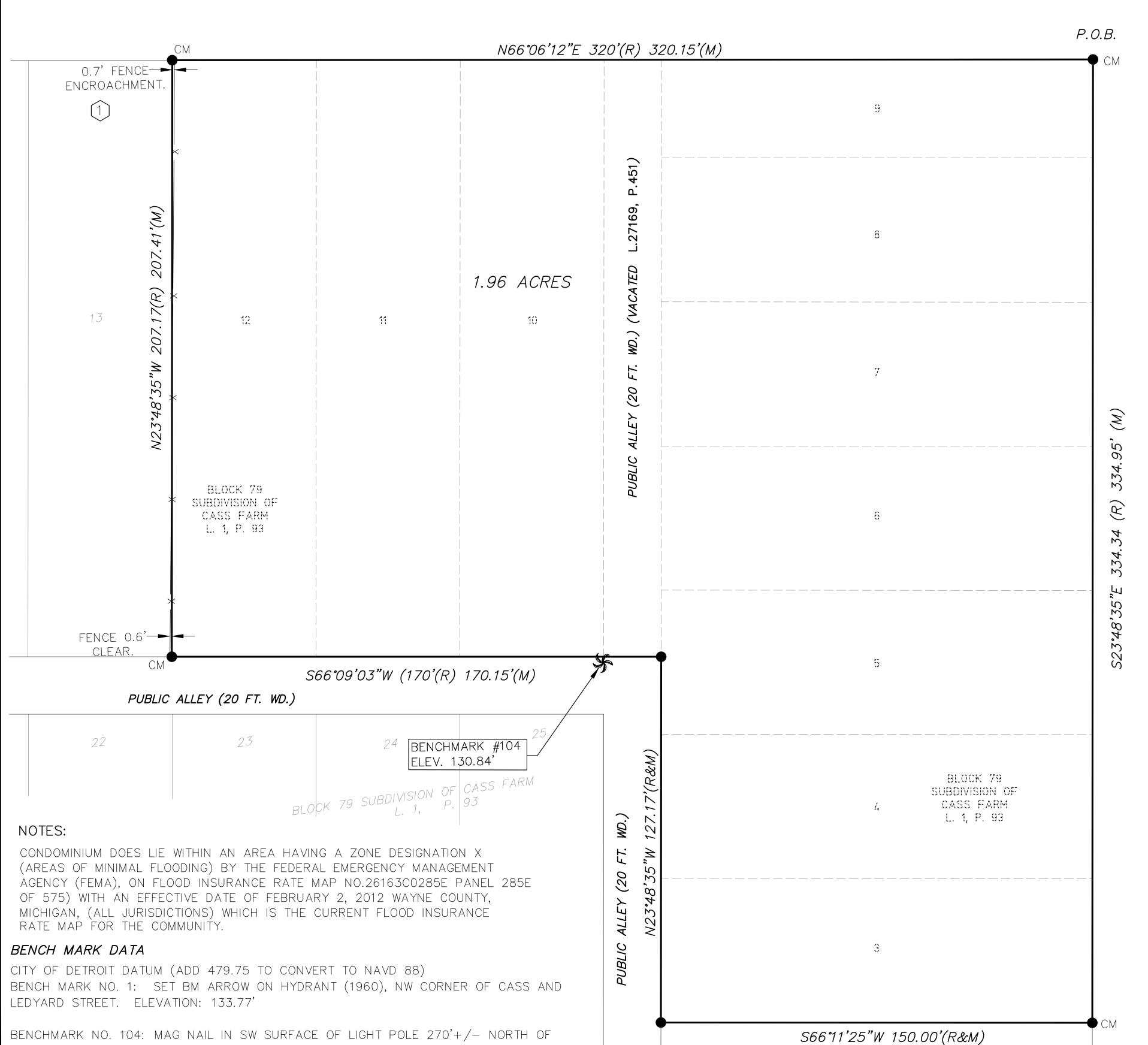
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

DATE: ISSUE:

MARINERS INN CONDOMINIUM CITY OF DETROIT **WAYNE COUNTY**

12.03.2020 SCALE: 1"=20' 2 PROJECT: 19535.05D No reproduction shall be made without th

MICHIGAN



LEDYARD STREET (100 FT. WD.)

HENRY, 210'+/- WEST OF CASS. ELEVATION: 130.84'

BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.

SURVEYOR'S CERTIFICATE

I, JOHN N. REDASH, PROFESSIONAL LAND SURVEYOR OF THE STATE OF MICHIGAN, HEREBY CERTIFY:

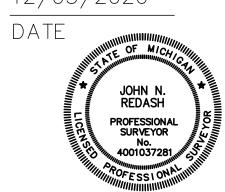
THAT THE SUBDIVISION PLAN KNOW AS WAYNE COUNTY CONDOMINIUM SUBDIVISION PLAN NO. ____ AS SHOWN ON THE ACCOMPANYING DRAWINGS, REPRESENTS A SURVEY ON THE GROUND MADE UNDER MY DIRECTION, THAT THERE ARE EXISTING ENCROACHMENTS UPON THE LANDS AND THE PROPERTY HEREIN SHOWN AND DESCRIBED.

THAT THE REQUIRED MONUMENTS AND IRON MARKERS HAVE BEEN LOCATED IN THE GROUND AS REQUIRED BY RULES PROMULGATED UNDER SECTION 142 OF ACT 59 OF THE PUBLIC ACTS OF 1978, AS AMENDED.

THAT THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS REQUIRED BY THE RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978 AS AMENDED.

THAT THE BEARINGS AS SHOWN, ARE NOTED ON THE SURVEY PLAN AS REQUIRED BY THE RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978 AS AMENDED.

12/03/2020



JOHN N. REDASH, P.S. NO. 4001037281 GIFFELS WEBSTER 28 W. ADAMS, SUITE 1200 DETROIT, MI 48226

LEGEND

--- PARCEL BOUNDARY

DENOTES AN ENCROACHMENT

C.M. CONCRETE MONUMENT

B.M. BENCH MARK

(R) RECORDED BEARING OR DISTANCE MEASURED BEARING OR DISTANCE

BENCHMARK

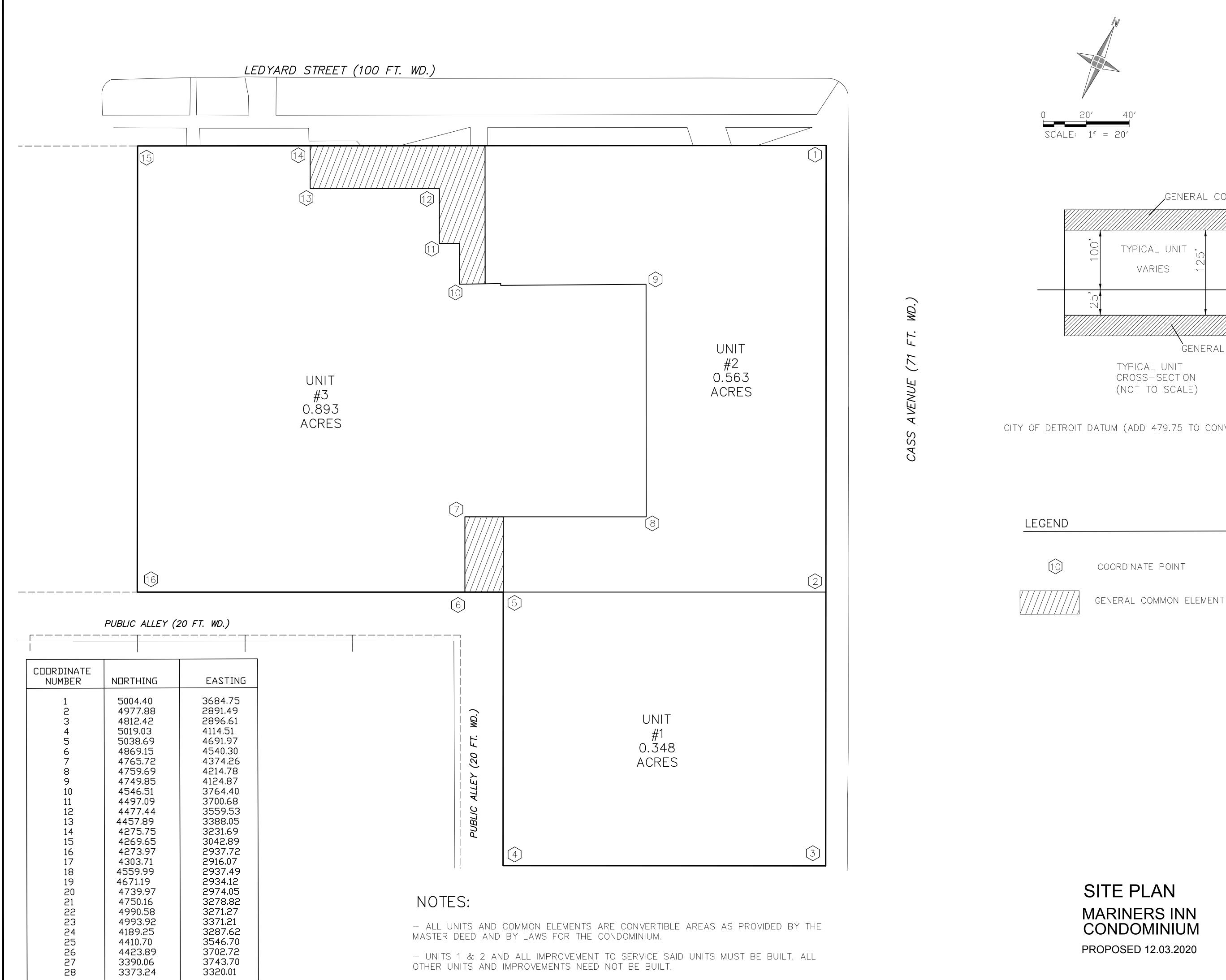
P.O.B. POINT OF BEGINNING CM
INDICATES A SET MONUMENT WHICH IS ONE-HALF (1/2) INCH DIAMETER STEEL BAR THIRTY-SIX (36) INCHES LONG, ENCASED IN

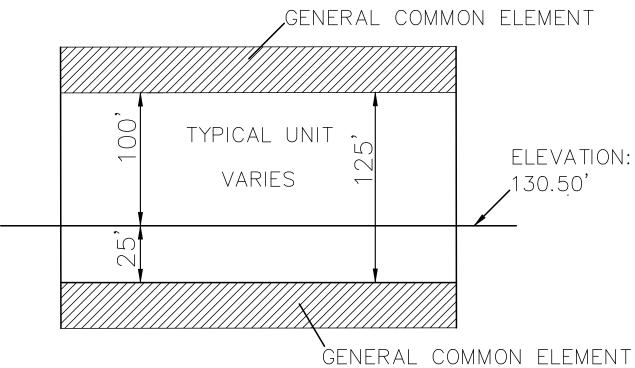
INDICATES A SET REBAR WHICH IS ONE-HALF (1/2) INCH DIAMETER STEEL BAR EIGHT (8) INCHES LONG, DRILLED AND GROUTED IN PLACE.

CONCRETE FOUR (4) INCHES IN DIAMETER.

SURVEY PLAN MARINERS INN CONDOMINIUM

PROPOSED 12.03.2020





(NOT TO SCALE)

CITY OF DETROIT DATUM (ADD 479.75 TO CONVERT TO NAVD 88)

ENGINEERS SURVEYORS **PLANNERS** LANDSCAPE ARCHITECTS

28 W. ADAMS STREET **SUITE 1200** DETROIT, MI 48226 P (313) 962-4442 www.giffelswebster.com

XECUTIVE:	MK
//ANAGER:	JNR
ESIGNER:	MPM
Q. CTRL:	JNR
SECTION:	

SEAL:

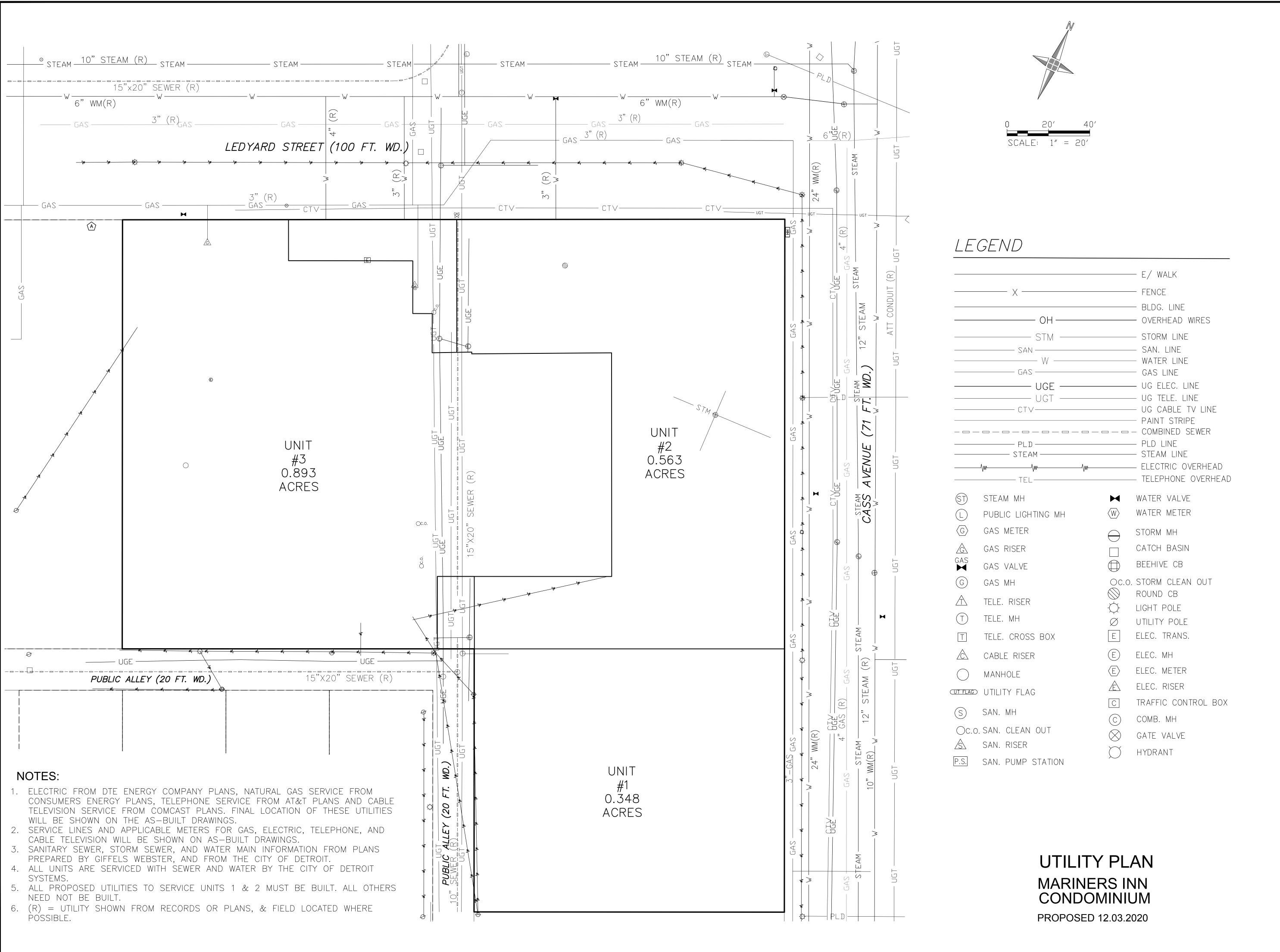


KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

DATE: ISSUE:

MARINERS INN CONDOMINIUM CITY OF DETROIT WAYNE COUNTY **MICHIGAN**

12.03.2020 SCALE: 1"=20' PROJECT: 19535.05D Copyright © 2020 Giffels Webster. No reproduction shall be made without the



giffels webster

ENGINEERS
SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS

28 W. ADAMS STREET SUITE 1200 DETROIT, MI 48226 P (313) 962-4442 www.giffelswebster.com

EXECUTIVE:	MK
MANAGER:	JNR
DESIGNER:	MPM
Q. CTRL:	JNR
SECTION:	

SEAL:





KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

DATE: ISSUE:

MARINERS INN
CONDOMINIUM
CITY OF DETROIT
WAYNE COUNTY
MICHIGAN

DATE: 12.03.2020

SCALE: 1"=20'

SHEET: 4

PROJECT: 19535.05D

Copyright © 2020 Giffels Webster.
No reproduction shall be made without the

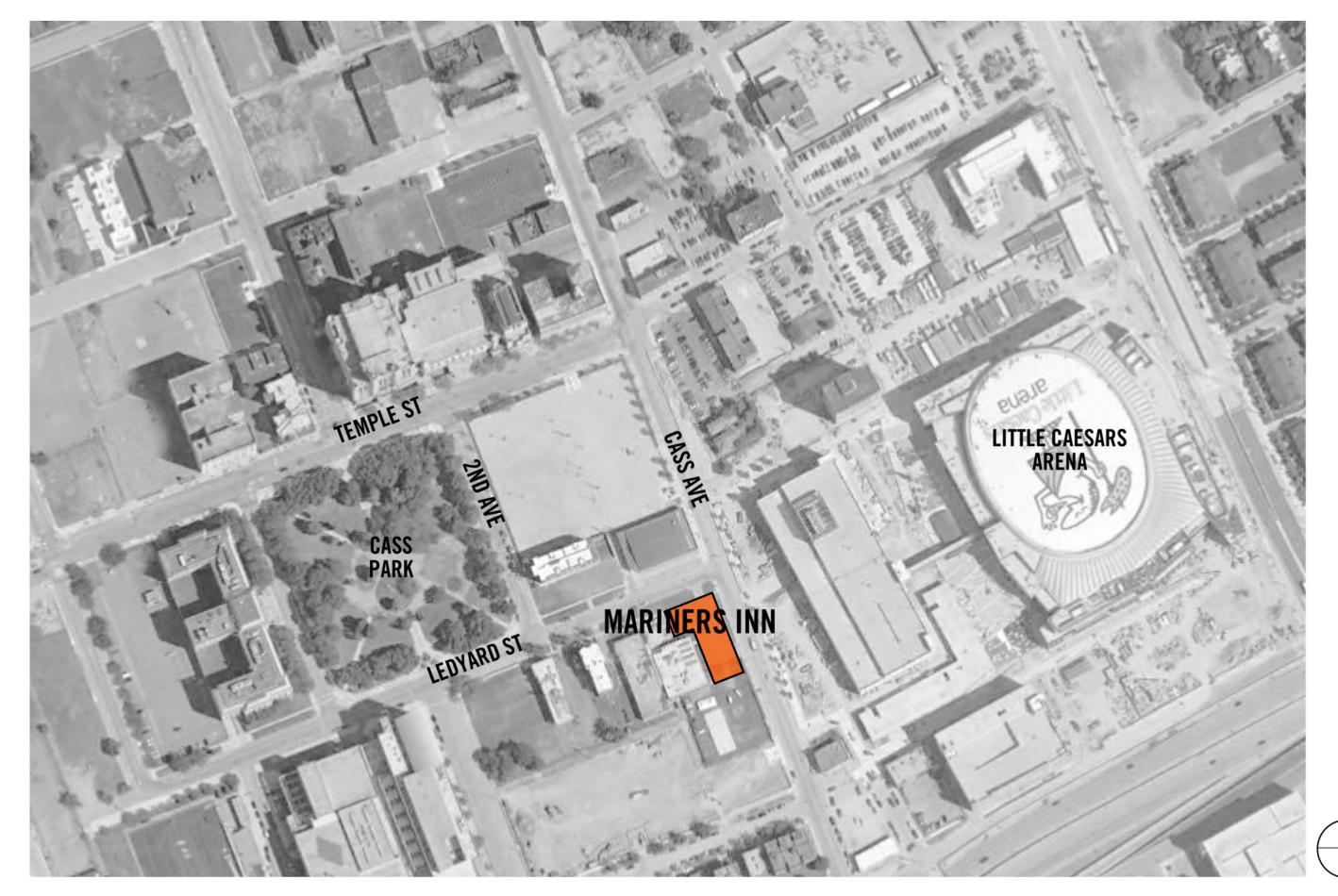
Mariners Inn

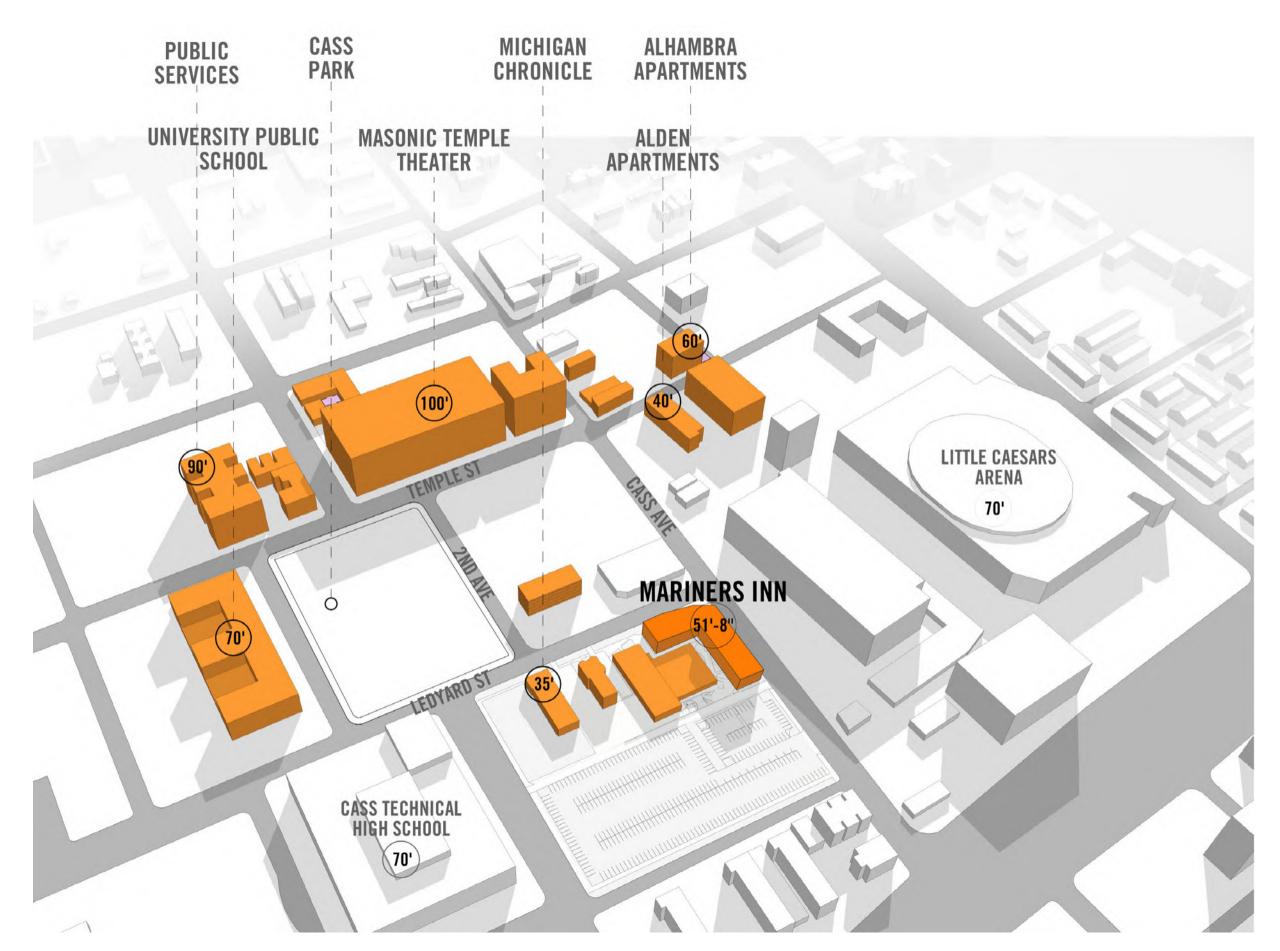
PDD Design Review / March 4, 2021

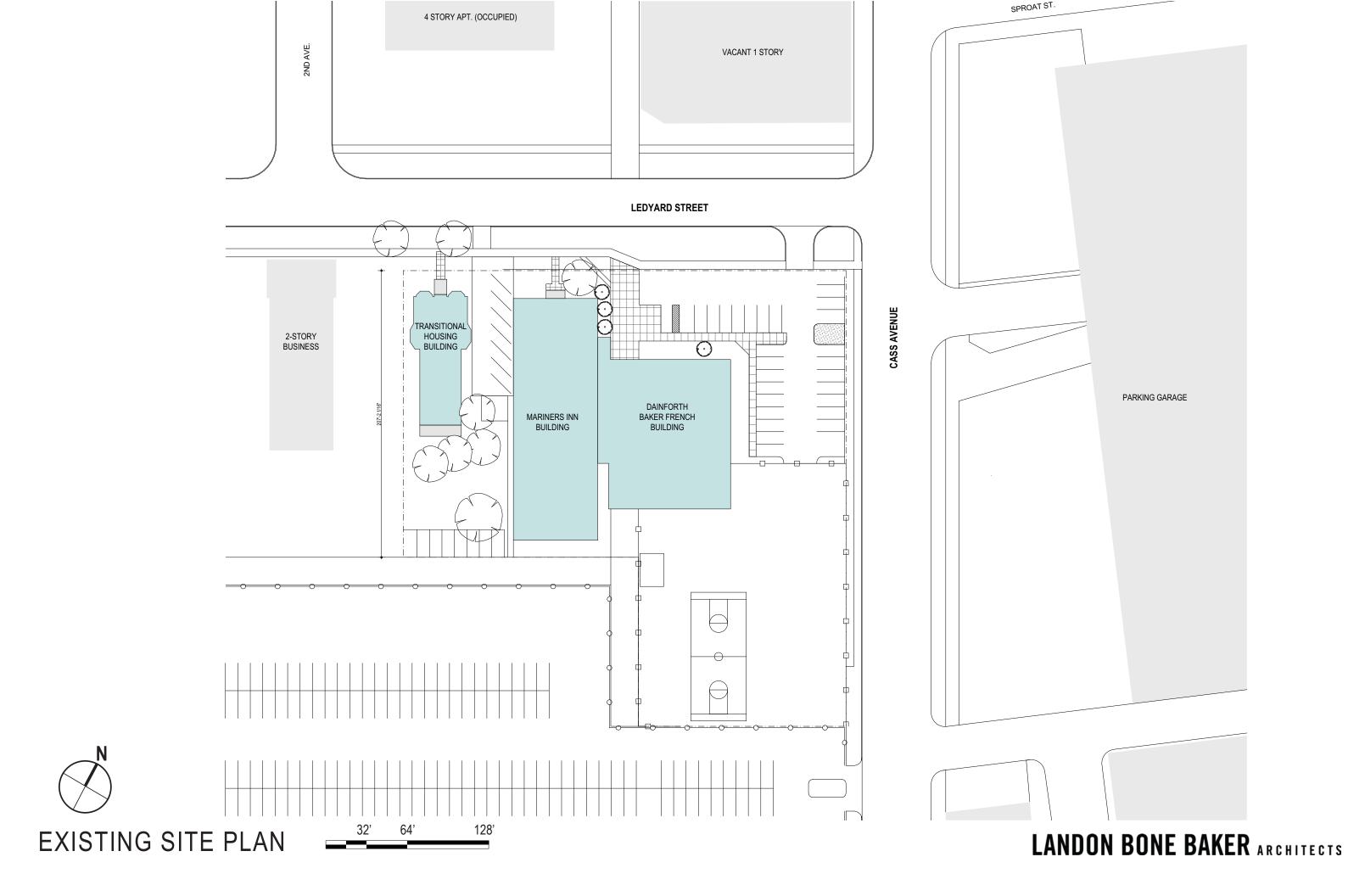


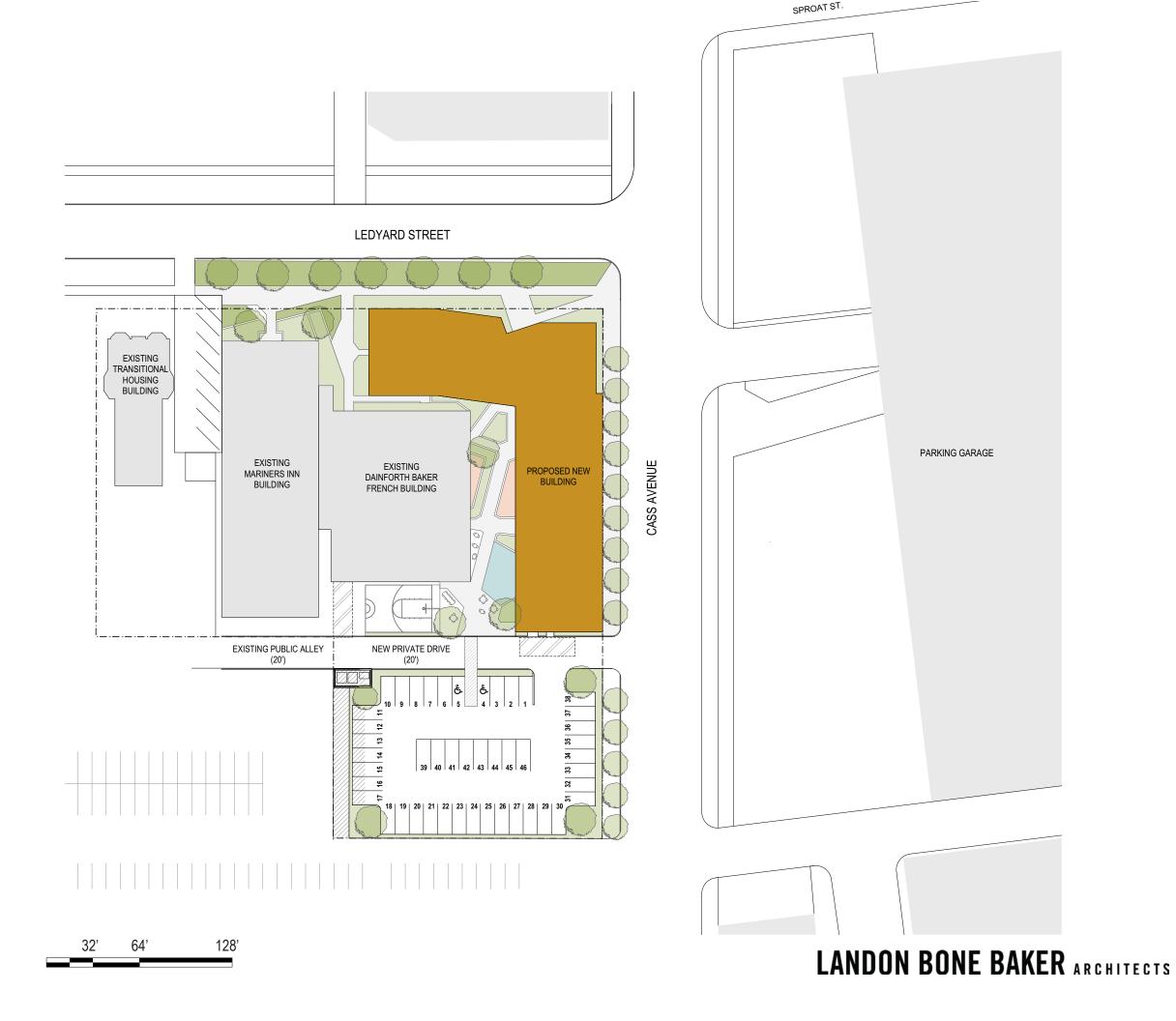












PROPOSED SITE PLAN













LANDON BONE BAKER ARCHITECTS





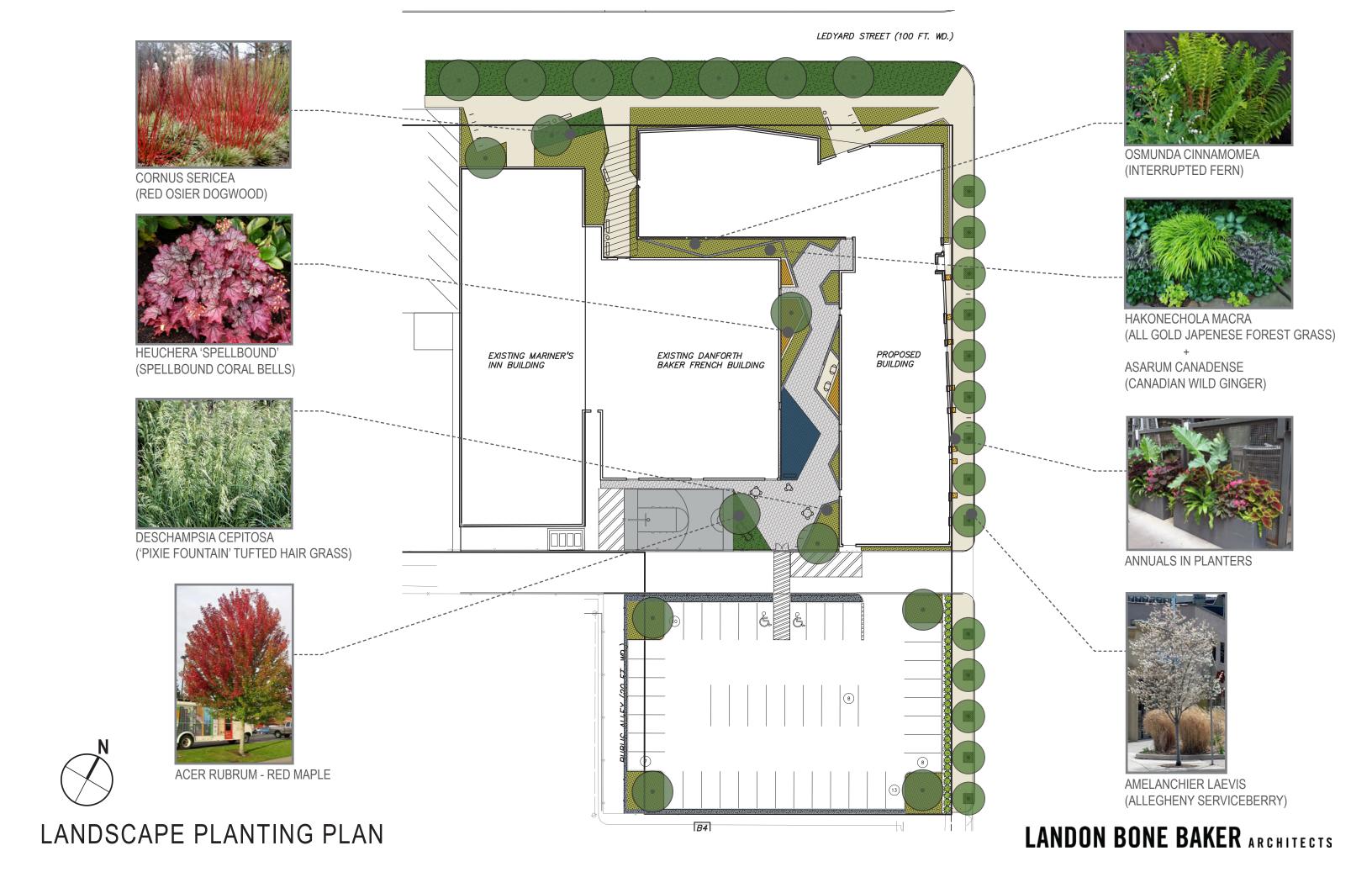
LANDON BONE BAKER ARCHITECTS





LANDON BONE BAKER ARCHITECTS

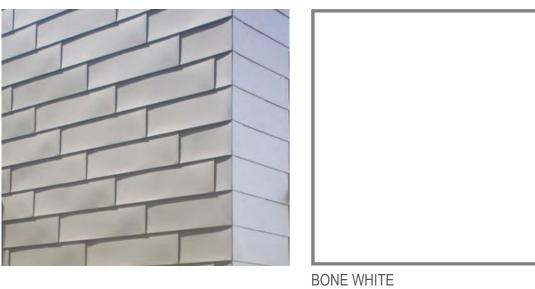




GRAY BRICK / SIOUX CITY EBONITE



ATAS VERSA-LOCK METAL PANEL



ATAS STELLAR ACCENT METAL



ATAS DESIGN WALL METAL PANEL







EAST (CASS AVE.) ELEVATION



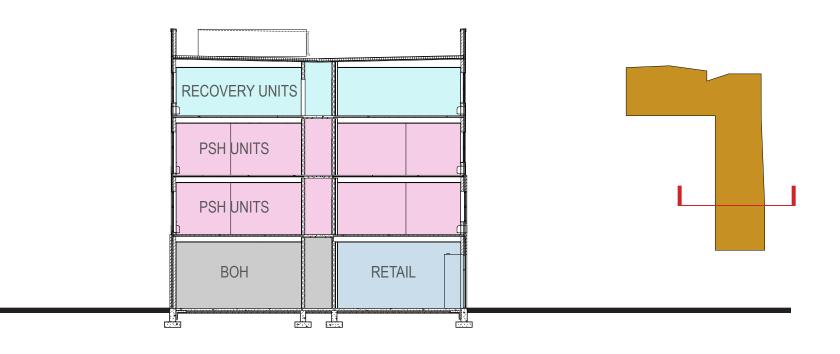


WEST ELEVATION





LONGITUDINAL BUILDING SECTION



445 LEDYARD 48201 (Property Address)

Parcel Number: 02000618-9

Property Owner: EPISCOPAL CHURCH, DIOCESE OF MI

Summary Information

- > Commercial/Industrial Building Summary
 Yr Built: 1880 # of Buil
 - # of Buildings: 4
 - Total Sq.Ft.: 41,466
- > Property Tax information found

> Assessed Value: \$0 | Taxable Value: \$0

Item 1 of 15 13 Images / 2 Sketches

Owner and Taxpayer Information

Owner EPISCOPAL CHURCH, DIOCESE OF Taxpayer

4800 WOODWARD AVE DETROIT, MI 48201-1310 SEE OWNER INFORMATION

General Information for Tax Year 2022

Property Class	201 201-COMMERCIAL	Unit	01 CITY OF DETROIT
School District	DETROIT CITY SCHOOL DISTRICT	Assessed Value	\$0
WARD#	02	Taxable Value	\$0
HOPE#	4	State Equalized Value	\$0
PP CODE#	Not Available	Date of Last Name Change	03/22/2004
RELATED #	Not Available	Notes	Not Available
Historical District	Not Available	Census Block Group	Not Available
COUNCIL#	Not Available	Exemption	No Data to Display

Principal Residence Exemption Information

Homestead Date No Data to Display

Principal Residence Exemption	June 1st	Final
2022	0.0000 %	-
2021	0.0000 %	0.0000 %

Land Information

Zoning Code	B4	Total Acres	1.865
Land Value	\$2,830,980	Land Improvements	\$40,417
Renaissance Zone	No	Renaissance Zone Expiration	No Data to Display
		Date	
ECF Neighborhood	Not Available	Mortgage Code	No Data to Display
Lot Dimensions/Comments	Not Available	Neighborhood Enterprise Zone	No
		•	

	Total Frontage: 170.00 ft	Average Depth: 207.00 ft
Lot 1	170.00 ft	207.00 ft
Lot(s)	Frontage	Depth

Legal Description

S LEDYARD 3 THRU 12BLK--79 SUB PT CASS FARM L1 P93 PLATS, W C R 2/18 81,226.5 SQ FT

Sale History

Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms of Sale	Liber/Page
			•	•	•	

No sales history found.

Building Information - 9480 sq ft Rooming Houses (Commercial)

Floor Area	9,480 sq ft	Estimated TCV	Not Available
Occupancy	Rooming Houses	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1880	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Forced Air Furnace
Physical Percent Good	49%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	35 yrs

Building Information - 21240 sq ft Office Buildings (Commercial)

Floor Area	21,240 sq ft	Estimated TCV	Not Available
Occupancy	Office Buildings	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1956	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Package Heating & Cooling
Physical Percent Good	63%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	23 yrs

Building Information - 846 sq ft Office Buildings (Commercial)

Floor Area	846 sq ft	Estimated TCV	Not Available
Occupancy	Office Buildings	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1995	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Package Heating & Cooling
Physical Percent Good	63%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	23 yrs

Building Information - 9900 sq ft Office Buildings (Commercial)

Floor Area	9,900 sq ft	Estimated TCV	Not Available
Occupancy	Office Buildings	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1995	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Package Heating & Cooling
Physical Percent Good	63%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	23 yrs

^{**}Disclaimer: BS&A Software provides BS&A Online as a way for municipalities to display information online and is not responsible for the content or accuracy of the data herein. This data is provided for reference only and WITHOUT WARRANTY of any kind, expressed or inferred. Please contact your local municipality if you believe there are errors in the data.

Appendix B



2022 MSHDA Phase I Summary Cover Sheet

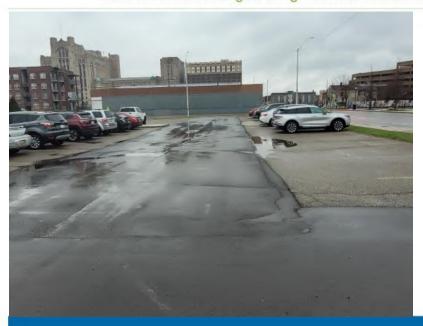
Project Name:			
Project Address:			
Sponsors Name:	Sponsor E-mail:		
Consulting Firm:			
Consultant Phone: () E-mail:		
Consultant Project #:	Report Date:		
Add	itional Site Info (please complete if known)		
Site area:	(in acres) # Units planned:		
Vacant land: Develop	ped: If developed, # existing buildings:		
Vacant Structure(s): # vac	Date(s) of construction for existing structures:		
Single Site: Scatt	tered sites: If scattered, # sites:		
Rehab of existing structure(s):	New Construction with planned		
	demolition of existing structure(s): New Construction without planned		
Adaptive Re-Use:	demolition of existing structure(s):		
No physical changes planned:	Comments:		
Please answer all questions below, noting the appropriate page or appendix in your report that contains the supporting documentation. Summary Cover Sheets containing unknown or incomplete responses will not be processed and will be returned for correction. REPORT FINDINGS a. RECs - The Phase I ESA revealed a REC(s). Yes No (See Sec. IV)			
b. The site contains a wetland are	ea(s). Yes No (See Sec. IV, H.5)		
c. The site or a portion of the site	is in the Special Flood Hazard Area . Yes No (See Sec. IV, H.4)		
d. The site contains a UST(s) .	☐ Yes ☐ No (See Sec. IV, I)		
e. This site contains a AST(s) . Yes No (See Sec. IV, H.10)			
e. EMF - There are high power electrical transmission lines within 100 yds. of the subject site. Yes No (See Sec. IV, H.6)			
f. HP GAS - There are buried highwithin 1000 feet of the subject sit	-pressure gas transmission lines (4" in diameter and 400 psi or greater) te.		

g. NOISE - The subject site is near a busy roadway or within 10	000 feet of a limited access freeway or			
3000 feet of a rail line, or within 15 miles of an airport.				
☐ Yes ☐ No Was a noise assessment performed?				
	o (See Sec. IV, H.8)			
	,			
h. ASBESTOS - A NESHAP-compliant asbestos survey is require	-			
renovation/remodeling project, regardless of the date of cons	•			
asbestos survey performed for this renovation/remodeling pro	•			
	stos containing materials (ACM) identified?			
· · ·	o (See Sec. IV, H.1)			
	, ,			
i. LEAD - For structures built before January 1, 1978, a combination	ation lead Risk Assessment/Inspection			
satisfying state and federal requirements is required. Was a co	ombination lead Risk			
Assessment/Inspection performed?				
Not required (Post-1977 Date of Construction)				
If Yes, was Lead Based Paint identified?	Yes No (See Sec. IV, H.2)			
j. RADON - For developments in Michigan counties where 25%	or more homes tested equal to or above			
the EPA action level of 4 pCi/L, as depicted by the Michigan E	•			
Calhoun, Cass, Clinton, Dickinson, Easton, Hillsdale, Ionia, Iron, Ja				
Livingston, Monroe, Oakland, Otsego, Ottawa, St. Joseph, Shiawasse				
assessment conducted by a Radon Professional was performed	<u> </u>			
☐ Not required: Not in >25% county.	Yes No			
If Yes, was Radon above EPA action level?	Yes No (See Sec. IV, H.3)			
k. A "Recorded Land Records" search was performed?	Yes No (See Sec. IV, C)			
I. A Phase II investigation is required?	☐ Yes ☐ No (See Sec. V)			
1. A Friase ii iiivesugatioii is requireu:	BEA and ResAP - RAP			
m. A Tier I and non-invasive Tier II Vapor Encroachment Screen				
·	Yes No (See Sec. IV, H.9)			
If yes, was a Vapor Encroachment Condition (VEC) identified and an invasive Tier II			
investigation is recommended.	Yes No (See Sec. IV, H.9)			
2. Report Documentation Check List. If any of the responses	below are "NO," do not submit report.			
a. MSHDA Phase I Letter of Reliance completed?	□Vos □No			
a. Mishipa Filase i Letter of Renance completed?	Yes No			

b. User's Disclosure Statement completed?	Yes No
c. Compliant ACORD 25 Certificate of insurance included?	☐ Yes ☐ No
d. FEMA Flood Plain Map Included?	☐ Yes ☐ No
e. Fire Insurance Maps or No Coverage Letter Included?	☐ Yes ☐ No
f. Development Site Plan Included?	☐ Yes ☐ No
g. Site boundaries indicated on all maps and photos?	☐ Yes ☐ No
h. CD or flash drive (PDF versions) included?	☐ Yes ☐ No
i. For sites with nearby or adjoining industrial uses, has a separate evaluation report been included (Section IV.D)?	☐ Yes ☐ No ☐ N/A
I represent that this Summary Cover Sheet accurately reflects the in the above captioned document.	e environmental information contained
Carey Knots	
Signature of Environmental Date Professional	Print or Type Legal Name



Environmental & Engineering Services Nationwide



ENVIRONMENTAL SERVICES

BUILDING ARCHITECTURE, ENGINEERING & SCIENCE

INDUSTRIAL HYGIENE SERVICES

BROWNFIELDS & ECONOMIC INCENTIVES CONSULTING

PHASE I ENVIRONMENTAL SITE ASSESSMENT

The Anchor at Mariners Inn

Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and General Common Elements

Located in the Eastern and Southern Portions of 445 Ledyard Street Detroit, Michigan

PM Project Number 01-11288-1-0001

Prepared for:

Cinnaire Solutions Corporation

2111 Woodward Avenue, Suite 600 Detroit, Michigan 48201

Prepared by:

PM Environmental 4080 West Eleven Mile Road Berkley, Michigan 48072

Know Your Risk. Take Control. Work with the Experts.

www.pmenv.com



Corporate Headquarters

Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906 f: 877.884.6775 t: 517.321.3331 Michigan Locations Berkley E

Berkley Bay City Grand Rapids Lansing Oak Park

May 20, 2022

Mr. Edward Potas Cinnaire Solutions Corporation 2111 Woodward Avenue, Suite 600 Detroit, Michigan 48201

Re: Phase I Environmental Site Assessment of The Anchor at Mariners Inn

Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and

General Common Elements

Located in the Eastern and Southern Portions of 445 Ledyard Street,

Detroit, Michigan

PM Environmental Project No. 01-11288-1-0001

Dear Mr. Potas:

Please find enclosed the Phase I Environmental Site Assessment for the subject property dated May 20, 2022 to the Michigan State Housing Development Authority.

It is our understanding that the information contained in the Phase I Environmental Site Assessment will be used by the Authority in considering proposed financing of residential development of the property and, furthermore, that the Authority may rely upon the Phase I Environmental Site Assessment as if it were issued to the Authority.

We **represent** that the attached is a true, correct, and complete copy of the Phase I Environmental Site Assessment for the above captioned property and that the report represents our professional opinion of the site as of this date and that we meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. We also **represent** that the Phase I Environmental Site Assessment including the evaluation, recommendations, and conclusions as of this date has been performed in conformance with the scope and limitations of the ASTM Practice E1527-13, ASTM Practice E 2600-15, and MSHDA's Environmental Review Requirements for 2022.

If you have any questions related to this report, please do not hesitate to contact our office at 248.336.9988.

Sincerely,

PM ENVIRONMENTAL

Carey Kratz, EP

Regional Manager – Due Diligence

Peter S. Bosanic, P.E., EP

Principal

Corporate Headquarters

Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906 f: 877.884.6775 t: 517.321.3331 **Michigan Locations**

Berkley Bay City
Grand Rapids Lansing
Oak Park

2022 MSHDA PHASE I LETTER OF RELIANCE

PRIVILEGED AND CONFIDENTIAL

Mr. Dan Lince
Environmental Manager
Rental Development Division
Michigan State Housing Development Authority
735 East Michigan Avenue
Lansing, Michigan 48912

Re: Phase I Environmental Site Assessment of The Anchor at Mariners Inn Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and General Common Elements
Located in the Eastern and Southern Portions of 445 Ledyard Street Detroit, Michigan
PM Environmental Project No. 01-11288-1-0001

Dear Mr. Lince:

Please find enclosed the Phase I Environmental Site Assessment for the subject property dated May 20, 2022 to the Michigan State Housing Development Authority.

It is our understanding that the information contained in the Phase I Environmental Site Assessment will be used by the Authority in considering proposed financing of residential development of the property and, furthermore, that the Authority may rely upon the Phase I Environmental Site Assessment as if it were issued to the Authority.

We **represent** that the attached is a true, correct, and complete copy of the Phase I Environmental Site Assessment for the above captioned property and that the report represents our professional opinion of the site as of this date and that we meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. We also **represent** that the Phase I Environmental Site Assessment including the evaluation, recommendations, and conclusions as of this date has been performed in conformance with the scope and limitations of the ASTM Practice E1527-13, ASTM Practice E 2600-15, and MSHDA's Environmental Review Requirements for 2022.

Sincerely,

PM ENVIRONMENTAL

Carey Kratz, EP

Regional Manager - Due Diligence

Peter S. Bosanic, P.E., EP

Principal

TABLE OF CONTENTS

Section 1.0: Executive Summary	
Section 1.1: Phase I ESA Summary and Conclusions	
Section 1.3: Identified Liens or Activity and Use Limitations	
Section 2.0: Introduction	
Section 2.1: Purpose	
Section 2.2: Detailed Scope of Services	6
Section 2.3: Significant Assumptions	6
Section 2.4: Limitations and Exceptions	
Section 2.5: Special Terms and Conditions	
Section 2.6: User Reliance	
Section 3.0: Subject Property Description	
Section 3.1: Location and Legal Description	
Section 3.2: Subject Property and Vicinity Characteristics	8
Section 3.3: Current Use of the Subject Property	8
Section 3.4: Descriptions of Structures, Roads, and Other Improvements on the Subject	
Property	8
Section 3.4.1: Municipal Water/Water Wells	8
Section 3.4.2: Sanitary Sewer/Septic System	8
Section 3.4.3: Storm Sewer/Storm Water Detention Ponds	
Section 3.4.4: Heat Source	
Section 3.5: Current Uses of Adjoining Properties	9
Section 4.0: User Provided Information	.10
Section 4.1: Title Records	
Section 4.2: Environmental Liens or Activity and Use Limitations	.11
Section 4.3: Specialized Knowledge	
Section 4.4: Commonly Known or Reasonably Ascertainable Information	
Section 4.5: Valuation Reduction for Environmental Issues	
Section 4.6: Owner, Property Manager, and Occupant Information	.11
Section 4.7: Reason for Performing this Phase I ESA	.11
Section 4.8: Other	.12
Section 5.0: Records Review	
Section 5.1: Standard Environmental Record Sources	
Section 5.1.1: Subject Property and Occupant Listings	
Section 5.1.2: Adjoining and Nearby Sites	.13
Section 5.2: Additional Environmental Records Sources	
Section 5.2.1: Assessing Department/Building Department Records	.16
Section 5.2.2: Zoning Department Records	.17
Section 5.2.3: Previous Site Investigations	.18
Section 5.3: Physical Setting Source(s)	
Section 5.4: Historical Use Information on the Subject Property	
Section 5.4.1: Aerial Photographs and Sanborn Map Coverage for the Subject Property	.20
Section 5.4.2: Local Street Directories for the Subject Property	.22
Section 5.4.3: Summary of Historical Use for the Subject Property	
Section 5.5: Historical Use Information on the Adjoining Properties	
Section 6.0: Site Reconnaissance	.25
Section 6.1: Methodology and Limiting Conditions	.25
Section 6.2: General Subject Property Setting	

Section 6.3: Exterior Observations	26
Section 6.3.1: Underground Storage Tanks (USTs)	26
Section 7.0: Interviews	26
Section 7.1: Interview with Owners, Occupants, or Others	27
Section 7.2: Interview with Local Government Officials	27
Section 7.2.1: Local Fire Department	
Section 8.0: Evaluation and Report Preparation	27
Section 8.1: Findings	27
Section 8.1.1: De Minimis Condition	
Section 8.1.2: Significant Data Gaps	28
Section 8.1.3: Historical Recognized Environmental Conditions (HRECs)	28
Section 8.1.4: Recognized Environmental Conditions (RECs)	28
Section 8.1.5: Controlled Recognized Environmental Conditions (CRECs)	29
Section 8.2: Opinion	29
Section 8.3: Additional Investigation	29
Section 8.4: Conclusions	
Section 8.5: Additional Services	
Section 8.6: Deviations	
Section 8.7: References	
Section 8.8: Signature(s) of Environmental Professional(s)	
Section 8.9: Qualification(s) of Environmental Professional(s)	31
Section 9.0: NON-ASTM Scope Services	
Section 9.1: Friable and Non-friable Asbestos Containing Materials (ACMs)	
Section 9.2: Lead-Based Paint (LBP)	
Section 9.3: Radon Gas	
Section 9.4: 100-Year Floodplain	
Section 9.5: Wetlands	
Section 9.6: Electromagnetic Fields	
Section 9.7: High Pressure Buried Gas Lines	32
Section 9.8: Noise Analysis	
Section 9.9: Assessment of Potential Vapor Encroachment Conditions (VECs)	33
Section 9.9.1: Additional Historical Record Sources	
Section 9.9.2: Conclusions/Opinion	
Section 9.10 Onsite or Nearby Blast Hazard	35

APPENDICES

Section 10.1:	Site Vicinity Map
	Site Plan and Proposed Condominium Plans
	Site Photographs
	Historical Research Documentation
Section 10.5:	Regulatory Records Documentation
Section 10.6:	Interview Documentation
Section 10.7:	Special Contractual Conditions between User and Environmental Professional
Section 10.8:	Qualification(s) of the Environmental Professional(s)
Section 10.9:	MSHDA Phase I Letter of Reliance
Section 10.10	Copy of Environmental Professional Insurance Certificates

ADOBE ATTACHMENT TAB

1. Phase I ESA, PM, 445 Ledyard Street (entire parent parcel), PM, August 30, 2019.

SECTION 1.0: EXECUTIVE SUMMARY

Section 1.1: Phase I ESA Summary and Conclusions

PM Environmental, (PM) has completed a Phase I Environmental Site Assessment (ESA) of The Anchor at Mariners Inn, proposed Mariners Inn Condominium Units Nos. 1 and 2 and General Common Elements, located in the eastern and southern portions of 445 Ledyard Street, Detroit, Wayne County, Michigan (hereafter referred to as the "subject property"). This Phase I ESA was conducted in general accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} (2) guidelines established by the American Society for Testing and Materials (ASTM) in the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-13 (ASTM Standard Practice E 1527-13) (3) guidelines established by the ASTM in the Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions / Designation E 2600-15 (ASTM Practice E 2600-15) and (4) MSHDA's Environmental Review Requirements for 2022.

THE REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF THE ANCHOR AT MARINERS INN LDHA LP, THE ANCHOR AT MARINERS INN 4 LDHA LP, CINNAIRE SOLUTIONS CORPORTATION, MARINERS INN, PROTESTANT EPISCOPAL CHURCH OF THE DIOCESE OF MICHIGAN, THE CITY OF DETROIT, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

Main Cross Street(s)/Location	Located at the southwest corner of Ledyard Street and Cass Avenue
Number of Parcels and Acreage	Approximately 1.07 acres of a larger parcel totaling 1.87 acres The subject property consists of Unit Nos. 1 and 2 and all general common elements of the proposed Mariners Inn Condominium
Number of Building(s) and Square Footage	Three sheds each containing between approximately 70 and 300 square feet
Current Property Use	The subject property consists of green space, a paved parking lot, three storage sheds, and a basketball court with no business operations

Reasonably ascertainable records for the subject property extended back to approximately 1889. Data failure occurred prior to that date. However, PM did not identify any significant data gaps during the completion of this Phase I ESA.

Standard and other historical sources were able to document the subject property was developed prior to 1889 with several residential dwellings and outbuildings. The southernmost dwelling also included a first-floor storefront that was occupied by a doctor's office in at least 1901, a restaurant in at least 1916, a hand laundry in at least 1921, and a shoe repair business in at least 1926. Between 1912 and 1913, the dwelling in the northern portion was demolished and replaced with the Priscilla Inn, a women's correctional center and church convention center with a kitchen and six storefronts, which were occupied by a cleaning and dying company, a clothes cleaner, a pharmacy, a church, a grocery store, a hand laundry, a tea supplier, a baker, a library, and a beauty shop. In the 1940s, two dwellings in the southern portion were demolished and replaced with a car wash, which was demolished in 1969. By 1950, most, if not all, storefronts within Pricilla Inn were converted to shelter-related uses such as a recreation room and lobby, and the land immediately south of the inn was converted into a parking lot and was used for automotive sales in at least 1925 to 1926. The Priscilla Inn was demolished in 1984 and the northern portion has

been utilized for parking since that time. Two of the three remaining dwellings in the southern portion were demolished in the 1960s and the third was demolished in the 1980s. The southern portion has been utilized for parking or a recreational lot for the west adjoining homeless shelter, Mariners Inn since at least 1987. Two of the three current sheds were constructed in the western portion between 2002 and 2005, and the third shed was constructed between 2012 and 2016.

PM completed a previous Phase I ESA dated August 30, 2019 for the entire parent parcel, including the current subject property. The following RECs were identified:

- A storefront within the former Priscilla Inn (417 Ledyard Street) was previously occupied by a clothes cleaner between at least 1935 to 1940 (and potentially from 1931 to 1945), which may have included dry cleaning operations.
- The south adjoining property, identified as 2501 Cass Avenue, is identified as a Baseline Environmental Assessment (BEA) site. PM attempted to review regulatory file information for this property but did not receive a response within the time constraints of this report. The property was historically occupied by a movie theater equipment company, restaurants, hair salons/barbers, bars, and a popcorn company. PM was unable to determine the source of the known contamination on the property. Based on the close proximity to the subject property (i.e., directly adjoining), the potential exists that existing contamination on this property has migrated onto the subject property.

To address the RECs, on June 10, 2021, PM completed subsurface investigation activities consisting of the advancement of eight soil borings, installation of four temporary soil gas points, and the collection of 16 soil samples and four soil gas samples. Concentrations of the polynuclear aromatic hydrocarbons (PNAs) benzo(a)pyrene and benzo(b)fluoranthene were identified in one soil sample in the central portion of proposed condominium Unit #1 (SB-5, 3.5-4.5 feet bgs) above Part 201 Residential Generic Cleanup Criteria (GCC) for Direct Contact (DC). Additionally, concentrations of the PNAs fluoranthene, naphthalene, phenanthrene, and mercury were also identified in SB-5, 3.5-4.5 feet below ground surface (bgs) above Part 201 Residential GCC for Groundwater Surface Water Interface Protection (GSIP). The concentrations of naphthalene and mercury detected in SB-5, 3.5-4.5 feet bgs also exceed Michigan Department of Environment, Great Lakes, and Energy (EGLE) Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.

On November 24, 2021, PM completed an additional subsurface investigation in an effort to delineate the extent of PNA contamination identified in the southern-central portion of the subject property in June 2021. The investigation consisted of the advancement of six soil borings, installation of two temporary soil gas points, and the collection of 13 soil samples and two soil gas samples. No concentrations of VOCs were detected in the soil samples above laboratory method detection limits (MDLs) or most restrictive Part 201 GCC and no soil gas samples were detected above EGLE Residential VIAP Screening Levels. The PNA benzo(a)pyrene was identified in soil boring SB-5R, 0.5-1.5 feet bgs over Part 201 Residential DC and the PNAs benzo(a)pyrene and benzo(b)fluoranthene were identified in soil boring SB-9, 3.5-4.5 feet bgs, also located in the central portion of proposed condominium Unit 1, over Part 201 Residential DC. No additional PNAs were identified above laboratory MDLs and/or the most restrictive Part 201 GCC. Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. Based on these analytical results, the subject property would be classified as a "facility," as

defined by Part 201 of P.A. 451 of the Michigan Natural Resources and Environmental Protection Act (NREPA), as amended.

Below is a Summary Table presenting PM's recommended actions for the subject property. PM's Findings, Opinions, and Recommendations are present in Section 8.1-8.4. In addition, any potential Non-ASTM scope related concerns identified associated with the subject property are included. Affirmative answers are further discussed below the table:

Summary Table		
Assessment Topic	Section	Recommended Action
De Minimis Condition	8.1.1	No Further Action
Significant Data Gap	8.1.2	No Further Action
Historical Recognized Environmental Condition (HREC)	8.1.3	No Further Action
Recognized Environmental Condition (REC)	8.1.4	See Below
Controlled Recognized Environmental Condition (CREC)	8.1.5	No Further Action
Potential Unsuitable Fill Material	5.5.4	See Below
Asbestos Containing Materials (ACM)	9.1	No Further Action
Lead Based Paint (LBP)	9.2	No Further Action
Radon Gas	9.3	No Further Action
100-Year Floodplain	9.4	No Further Action
Potential Wetlands	9.5	No Further Action
Electromagnetic Fields	9.6	No Further Action
High Pressure Buried Gas Mains	9.7	No Further Action
Noise Assessment	9.8	See Below
Vapor Encroachment	9.9	See Below
Onsite or Adjoining Blast Hazard	9.10	No Further Action

Recognized Environmental Condition

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of The Anchor at Mariners Inn, proposed Mariners Inn Condominium Units Nos. 1 and 2 and General Common Elements, located in the eastern and southern portions of 445 Ledyard Street, Detroit, Wayne County, Michigan, the subject property. Any exceptions to, or deletions from, this practice are described in Sections 2.4 and 2.5 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except the following:

• Concentrations of benzo(a)pyrene, benzo(b)fluoranthene fluoranthene, naphthalene, phenanthrene, and mercury were identified during PM's 2021 subsurface investigation in soil samples collected from the central portion of the proposed condominium Unit #1 on the subject property exceeding Residential Part 201 Generic Cleanup Criteria (GCC). The concentrations of naphthalene and mercury detected also exceed EGLE Residential VIAP Screening Levels. The impacted area appears to be associated with backfill associated with former dwellings. Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. Based on these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan NREPA, as amended.

No adjoining and/or nearby RECs have been identified.

Potential Unsuitable Fill Material: The subject property was historically developed with several residential dwellings with basements, which were demolished at various times between the 1940s and 1980. Subsurface investigations completed at the subject property in June and November 2021 documented concrete and brick debris was encountered in five soil borings within former building footprints in the southern portion between 0.5 feet and 6.0 feet below ground surface (bgs). A limited area of polynuclear aromatic hydrocarbons (PNAs) and mercury exceeding Part 201 GCC was identified in the former footprint of two former dwellings in the southern portion, which will be excavated as part of redevelopment activities.

Noise Assessment: Using the HUD DNL calculator, the following is a summary of the findings of the Desktop Noise Assessment.

NAL#	Combined Source DNL (decibel)	Category
1 (northwest corner of proposed building)	67	Normally Unacceptable
2 (southeast corner of proposed building)	72	Normally Unacceptable

The "Normally Unacceptable" noise zone includes community noise levels from above 65 decibel (dB) to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB (HUD generally gives a 1 dB variance up to 76 dB). Additionally, I-75 is sunken approximately 13 feet below grade nearest the subject property, which will provide some noise attenuation from the traffic. The project architect will need to complete attenuation documentation for the project by completing either a Sound Transmission Classification Assessment Tool (STraCAT) form or HUD Figure 19. Interior noise levels must be mitigation for 45 dB or less.

Vapor Encroachment: The Tier I and non-invasive Tier II Vapor Encroachment Screen (VES) did not reveal any Vapor Encroachment Conditions (VECs) associated with the target property and/or nearby/adjoining properties; with the exception of that identified as a REC above.

Conclusions and Recommendations

PM has performed an Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527-13, ASTM Practice E 2600-15, and the Michigan State Housing Development Authority (MSHDA) Environmental Review Requirements for 2022 of the Mariners Inn located at the Eastern and Southern Portion of 445 Ledyard Street, Detroit, Wayne County, Michigan. Any exceptions to or deletions from this practice are described in the Limitations section of this report. These RECs have been brought to the attention of the client within the requirements of the ASTM Standard Designation E-1527-2013.

This REC have been brought to the attention of the client within the requirements of the ASTM Standard Designation E-1527-13. Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. The planned remedial actions include excavating contaminated soils with proper landfill disposal. The proposed excavation is 33 feet wide by 50 feet long by 6.0 feet deep. Following soil removal activities, VSR samples will consist of using

biased sampling strategies and screening the floors and sidewalls prior to sample collection to document the removal of contaminated soils to concentrations below applicable Part 201 Residential cleanup criteria and VIAP Screening Levels. PM is currently completing a BEA on behalf of the proposed lessee - The Anchor at Mariners Inn LDHA LP. PM is also preparing a Response Activity Plan – Remedial Action Plan to be approved by the Michigan Department of Energy, Great Lakes, and Energy (EGLE).

Section 1.2: Identified Data Gaps

Reasonably ascertainable records for the subject property extended back to approximately 1889. Data failure occurred prior to that date. However, PM did not identify any significant data gaps during the completion of this Phase I ESA.

Section 1.3: Identified Liens or Activity and Use Limitations

The Client did not report any: (1) environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law; or (2) activity and use limitations (AULs), such as engineering controls, land use restrictions or institutional controls, that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law.

The summary presented above is general in nature and should not be considered apart from the entire text of the report, which contains the qualifications, considerations and subject property details mentioned herein. Details of findings and conclusions are elaborated upon in this report.

This report has been reviewed for its completeness and accuracy. Please feel free to contact our office at 248.336.9988 to discuss this report.

Report Prepared By:

PM Environmental

Devon Nagengast Staff Consultant **Report Reviewed By:**

PM Environmental

Carey Kratz, EP

Regional Manager - Due Diligence

Peter S. Bosanic, P.E., EP

Principal

SECTION 2.0: INTRODUCTION

PM Environmental (PM) was retained to conduct a Phase I Environmental Site Assessment (ESA) of The Anchor at Mariners Inn, proposed Mariners Inn Condominium Units Nos. 1 and 2 and General Common Elements, located in the eastern and southern portions of 445 Ledyard Street, Detroit, Wayne County, Michigan (subject property). This Phase I ESA was conducted in general accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} (2) guidelines established by the American Society for Testing and Materials (ASTM) in the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-13 (ASTM Standard Practice E 1527-13) (3) guidelines established by the ASTM in the Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions / Designation E 2600-15 (ASTM Practice E 2600-15) and (4) MSHDA's Environmental Review Requirements for 2022.

Section 2.1: Purpose

The purpose of this Phase I ESA was to evaluate the current and historical conditions of the subject property in an effort to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), and historical recognized environmental conditions (HRECs) in connection with the subject property. This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs, CRECs, and HRECs in connection with the subject property.

Section 2.2: Detailed Scope of Services

PM's scope-of-services is based on its proposal dated April 7, 2021, and the terms and conditions of that agreement. This Phase I ESA included the following:

- An inquiry of environmental conditions by an environmental professional.
- A review of specialized knowledge reported by the Client.
- A review of public and historical records, including those maintained by federal, state, tribal, and local government agencies.
- Interviews with regulatory officials and personnel associated or knowledgeable with the subject property, including as appropriate past and present owners, or neighbors if the property is abandoned.
- A reconnaissance of the subject property and adjoining properties.

Section 2.3: Significant Assumptions

During this Phase I ESA, PM made the following significant assumptions:

- PM assumed that the information provided by Environmental Data Resources (EDR) in the regulatory database report is an accurate and complete representative summary of the information contained in the referenced regulatory agency records, except when such information is obviously contradicted by other data.
- PM assumed that the information used to prepare this assessment that was obtained from ostensibly knowledgeable individuals, regulatory agency representatives, or other secondary

sources was an accurate and complete representative summary of the information possessed by those individuals, representatives, or sources.

Section 2.4: Limitations and Exceptions

There are no deviations from the ASTM Standard. Non-ASTM Scope considerations are included in Section 9.0. Any physical limitations identified during the completion of this report are referenced in Section 6.1.

Due to changing environmental regulatory conditions and potential on-site or adjacent activities occurring after this assessment, the client may not presume the continuing applicability to the subject property of the conclusions in this assessment for more than 180 days after the report's issuance date, per ASTM Standard Practice E 1527-13.

To the best of PM's knowledge, no special terms or conditions apply to the preparation of this Phase I ESA that would deviate the scope of work from the ASTM Standard Practice E 1527-13.

Section 2.5: Special Terms and Conditions

To the best of PM's knowledge, no special terms or conditions apply to the preparation of this Phase I ESA.

Section 2.6: User Reliance

PM HAS PREPARED THIS REPORT FOR THE EXCLUSIVE USE OF THE ANCHOR AT MARINERS INN LDHA LP, THE ANCHOR AT MARINERS INN 4 LDHA LP, CINNAIRE SOLUTIONS CORPORTATION, MARINERS INN, PROTESTANT EPISCOPAL CHURCH OF THE DIOCESE OF MICHIGAN, THE CITY OF DETROIT, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

PM acknowledges that these parties may rely on the contents and conclusions presented in this report. Unless stated otherwise in writing, PM makes no other warranty, representation, or extension of reliance upon the findings of this report to any other entity or third party.

SECTION 3.0: SUBJECT PROPERTY DESCRIPTION

Section 3.1: Location and Legal Description

Main Cross Streets/Location	Located at the southwest corner of Ledyard Street and Cass Avenue
Number of Parcels and Acreage	Approximately 1.07 acres of a larger parcel totaling 1.87 acres The subject property consists of Unit Nos. 1 and 2 and all general common elements of the proposed Mariners Inn Condominium
Number of Building(s) and Square Footage	Three sheds each containing between approximately 70 and 300 square feet
Current Property Use	The subject property consists of a green space, a paved parking lot, three storage sheds, and a basketball court with no business operations

Proposed Property Use	The Sponsor intends to construct a mixed-use building in the eastern portion, which will include an additional 84 bed capacity and retail and office space
-----------------------	--

The legal description of the subject property is presented in Section 10.4. Photographs taken during PM's subject property reconnaissance are provided in Section 10.3.

Section 3.2: Subject Property and Vicinity Characteristics

The subject property is currently a parking lot and recreational yard developed with three storage sheds and is located within a commercial and residential area of Detroit. Cass Avenue is a commercial thoroughfare, with residential apartments on side streets adjacent to the commercial properties.

Section 3.3: Current Use of the Subject Property

The subject property consists of green space, a paved parking lot, three storage sheds, and a basketball court with no business operations.

Section 3.4: Descriptions of Structures, Roads, and Other Improvements on the Subject Property

A paved parking lot is present in the northern portion, a basketball court is present in the southern portion, and three storage sheds are present in the western portion. The remainder of the subject property contains groomed grass and landscaped areas.

Section 3.4.1: Municipal Water/Water Wells

Municipal water is currently available to the subject property; however, the subject property is not currently connected. PM attempted to obtain an initial tap date from the City of Detroit Water and Sewerage Department. However, a representative of the department indicated no tap records were available for the property. Review of Sanborn maps indicates municipal water has been available to the subject property since at least 1884. Additionally, review of the sewer main distribution map indicates municipal sewer has been available to the subject property since 1864. Municipal water was likely available during the same time frame. Based on this information and the highly urban area, the former buildings likely tapped to municipal water during construction. No records of private water wells have been identified through review of reasonably ascertainable information.

Section 3.4.2: Sanitary Sewer/Septic System

Municipal sewer is currently available to the subject property; however, the subject property is not currently connected. PM attempted to obtain an initial tap date from the City of Detroit Water and Sewerage Department. However, a representative of the department indicated no tap records were available for the property. Review of the sewer main distribution map indicates municipal sewer has been available to the subject property since 1864. Based on this information and the highly urban area, the current and former buildings on the subject property likely tapped to municipal sewer or to privies during construction. No records of private septic fields have been identified through review of reasonably ascertainable information.

Section 3.4.3: Storm Sewer/Storm Water Detention Ponds

PM observed several storm water catch basins on the subject property. No staining or evidence of poor waste management practices was observed associated with these exterior catch basins.

Section 3.4.4: Heat Source

Natural gas is currently available to the subject property, which is supplied by DTE Energy. Review of the natural gas distribution map documents natural gas has been available to the subject property since at least 1993. However, based on PM's experience with the area, this is likely a main replacement date and natural gas has likely been available to the subject property area since between the early 1900s and the early 1950s. Additionally, review of Sanborn maps documents that at least one of the former buildings on the subject property was previously heated with central steam heat provided by the main boiler facility for the City of Detroit. Based upon the location of the subject building in downtown Detroit, it is likely that the current and former buildings were historically heated with steam and may have historically utilized wood and/or coal-fired steam boilers prior to central steam availability. No documentation of fuel oil use was identified during review of reasonably ascertainable records, and no visual evidence of fuel oil use was identified during the site reconnaissance. There is the potential for a fuel oil AST or UST to have been used at the property and for a release to have occurred. However, based upon PM's experience, the risk of a release associated with a potential fuel oil UST is low. If a fuel oil UST is discovered in the future and/or evidence of a release of historical fuel oil is identified, further evaluation may be necessary.

Section 3.5: Current Uses of Adjoining Properties

A visual inspection of the adjoining properties was made from the subject property and public thoroughfares. Color photographs are included within Section 10.3. Refer to Section 5.5 for details on historical usage. Refer to the paragraphs below for additional information.

North Adjoining Properties, across Ledyard Street

The northeast adjoining property, identified as 2701 Cass Avenue, is currently occupied by a vacant commercial warehouse.

The northwest adjoining property, identified as 2700-2714 Second Avenue, is currently occupied by an apartment building and vacant land.

East Adjoining Property, across Cass Avenue

The east adjoining property, identified as 165 Sproat Street, is currently occupied by the Little Caesar's Arena Parking Garage.

The southeast adjoining property, identified as 210 Henry Street, is currently occupied by ZZ Market and Grill.

South Adjoining Property

The south adjoining property, identified as 2501 Cass Avenue, is currently occupied by a paved parking lot.

West Adjoining Property

The west adjoining property *remaining portions of the current parent parcel), identified as part of 445 Ledyard Street, is currently occupied by Mariners Inn, a homeless shelter.

The west adjoining property, identified as 438 Henry Street, is currently a parking lot.

SECTION 4.0: USER PROVIDED INFORMATION

The ASTM Standard defines a User as "the party seeking to use Practice E 1527 to complete an environmental site assessment. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The User has specific obligations for completing a successful application of this practice as outline in Section 6 (of the ASTM Standard E-1527-13).

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small business Liability relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments"), the User must provide certain information (if available) included on the User Questionnaire to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

PM provided Mr. Edward Potas (i.e., the User) with a copy of MSHDA's User's Environmental Questionnaire and Disclosure Statement, which was completed and returned to PM. None of the questions were answered in the affirmative or in a manner that would suggest the potential for RECs by Mr. Potas. No other specialized knowledge or experience of the subject property was provided to PM by the User.

Section 4.1: Title Records

A chain of title was not conducted for the subject property. PM utilized aerial photography, city directories, assessing information, and interviews with individuals knowledgeable of the subject property area as sources to determine the historical use of the subject property (see Section 10.4). Information from these sources is referenced throughout this report.

The User provided PM with a Commitment for Title Insurance completed for the subject property in May 31, 2019. The Commitment for Title Insurance documents the subject property is owned by the Protestant Episcopal Church for the Diocese of Michigan with Mariners Inn as leasehold interest, which is consistent with current assessing records. No additional relevant information was included in the title search documents. A copy of the Commitment for Title Insurance is not included with this report but could be provided upon request.

Section 4.2: Environmental Liens or Activity and Use Limitations

The User did not report any: (1) environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law; or (2) activity and use limitations (AULs), such as engineering controls, land use restrictions or institutional controls, that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law.

PM reviewed the Part the 201 Enforcement Liens list available through the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division (RRD), for information about environmental liens on the subject property. There was no information regarding environmental liens encumbering the subject property, or any pending, threatened, or past environmental litigation, environmental administrative procedures, or notices from government entities regarding possible violations of environmental law or possible environmental liability.

PM has not identified any record of activity and use limitations or institutional controls or engineering controls associated with the subject property through review of reasonable ascertainable records.

Section 4.3: Specialized Knowledge

The User did not report specialized knowledge or experience, actual knowledge, or commonly known or reasonable ascertainable information that is material to identifying recognized environmental conditions in connection with the subject property.

Section 4.4: Commonly Known or Reasonably Ascertainable Information

The User did not report knowledge of any commonly known or reasonably ascertainable information within the local community that is material to RECs in connection with the subject property. The User indicated past use was parking.

Section 4.5: Valuation Reduction for Environmental Issues

The User indicated that subject property will be controlled through a long-term ground lease with a discounted price due to the mission alignment of the lessor and lessee.

Section 4.6: Owner, Property Manager, and Occupant Information

The User did not report knowledge relevant information from the owner, property manager, or occupants.

Section 4.7: Reason for Performing this Phase I ESA

According to the User, this Phase I ESA was conducted to fulfill MSHDA's requirements as part of applications for funding provided by MSHDA and the City of Detroit.

Section 4.8: Other

The User did not provide PM with any additional information pertaining to the subject property.

SECTION 5.0: RECORDS REVIEW

Section 5.1: Standard Environmental Record Sources

PM retained EDR to provide current regulatory database information compiled by a variety of federal and state regulatory agencies. A copy of the database report is included in Section 10.5. The purpose of obtaining this data was to evaluate potential environmental risks associated with the subject property, adjoining sites, and other sites that are (1) identified on target lists, and (2) within varying distances of up to one mile from the subject property. PM reviewed the following federal and state databases for such listings within the indicated search radii.

Туре	Regulatory Agency Database	Approximate Minimum Search Distance (AMSD)	Number of Sites within AMSD
Federal	National Priority List (NPL) Sites	1 mile	0
Federal	Delisted National Priority List (DNPL) Sites	½ mile	0
Federal	Superfund Enterprise Management System (SEMS) (formerly CERCLIS – renamed in 2015) Sites	½ mile	2
Federal	SEMS-Archive Sites (formerly CERLIS-NFRAP – renamed 2015)	½ mile	1
Federal	Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Sites	1 mile	0
Federal	RCRA non-CORRACTS Treatment, Storage or Disposal Facilities (TSDF) Sites	½ mile	0
Federal	Federal RCRA Large Quantity Generators (LQG) Sites		0
Federal	Federal RCRA Small Quantity Generators (SQG) Sites		0
Federal	RCRA Very Small Quantity Generators (VSQG) Sites	subject property and adjoining properties	1
Federal	RCRA Non-Generators (NON-GEN) Sites	subject property and adjoining properties	3
Federal	Institutional Control / Engineering Control Registries	subject property	0
Federal	Environmental Response and Notification System (ERNS)	subject property	0
State & Tribal	Hazardous Waste Sites (HWS) (equivalents to NPL and CERCLIS)	1 mile	0
State & Tribal	Solid Waste Facilities/Landfill Sites (SWF/LF)	½ mile	0
State & Tribal	Leaking Underground Storage Tank (LUST) Sites	½ mile	43
State & Tribal	Registered Underground Storage Tank (UST) Sites	subject property and adjoining properties	3
State & Tribal	Institutional Control / Engineering Control Registries	subject property	0

Туре	Regulatory Agency Database	Approximate Minimum Search Distance (AMSD)	Number of Sites within AMSD
State & Tribal	Brownfield Sites	½ mile	6
State & Tribal	Michigan Inventory of Facilities (Includes Part 201 Sites and Baseline Environmental Assessment {BEA} Sites)	½ mile	278
Either	Unmappable Database Listings (a.k.a. Orphan Sites)	database-dependent	3

Section 5.1.1: Subject Property and Occupant Listings

The subject property or its known occupants are not identified in the referenced databases.

Section 5.1.2: Adjoining and Nearby Sites

PM's review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby sites. To evaluate which of the adjoining and nearby sites identified in the regulatory database report present an environmental risk to the subject property, PM considered the following criteria:

- The type of database on which the site is identified.
- The topographic position of the identified site relative to the subject property.
- The direction and distance of the identified site from the subject property.
- Local soil conditions in the subject property area.
- The known or inferred groundwater flow direction in the subject property area.
- The status of the respective regulatory agency-required investigation(s) of the identified site, if any.
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes, and ditches) located between the identified site and the subject property.

Only those sites that are judged to present a potential environmental risk to the subject property and/or warrant additional clarification are further evaluated. Using the referenced criteria, and based upon a review of readily available information contained within the regulatory database report, PM did not identify adjoining (i.e., bordering) or nearby sites (e.g., properties within a ¼-mile radius) listed in the regulatory database report that were judged to present a potential environmental risk to the subject property, with the exception of the following:

TSD Solution LLC/Moslem Temple Aaonms – This site is identified as 2701 Cass Avenue and is the northeast adjoining property. Review of the regulatory database indicates this property is a closed UST site, closed LUST site with two releases reported in 2012, and a former occupant has been registered as a RCRA non-generator of hazardous waste since 2012 with no reported violations. PM attempted to review EGLE regulatory records relating to the RCRA status, however, no records were available. Review of the Waste Data System (WDS) website documents the current occupant was registered as a generator in 1984 associated with child day care activities. PM reviewed Michigan Department of Licensing and Regulatory Affairs Storage Tank Division (LARA STD) and UST file information which documented a 12,000-gallon diesel UST was installed in the southern portion of the current building in 1971, which was removed in 2012. During the removal, an orphan UST was discovered, which was filled with concrete. Review

of EGLE file information relating to the LUST indicates the property was formerly utilized for vehicle repair operations and a release was reported for each of the two UST systems. Analytical results from soil and soil gas samples collected to assess the releases indicate that contamination has migrated to the south, partially into the Ledyard Street right-of-way, and west into an alley. However, the existing contamination does not exceed any viable exposure pathways such as the current Part 201 Soil Volatilization to Indoor Air Inhalation (SVII) cleanup criteria. No groundwater was encountered up to 20.0 feet below ground surface (bgs). Additionally, a Phase II ESA was completed for the subject property in 2021 and all soil samples collected from the northern portion of the property documented concentrations of volatile organic compounds (VOCs) and polynuclear aromatic compounds (PNAs) were below laboratory method detection limits (MDLs). Based on the delineation in the direction of the subject property, distance of existing contamination from the subject property (i.e., approximately 75 feet across Ledyard Street), removal of the UST systems, and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified this property as a REC. Refer to Section 5.2.3 for additional information regarding the 2021 Phase II ESA for the subject property.

Acis Laboratories/U.S. Environmental Protection Agency/Clifford Lab – This site is identified as 2600 Clifford Street and is a former east adjoining property. Review of the regulatory database indicates this site is identified as a SEMS site, a BEA site, and a former occupant has been registered as a RCRA non-generator of hazardous waste since 2005 with no reported violations. PM attempted to review EGLE regulatory records relating to the RCRA status, however, no records were available. Review of the WDS website documents at the time of registration, the site was classified as an emergency site. Review of the 2010 BEA documents the property was previously occupied by a chemical and petroleum lab that was abandoned with thousands of chemical containers and 55-gallon drums. The EPA removed and disposed of the abandoned containers in 2005. Review of the 2010 BEA report indicates contamination is present in the soil above the current Part 201 GCC. However, the existing contamination has been delineated in the direction of the subject property. No groundwater was encountered up to 20.0 bgs. Based on the distance of contamination from the subject property (i.e., at least 180 feet across Cass Avenue), recent re-development of the property (which would have included excavation of contaminated soils), and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified this property as a REC.

Gateway Gardens LLC/Detroit Repair Inc. - This site is identified as 2500 Clifford Street and is a former east adjoining property. Review of the regulatory database indicates this site is identified as a closed UST site, closed LUST site with one reported release in 1998, a BEA site, and a former tenant has been registered as a RCRA VSQG of hazardous waste since 2011 with no reported violations. PM attempted to review EGLE regulatory records relating to the RCRA status. however, no records were available. Review of the WDS website documents the RCRA status is related to offices of other holding company activities. PM reviewed EGLE file information for this property, which included a Closure Report completed in 1998 and a Phase II ESA and BEA completed in 2010 for 2500 Clifford Street, 2520 Cass Avenue, and 201 Sibley Street. Analytical results indicated low levels of Tetrachloroethylene (PCE) and Trichloroethylene (TCE) were detected in the northeastern portion of the 2500 Clifford Street (i.e., at least 200 feet across Cass Avenue and the former Clifford Street) above the current Part 201 Generic Cleanup Criteria (GCC). Additionally, benzo(a)pyrene was detected above the current Part 201 GCC in the northwestern portion of the former median of Cass Avenue and Clifford Street. Based on the closed LUST status, distance of contamination from the subject property (i.e., at least 90 feet across Cass Avenue), recent redevelopment of the property (which would have included

excavation of contaminated soils), and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified this property as a REC.

Bay Rent Inc. – This site is identified as 2540 Cass Avenue and is a former east adjoining property in the former median between Cass Avenue and Clifford Street. Review of the regulatory database indicates this site is identified as a closed UST site. PM reviewed LARA STD and UST file information which indicates six USTs were removed from the property in April 1990. Analytical results from soil samples taken from the sidewalls and floors of the UST basins were below laboratory MDLs for all parameters, with the exception of one sample taken from a former heating oil UST basin, which documented detectable levels of Total Petroleum Hydrocarbons (TPH). The tanks were removed, and the UST basins were excavated and backfilled to grade with gravel. This area was assessed further during a 2010 BEA mentioned in the paragraph above for "Gateway Gardens LLC/Detroit Repair Inc." Based on the distance from the subject property (i.e., at least 90 feet across Cass Avenue), recent redevelopment of the property (which would have included excavation of contaminated soils), and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified this property as a REC.

Delbruck Technology, LLC – This site is identified as 3501 Cass Avenue, however, based on review of EGLE records this listing is associated with the south adjoining property, 2501 Cass Avenue. Review of the regulatory database indicates this property is listed on the Michigan Inventory of Databases as a BEA site. PM was not provided with the 2012 BEA during the 2019 Phase I ESA, however, the BEA was provided at a later date and was reviewed as part of this Phase I ESA. The 2012 subsurface investigation was completed to assess the potential for contaminated backfill related to former structures to be present on the property and for the presence of a former dry cleaner in a former tenant space. Analytical results from the soil samples collected closest to the subject property were below the most restrictive Part 201 GCC for all parameters except for total lead. The analytical results for the soil samples collected and analyzed from borings along the southern subject property boundary during PM's 2021 subsurface investigation were below the most restrictive Part 201 GCC for all parameters. Based on review of the 2012 BEA and these results, this property no longer represents a REC.

466 Henry Street – This site is identified as 466 Henry Street and is located within one-eighth mile southwest of the subject property. Review of the regulatory database indicates this property is identified on the Michigan Inventory of Databases as a BEA site. PM reviewed EGLE file information, including a 2017 BEA which documented concentrations of metals and PNAs are present in the soil above the current Part 201 GCC. No VOCs were detected. Based on the distance of contamination from the subject property (i.e., at least 60 feet across a public alley), redevelopment of the property with the current paved parking lot, and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified this property as a REC.

Michigan Chronicle – This site is identified as 479 Ledyard Street and is located within one-eighth mile west of the subject property. Review of the regulatory database indicates this site in listed on the Michigan Inventory of Databases as a BEA site. Review of the 2015 BEA a subsurface investigation was completed to assess potential unsuitable fill material in the eastern portion. Analytical results from soils samples collected from the eastern portion of the property document concentrations of metals and PCE remain in onsite above the current Part 201 GCC. PM completed a Phase II ESA on the subject property in 2021, which documented analytical results collected in the northeastern portion of the subject property were below the laboratory

MDLs for all parameters. Based on distance from contamination to the subject property (i.e., approximately 100 feet), and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified this property as a REC.

Additional properties were listed in the regulatory database within one-eighth of a mile of the subject property; however, based on the regional clay geology, insufficient groundwater to act as a transport mechanism, and distance considerations, PM has not identified these properties as RECs. PM also utilized reasonably ascertainable information to determine the location of the "orphan" listings in the regulatory database. None of the sites were identified as concerns.

Section 5.2: Additional Environmental Records Sources

The objective of reviewing historical sources is to: (1) develop a history of previous uses or specific occupancies of the subject property, (2) identify those uses or specific occupancies that are likely to have led to potential environmental concerns at the subject property, and to the extent identifiable, at adjoining properties, and (3) identify obvious uses of the subject property from the present, back to the property's *obvious* first developed use, or back to 1940, whichever is earlier. Further, the historical review was completed to assess whether operations were conducted that involved the use, storage and/or disposal of hazardous waste, hazardous substances, and/or petroleum products.

An understanding of the subject property was obtained from reasonably ascertainable standard and other historical sources extending back to 1889. Data failure occurred prior to that date. Interviewees provided independent knowledge of subject property and surrounding area usage which in turn provided information confirming historical subject property and general adjoining and surrounding land usage. See Sections 5.4.3 and 5.5 for specific documentation of standard and other historical sources consulted and availability of these sources. The history of the subject property and adjoining and surrounding areas, which was able to be derived from standard historical sources and other sources to satisfy the ASTM standard requirements for uses of a property (except those excluded by data failure), have been described within the text of this report.

Section 5.2.1: Assessing Department/Building Department Records

Reasonably ascertainable assessment online information provided by the City of Detroit Assessor's Office was obtained and reviewed. Assessing records document that the subject property is part of one parent parcel totaling 1.87 acres that is developed with two buildings associated with the homeless shelter and transitional housing operations.

PM reviewed historical City of Detroit Assessing Department records as part of a 2019 Phase I ESA (Section 5.2.3) and no additional relevant information was documented for the subject property. Copies of available assessment records for the subject property and the current legal description are included in Section 10.4.

Reasonably ascertainable building information provided by the City of Detroit Department of Buildings, Safety Engineering and Environmental Department (BSEED) was obtained and reviewed. The table below describes the permit issued, the date of issuance, and the reason for issue.

Address	Permit Number	Date of Issuance	Description	
435-439	47996	3/3/1955	Wreck dwelling and remove debris	
Ledyard Street	50159	4/8/1955	Wreck garage building and remove debris	
447 Ledyard	910	3/20/1911	Construct garage	
Street	47997	3/3/1955	Wreck dwelling and remove debris	
2525-2527 Cass Avenue	34106	5/1/1969	Wreck wash rack and remove debris	
2527 Cass Avenue	34522-A	10/15/1930	Wreck dwelling	
2531 Cass	48396	1/14/1964	Wreck rooming house (six apartments) and remove debris	
Avenue	48397	1/14/1964	Wreck multiple dwelling (six apartments) and remove debris	
2537 Cass Avenue	65252	3/12/1965	Use of land for private parking	
2545-2547 Cass Avenue 17674 6/11/1984 Wreck		Wreck rooming house and remove debris		
2551 Cass Avenue	s 8157A 3/25/1924 Wreck two story dv		Wreck two story dwelling	
2557 Cass Avenue	70350	4/4/1930	Construct watchman shelter	
2561 Cass Avenue	29470	4/25/1922	Construct garage	
2575 Cass Avenue	53917	11/26/1924	Construct garage	
2605 Cass Avenue	13220	6/28/1923	Construct office	
2613 Cass Avenue	4499	10/16/1912	Construct hotel	
3619 Cass Avenue	33682	6/9/1986	Wreck multi-dwelling and remove debris	

Additional permits were available documenting parking lot permits and alterations/repairs to the former dwellings and mixed-use building (Pricilla's Inn). Records for 445 Ledyard Street documented permits associated with the current west adjoining buildings on the parent parcel.

PM also attempted to review BSEED oil and gas record cards, which document historical fuel oil use and are unique to Detroit. However, no records for the subject property were available for review.

Section 5.2.2: Zoning Department Records

PM reviewed the City of Detroit zoning map. The subject property is currently zoned "B-4: General Business District." PM's review did not identify potential environmental concerns associated with the subject property based on its current zoning.

Section 5.2.3: Previous Site Investigations

Phase I ESA

PM completed a previous Phase I ESA dated August 30, 2019 for the entire parent parcel, including the current subject property. At the time of the Phase I ESA, the properties were occupied by the Mariners Inn homeless shelter. Similar historical information was included in this Phase I ESA. The following on-site REC was identified associated with the subject property:

• A storefront within the former Priscilla Inn (417 Ledyard Street) was previously occupied by a clothes cleaner between at least 1935 to 1940 (and potentially from 1931 to 1945), which may have included dry cleaning operations. Dry cleaning operations during this timeframe commonly involve the usage of general hazardous substances and/or petroleum products, which, if improperly managed and/or disposed of, can be a source of contamination. This time period preceded major environmental regulations and current waste management and disposal procedures. The historical waste management practices associated with the former dry-cleaning operations are unknown and may be a source of subsurface contamination.

The following adjoining REC to the subject property was identified:

• The south adjoining property, identified as 2501 Cass Avenue, is identified as a Baseline Environmental Assessment (BEA) site. PM attempted to review regulatory file information for this property but did not receive a response within the time constraints of this report. The property was historically occupied by a movie theater equipment company, restaurants, hair salons/barbers, bars, and a popcorn company. PM was unable to determine the source of the known contamination on the property. Based on the close proximity to the subject property (i.e., directly adjoining), the potential exists that existing contamination on this property has migrated onto the subject property.

Phase II ESA

To address the RECs associated with the subject property, on June 10, 2021, PM completed subsurface investigation activities consisting of the advancement of eight soil borings, installation of four temporary soil gas points, and the collection of 16 soil samples and four soil gas samples. Two boring locations were selected to address the onsite former dry cleaner REC and two soil boring locations were selected to address the south adjoining BEA site RE. Additionally, five additional soil borings were advanced to address the potential for fill material to be present in the locations of former buildings in the eastern portion of the subject property. The soil samples were submitted for laboratory analysis of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs), polychlorinated biphenyls (PCBs), and ten Michigan metals (or some combination thereof). The soil gas samples were submitted for laboratory analysis of VOCs. No concentrations of VOCs or metals were detected above laboratory MDLs. No VOCs were detected exceeding the most restrictive Part 201 Generic Cleanup Criteria (GCC) and/or the most restrictive EGLE Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels. Concentrations of the PNAs benzo(a)pyrene and benzo(b)fluoranthene were identified in one soil sample in the central portion of proposed condominium Unit #1 (SB-5, 3.5-4.5 feet bgs) above Part 201 Residential Generic Cleanup Criteria (GCC) for Direct Contact (DC). Additionally, concentrations of the PNAs fluoranthene, naphthalene, and phenanthrene and the metal mercury

were also identified in SB-5, 3.5-4.5 feet bgs above Part 201 Residential GCC for Groundwater Surface Water Interface Protection (GSIP). The concentrations of naphthalene and mercury detected in SB-5, 3.5-4.5 feet bgs also exceed EGLE Residential VIAP Screening Levels.

On November 24, 2021. PM completed an additional subsurface investigation in an effort to delineate the extent of PNA contamination identified in the southern-central portion of the subject property in June 2021. The investigation consisted of the advancement of six soil borings, installation of two temporary soil gas points, and the collection of 13 soil samples and two soil gas samples. The soil samples were submitted for laboratory analysis of VOCs and PNAs. The soil gas samples were submitted for laboratory analysis of VOCs. No concentrations of VOCs were detected in the soil samples above laboratory MDLs or most restrictive Part 201 GCC and no soil gas samples were detected above EGLE Residential VIAP Screening Levels. The PNA benzo(a)pyrene was identified in soil boring SB-5R, 0.5-1.5 feet bgs over Part 201 Residential DC and the PNAs benzo(a)pyrene and benzo(b)fluoranthene were identified in soil boring SB-9, 3.5-4.5 feet bgs, also located in the central portion of proposed condominium Unit 1, over Part 201 Residential DC. No additional PNAs were identified above laboratory MDLs and/or the most restrictive Part 201 GCC. Based on these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan Natural Resources and Environmental Protection Act (NREPA), as amended, which represents a REC.

Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. The planned remedial actions include excavating contaminated soils with proper landfill disposal. The proposed excavation is 33 feet wide by 50 feet long by 6.0 feet deep. Following soil removal activities, verification of soil remediation (VSR) samples will consist of using biased sampling strategies and screening the floors and sidewalls prior to sample collection to document the removal of contaminated soils to concentrations below applicable Part 201 Residential cleanup criteria and VIAP and/or Site-Specific Screening Levels.

A Draft Table of Soil Analytical Results and Draft Proposed Excavation Area figure are provided in Appendix 10.7.

Section 5.3: Physical Setting Source(s)

PHYSICAL SETT PROPER	SOURCE				
Topography: Refer to	Figure 1 for an excerpt of the Topographic Map				
Site Elevation	Site Elevation 610 feet above mean sea level (msl)				
Topographic Gradient	South	United States Geological Survey Division (U.S.G.S.) 7.5-Minute Topographic Map			
Closest Surface Water	The Detroit River, located approximately 1.10 miles south-southeast at an elevation of 575 feet above msl	of the Detroit, Michigan Quadrangle, 1968 (photo revised in 1973 and 1980)			
General Soil Characteristics: Refer to Section 10.4 for a copy of the soil survey map and soil type descriptions					
Soil Type	Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes	United States Department of Agriculture, Custom Soil			

PHYSICAL SETT PROPER	SOURCE				
Description	Urban land consists of areas covered by buildings, paved features, railroad yards, industrial complexes, and other structures. A typical soil profile is not defined. Permeability and available water capacity vary. Corrosion risk is not defined. A typical Riverfront soil profile consists of sandy loam to six inches bgs, very artifactual sandy loam to 16.0 inches bgs, gravelly-artifactual loam to 46.0 inches bgs, very artifactual loam to 68.0 inches, underlain by clay to 80.0 inches bgs. This soil is well drained with a depth to the water table of more than 80.0 inches. The risk of corrosion is low for both uncoated steel and concrete.	Resource Report for Wayne County, Michigan (survey area data: September 7, 2021)			
Area Specific Geolog	y/Hydrogeology Characteristics:				
Geology	Generally consists of sand, sandy clay, or clay to between 4.5 and 8.0 feet bgs, underlain by clay to 20.0 feet bgs, the maximum depth explored. Various debris (concrete and brick) was identified in in the southern portion between 0.5 and 6.0 feet bgs.	Previous site investigations for the subject property (June and November 2021)			
Hydrogeology	Groundwater was not encountered to a depth of 20.0 feet bgs, the maximum depth explored.				
Oil and Gas Wells:					
Current Oil and Gas Wells on Subject Property Historical Oil and Gas Wells on Subject property None identified None identified		The EGLE Geologic Survey			
		Division (GSD) web site			

Section 5.4: Historical Use Information on the Subject Property

Section 5.4.1: Aerial Photographs and Sanborn Map Coverage for the Subject Property

PM reviewed reasonably ascertainable aerial photographs for the subject property area. The sources and years reviewed are identified in the table below. Relevant aerial photographs are included in Section 10.4.

PM reviewed reasonably ascertainable Sanborn Fire Insurance Maps for the subject property area, which were obtained from EDR. The sources and years reviewed are identified in the table below. Relevant Sanborn Maps are included in Section 10.4.

The following table summarizes the sources reviewed and the information obtained about the subject property from these sources. Information obtained about the adjoining properties from these sources is summarized in Section 5.5.

Aerial and Sanborn Summary for the Subject Property

Year and Source	Summary of Information		
1884 Sanborn Map (EDR)	The eastern portion is depicted with five residential dwellings, and the western portion is not depicted. Ledyard Street is visible to the north and Cass Avenue is visible to the east.		
A shed, three stables, and a portion of a dwelling that extends onto the adjoining are depicted in the western portion. Otherwise, similar to the particular Sanborn year.			
1897 Sanborn Map (EDR)	An additional dwelling is depicted in the southern portion. Otherwise, similar to the previous Sanborn year.		
1919 Sanborn Map (EDR)	The northern dwelling, shed, and stable have been demolished and a building identified as "Priscilla Inn" is now depicted, which extends onto the west adjoining property and includes storefronts along the northern and eastern portions of the building. A portion of the southernmost dwelling is now identified as a store.		
1921 Sanborn Map (EDR)	A stable has been constructed in the western portion and a stable in the southwestern portion has been converted to a garage. Otherwise, similar to the previous Sanborn year.		
1937 Aerial (EDR)	Due to scale and resolution, definitive details could not be determined. However, appears similar to the previous Sanborn year.		
1949 Aerial (EDR)	Two dwellings and a garage have been demolished in the central and southern portions. The portion south of Priscilla Inn appears to be utilized for parking and a commercial building is visible in the southern portion. Otherwise, similar to the previous aerial and Sanborn years.		
1950 Sanborn Map (EDR)	One of the dwellings in the southern portion is identified as "rooming" and the commercial building in the southern portion is identified as a car wash. Otherwise, similar to the previous aerial year.		
1952 Aerial (EDR)	Similar to the previous aerial and Sanborn years.		
1953 Sanborn Map (EDR)	Similar to the previous aerial and Sanborn years.		
1956 Aerial (EDR)	The dwelling in the northwestern portion which extended onto the west adjoining property is no longer depicted. Otherwise, similar to the previous aerial and Sanborn years.		
1957 Sanborn Map (EDR)	Similar to the previous aerial year.		
1961 Sanborn Map (EDR)	Similar to the previous aerial and Sanborn years.		
1961 Aerial (EDR)	Similar to the previous aerial and Sanborn years.		
1966 Aerial (EDR)	A dwelling in the southern portion has been demolished and the location appears to be utilized for parking. Otherwise, similar to the previous aerial year.		
1972 Aerial (EDR) The car wash building in the southern portion has been demolished. Other similar to the previous aerial year.			
1977 Sanborn Map (EDR)	The Priscilla Inn is now labeled as the Baptist Building/Priscilla Hall and the stores are no longer depicted. The southern portion is depicted as parking. Otherwise, similar to the previous aerial year.		
1983 Aerial (EDR)	Similar to the previous Sanborn year.		
1987 Aerial (EDR)	The Baptist/Priscilla building and the remaining dwelling in the southern portion are no longer visible. Otherwise, similar to the previous aerial year.		

Year and Source	Summary of Information			
1988 Sanborn	The former Baptist/Priscilla building remains depicted in the northern portion.			
Map (EDR)	Otherwise, similar to the previous aerial year.			
1991 Sanborn	The former Baptist/Priscilla building is no longer depicted. Otherwise, similar to the			
Map (EDR)	previous Sanborn year.			
1996 Sanborn	Similar to the previous Sanborn year.			
Map (EDR)	Similar to the previous Samborn year.			
1997 Aerial (EDR)	The current paved parking lot is visible in the northern portion. Otherwise, similar			
1997 Aeriai (LDIN)	to the previous Sanborn year.			
1999 Aerial (EDR)	A basketball court is visible in the southern portion. Otherwise, similar to the			
1999 Aeriai (LDIN)	previous aerial year.			
2002 Sanborn	Similar to the previous Sanborn year.			
Map (EDR)	Similar to the previous Samborn year.			
2005 Aerial (EDR)	Two of the current sheds are visible in the western portion. Otherwise, similar to			
2000 Acriai (LDIV)	the previous aerial year.			
2009 Aerial (EDR)	A temporary tent is visible in the southern portion. Otherwise, similar to the			
2003 Aeriai (LDIN)	previous aerial year.			
2012 Aerial (EDR)	Similar to the previous aerial year.			
	The previously identified basketball court and temporary tent have been removed			
2016 Aerial (EDR)	and the current basketball court is visible in the southern portion. An additional			
2010 Aeriai (EDK)	shed is visible in the western portion. Otherwise, similar to the previous aerial and			
	appears similar to the current layout.			
2021 Aerial Similar to the provious social year				
(Google Earth)	Similar to the previous aerial year.			

A summary of this information along with other historical sources is included in Section 5.4.3.

Section 5.4.2: Local Street Directories for the Subject Property

Reasonably ascertainable local street directories for Detroit, Michigan were researched. Directories were available from 1891 to 2014. It should be noted that prior to 1921, the address numbers in Detroit changed, and therefore listings for the former address ranges prior to 1921 when available are provided. Directories were researched in at least five-year increments, when available. It should not be construed that the earliest date represented is the initial date of occupancy.

In general, historical commercial occupants included homeless shelter, medical offices, restaurant, retail, boarding house, correctional facility, church convention center, grocery, beauty shop, hand laundry, shoe repair, bakery, car wash, retail, dressmaker, pharmacy, and professional office, dry cleaning, and dying company occupants. A copy of the listings available for the subject property are included in Appendix 10.4 and a summary of this information along with other historical sources is included in Section 5.4.3.

PM also reviewed listings for adjoining commercial properties. Information from the listings reviewed is included in Section 5.5.

Section 5.4.3: Summary of Historical Use for the Subject Property

Standard and other historical sources were able to document the subject property was developed prior to 1889 with several residential dwellings and outbuildings. The southernmost dwelling also included a first-floor storefront that was occupied by a doctor's office in at least 1901, a restaurant

in at least 1916, a hand laundry in at least 1921, and a shoe repair business in at least 1926. Between 1912 and 1913, the dwelling in the northern portion was demolished and replaced with the Priscilla Inn, a women's correctional center and church convention center with a kitchen and six storefronts, which were occupied by a cleaning and dying company, a clothes cleaner, a pharmacy, a church, a grocery store, a hand laundry, a tea supplier, a baker, a library, and a beauty shop. In the 1940s, two dwellings in the southern portion were demolished and replaced with a car wash, which was demolished in 1969. By 1950, most, if not all, storefronts within Pricilla Inn were converted to shelter-related uses such as a recreation room and lobby, and the land immediately south of the inn was converted into a parking lot and was used for automotive sales in at least 1925 to 1926. The Priscilla Inn was demolished in 1984 and the northern portion has been utilized for parking since that time. Two of the three remaining dwellings in the southern portion were demolished in the 1960s and the third was demolished in the 1980s. The southern portion has been utilized for parking or a recreational lot for the west adjoining homeless shelter, Mariners Inn since at least 1987. Two of the three current sheds were constructed in the western portion between 2002 and 2005, and the third shed was constructed between 2012 and 2016.

One storefront within the former Priscilla Inn (417 Cass Avenue) was previously occupied by a cleaning and dying company in at least 1916, which may have included dry cleaning operations. However, based on the short timeframe of operations (i.e., less than five years) and time period when solvents were not commonly utilized, PM has not identified this potential former dry-cleaning operations as a REC.

Another storefront within the former Priscilla Inn (417 Ledyard Street) was previously occupied by a clothes cleaner between at least 1935 to 1940, which may have included dry cleaning operations. Dry cleaning operations during this timeframe commonly involved the usage of general hazardous substances and/or petroleum products, which, if improperly managed and/or disposed of, can be a source of contamination. The potential former dry-cleaning operations were assessed in a previous subsurface investigation at the subject property. Refer to Section 5.2.3 for additional information.

The subject property was historically developed with several residential dwellings with basements, which were demolished at various times between the 1940s and 1980. Subsurface investigations completed at the subject property in June and November 2021 documented concrete and brick debris was encountered in five soil borings within former building footprints in the southern portion between 0.5 feet and 6.0 feet below ground surface (bgs). A limited area of polynuclear aromatic hydrocarbons (PNAs) and mercury exceeding Part 201 GCC was identified in the former footprint of two former dwellings in the southern portion, which will be excavated as part of redevelopment activities.

Section 5.5: Historical Use Information on the Adjoining Properties

The same aerial photographs and Sanborn Maps described in Section 5.4.1 and city directories from Section 5.4.2 were obtained and reviewed for the adjoining properties. The following paragraphs provide information about the adjoining properties obtained during the site reconnaissance and through review of reasonably ascertainable information.

North Adjoining Properties, across Ledyard Street

The northeast adjoining property, identified as 2701 Cass Avenue, was developed prior to 1884 with a residential dwelling. The dwelling was demolished, and the current warehouse building was constructed in 1945. The building was utilized as an Avis car rental garage from at least 1960 until 1973 and a bus garage from at least 1972 to 1986. The warehouse has been vacant since approximately the 1980s. This property is identified in the regulatory database. Refer to Section 5.1.2 for additional information.

The northwest adjoining property, identified as 2700-2714 Second Avenue, was developed between 1889 and 1897 with two dwellings in the southeastern portion and a church in the southwestern portion, on previously vacant land. The current residential apartment building was constructed in the northern portion between 1897 and 1919. The church and dwellings were demolished between 1961 and 1967, and a new church building was constructed. The church was demolished between 2016 and 2018 and the property has been occupied by the apartments in the northern portion and vacant land in the southern portion since that time.

East Adjoining Property, across Cass Avenue

The east adjoining property, identified as 165 Sproat Street, was developed prior to 1884 with several residential dwellings and commercial storefronts. A gasoline service station, historically identified as 2524-2540 Cass Avenue, was constructed in the western portion, within a former median between Cass Avenue and Clifford Street between 1921 and 1931. The majority of the dwellings were demolished, and the property was redeveloped with numerous hotels and additional commercial storefronts in the 1930s and 1940s. Additionally, a gasoline service station, historically identified as 2500 Clifford Street, was constructed in the southern portion between 1937 and 1941. The gasoline service station in the southern portion operated until 1982 and was then occupied by a taxi company (with service operations) until approximately 2010. The gasoline service stations in the western portion operated until the late1970s. The two gasoline service stations and the remaining hotels and commercial buildings were demolished by the 2010s, and the entire area was redeveloped with the current Little Caesar's Arena parking garage, and Little Caesar's Arena beyond between 2016 and 2017. This property is identified in the regulatory database. Refer to Section 5.1.2 for additional information.

South Adjoining Property

The south adjoining property, identified as 2501 Cass Avenue, was developed prior to 1884 with residential dwellings and a commercial storefront in the southeastern portion, which was occupied by a mantle, grate, and cabinet shop. Several dwellings were demolished in the southern portion and apartment and hotel buildings were constructed between 1919 and 1921. The southeastern dwelling and storefront were demolished, and a commercial building was constructed between 1921 and 1937. The building was historically occupied by various restaurants, hair salons, a theater equipment company, bars, a popcorn company, and was occupied by a dry-cleaning company between at least 1940-1941. The hotel and apartment buildings were demolished in the late 1990s and early 2000s. The commercial building in the southeastern portion was demolished in 2017, and the property was redeveloped with the current parking lot in 2018. This property is identified in the regulatory database. Refer to Section 5.1.2 for additional information.

West Adjoining Property

The west adjoining property and remainder of the parent parcel, identified as 445 Ledyard Street, was developed prior to 1889 with three dwellings and the current transitional housing building. Between 1912 and 1913, a portion of Priscilla Inn, a women's correctional center and church convention center with several storefronts, was constructed in the eastern portion, which extended onto the subject property. Between 1897 and 1919, an outbuilding in the southern portion associated with the dwellings was converted into a 7-car garage with a north side heating plant addition by 1921. By 1950, most, if not all, storefronts within Pricilla Inn were converted to shelter-related uses such as a recreation room and lobby, and the land immediately south of the inn was converted into a parking lot and was used for automotive sales in at least 1925 to 1926. The three dwellings and the heated garage in the were demolished between 1955 and 1956 and replaced with the western portion of the current Mariners Inn (main office and dorm housing), which had an eastern addition completed in 1995 (offices and kitchen). The Mariners Inn has been utilized as a homeless shelter, counseling center, and transitional housing since construction.

The west adjoining property, identified as 438 Henry Street, was developed with a dwelling and stable prior to 1889. Between 1897 and 1919, the dwelling and stable were demolished and an apartment building identified as The Elms was constructed. The apartment building was demolished between 1997 and 1999 and the property consisted of vacant land until being redeveloped with the current parking lot in 2017/2018.

SECTION 6.0: SITE RECONNAISSANCE

Section 6.1: Methodology and Limiting Conditions

Reconnaissance Information			
PM Field Personnel: Ms. Devon Nagengast			
Site Reconnaissance Date:	April 14, 2022		
Escort: No escort			
Limitations:	PM did not access the sheds in the western portion, which were locked at the time of the site reconnaissance. Based on the use for general storage, PM has not identified this limitation as a significant data gap.		

Section 6.2: General Subject Property Setting

A general property description and improvements is provided in Sections 3.1 and 3.2.

The subject property consists of approximately 1.07 acres of a parent parcel totaling 1.87 acres located south of Ledyard Street and west of Cass Avenue in Detroit, Michigan. The three sheds are present in the western portion ranging in size between approximately 70 and 300 square feet each. A parking lot is present in the northern portion, a basketball court is present in the southern portion, a small, paved area is present in the western portion, and the remainder contains groomed grass. The subject property is located in an area of Detroit that is characterized by residential and commercial properties.

Section 6.3: Exterior Observations

The following table summarizes the exterior site observations. No affirmative responses were identified.

Category	Feature	Observed
	Aboveground Storage Tanks (ASTs)	No
	Drums, Barrels and/or Containers > 5 gallons	No
	Stressed Vegetation	No
	Stained Soil or Pavement	No
	Monitoring Wells	No
	Soil Piles of Unknown Origin/Site Filling	No
	Exterior Dumpsters with Staining	No
	Leachate or Other Waste Seeps	No
Exterior Observations	Trash, Debris, and/or Other Waste Materials	No
Exterior Observations	Uncontrolled Dumping or Disposal Areas	No
	Surface Water Discoloration, Sheen, or Free Product	No
	Strong, Pungent or Noxious Odors	No
	Storm water retention or detention ponds	No
	Pits, Ponds, Lagoons	No
	Pad or Pole Mounted Transformers and/or Capacitors	No
	Underground Storage Tanks	No
	Fuel Dispensers	No
	Pipeline Markers	No

Section 6.3.1: Underground Storage Tanks (USTs)

Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current and historical presence of USTs on the subject property. Specifically, no records of USTs were identified though review of reasonably ascertainable records and PM did not observe any evidence of USTs (i.e., fill ports, vent pipes, etc.) during the site reconnaissance. Additionally, the current owner indicated he had no knowledge of USTs associated with the subject property.

SECTION 7.0: INTERVIEWS

The objective of completing interviews with knowledgeable site contacts is to obtain information about the uses and physical characteristics of the property.

In general, interviewees supported the information reviewed from other historical sources (i.e., aerial photos, city records, etc.).

Section 7.1: Interview with Owners, Occupants, or Others

Represents	Interviewed	Name and Title	Length of Time Associated with Subject Property	Comments
Current Owner, Key Site Manager, and Current Occupant	Yes (during the 2019 Phase I ESA)	Mr. David Sampson, CEO of Mariners Inn	21 years	Mr. Sampson indicated the subject property has been occupied by the current nonprofit shelter for people with addiction problems and the homeless for the past 64 years. No information was reported that would be considered material for identifying recognized environmental conditions in connection with the subject property.
Former Property Owner	No	Not applicable	Not applicable	Contact information for the former owner was not reasonably ascertainable or provided by the User
Former Occupant(s)	No	Not applicable	Not applicable	Contact information for the former occupants was not reasonably ascertainable or provided by the User
Other(s)	No	Not applicable	Not applicable	No other relevant interviews were conducted as part of this Phase I ESA.

Section 7.2: Interview with Local Government Officials

PM interviewed representatives from the City of Detroit municipal offices and the City of Detroit Health Department.

Section 7.2.1: Local Fire Department

PM submitted a Freedom of Information Act (FOIA) request to the City of Detroit FOIA Coordinator at the City of Detroit Law Department to review Fire Department records for the subject property. PM did not receive a response within the time constraints of this report. If PM does receive a response, and it changes the findings of the report, the client will be notified.

PM submitted a FOIA request to the City of Detroit Health Department, Division of Environmental Health and Safety to review records for the subject property.PM received a written response from a representative of the department indicating no files were available for the subject property.

SECTION 8.0: EVALUATION AND REPORT PREPARATION

Section 8.1: Findings

The following known or suspect environmental conditions associated with the subject property have been identified. These conditions may include de minimis conditions, RECs, both on-site

and off-site, as well as historical RECs, controlled RECs, non-ASTM findings such as Asbestos Containing Materials and/or wetland identification, and environmental non-compliance issues.

Section 8.1.1: De Minimis Condition

A de minimis condition, as defined in the ASTM Standard, is a condition that generally does not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs or CRECs. No de minimis conditions were identified during this assessment.

Section 8.1.2: Significant Data Gaps

A data gap, as defined in the ASTM Standard, is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts by the environmental professional to gather such information. The environmental professional must then determine whether these gaps are significant. PM did not identify or encounter any instances of significant data gaps during the course of this ESA

Section 8.1.3: Historical Recognized Environmental Conditions (HRECs)

An HREC, as defined in the ASTM Standard, is a past release of hazardous substances or petroleum products that has occurred in connection with the subject property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the subject property to any required controls. PM has not identified any HRECs associated with the subject property.

Section 8.1.4: Recognized Environmental Conditions (RECs)

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of The Anchor at Mariners Inn, proposed Mariners Inn Condominium Units Nos. 1 and 2 and General Common Elements, located in the eastern and southern portions of 445 Ledyard Street, Detroit, Wayne County, Michigan, the subject property. Any exceptions to, or deletions from, this practice are described in Sections 2.4 and 2.5 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except the following:

• Concentrations of benzo(a)pyrene, benzo(b)fluoranthene fluoranthene, naphthalene, phenanthrene, and mercury were identified during PM's 2021 subsurface investigation in soil samples collected from the central portion of the proposed condominium Unit #1 on the subject property exceeding Residential Part 201 GCC. The concentrations of naphthalene and mercury detected also exceed EGLE Residential VIAP Screening Levels. The impacted area appears to be associated with backfill associated with former dwellings. Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. Based on these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan NREPA, as amended.

No adjoining and/or nearby RECs have been identified.

Section 8.1.5: Controlled Recognized Environmental Conditions (CRECs)

A CREC, as defined in the ASTM Standard, is a recognized environmental condition (REC) resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. PM has not identified any CRECs associated with the subject property.

Section 8.2: Opinion

PM has performed an Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527-13, ASTM Practice E 2600-15, and the Michigan State Housing Development Authority (MSHDA) Environmental Review Guidelines for 2022 of The Anchor at Mariners Inn, proposed Mariners Inn Condominium Units Nos. 1 and 2 and General Common Elements, located in the eastern and southern portions of 445 Ledyard Street, Detroit, Wayne County, Michigan. Any exceptions to or deletions from this practice are described in the Limitations section of this report.

This assessment has revealed no evidence of recognized environmental conditions connected with the property, with the exception of the REC identified in Section 8.1.4.

Section 8.3: Additional Investigation

Based on the results of the 2021 subsurface investigation, the area of contamination exceeding the Part 201 GCC and Residential VIAP Screening Levels was delineated both vertically and horizontally. The planned remedial actions include excavating contaminated soils with proper landfill disposal. The proposed excavation is 33 feet wide by 50 feet long by 6.0 feet deep. Following soil removal activities, VSR samples will consist of using biased sampling strategies and screening the floors and sidewalls prior to sample collection to document the removal of contaminated soils to concentrations below applicable Part 201 Residential cleanup criteria and VIAP Screening Levels. PM is currently completing a BEA on behalf of the proposed lessee - The Anchor at Mariners Inn LDHA LP. PM is also preparing a Response Activity Plan – Remedial Action Plan to be approved by EGLE.

Section 8.4: Conclusions

PM has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of The Anchor at Mariners Inn, proposed Mariners Inn Condominium Units Nos. 1 and 2 and General Common Elements, located in the eastern and southern portions of 445 Ledyard Street, Detroit, Wayne County, Michigan, the subject property. Any exceptions to, or deletions from, this practice are described in Sections 2.4 and 2.5 of this report. This assessment has revealed no evidence of recognized environmental conditions connected with the property except as listed in Section 8.1.4 of this report.

Section 8.5: Additional Services

Additions to the ASTM Standard include an asbestos inspection completed in accordance with NESHAP, a lead-based paint inspection, a formaldehyde insulation survey, a radon gas survey, a 100-year flood plain evaluation, an evaluation for the presence of potential wetlands, inspection for potential electromagnetic fields due to high tension power lines, an evaluation of the presence of high pressure gas mains in the vicinity of the subject property, an evaluation of communication towers and/or antenna currently located at or proposed at the subject property, and an evaluation of railroad/roadway/airport noise analysis, and a Tier I Vapor Encroachment Screen (VES) of the target property. Refer to Section 9.0 for a discussion of additional services.

Section 8.6: Deviations

Refer to Section 2.4 for additional discussion.

Section 8.7: References

The following published sources were utilized during completion of this Phase I ESA:

- Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM, ASTM Designation E 1527-13, Published November 2013.
- Bresser's Cross-Index City Directories, Bresser's in Detroit, Michigan. City: Detroit. Years: 1946-2014.
- R.L. Polk's Directories, obtained from the State of Michigan Library in Lansing, Michigan. City: Detroit. Years: 1891-1941.
- Michigan Department of Environment, Great Lakes, and Energy (EGLE) "Your County's Radon Levels" map, referenced March 2022.
- Federal Emergency Management Agency (FEMA) floodplain map, dated February 2, 2012 (Map No. 26163C0285E).
- U.S. Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI) Map, referenced March 2022.
- United States Geological Survey Division (U.S.G.S.) 7.5 Minute Topographic Map Detroit, Michigan Quadrangle, 1968 (photo revised in 1973 and 1980).
- Custom Soil Resource Report for Wayne County, Michigan, U.S. Department of Agriculture, survey area data: September 7, 2021.

In addition, PM reviewed the following previous site investigations:

• Phase I ESA, PM, August 30, 2019.

Section 8.8: Signature(s) of Environmental Professional(s)

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Carey Kratz, EP

Regional Manager – Due Diligence

Peter S. Bosanic, P.E., EP

Principal

Section 8.9: Qualification(s) of Environmental Professional(s)

Refer to resumes included in Section 10.8 for descriptions of qualifications for the above Environmental Professionals.

SECTION 9.0: NON-ASTM SCOPE SERVICES

Section 9.1: Friable and Non-friable Asbestos Containing Materials (ACMs)

The storage sheds do not contain finish materials or suspect ACMs. No additional buildings or other structures were present at the subject property during the site reconnaissance. Therefore, an evaluation for the existence of suspect asbestos containing materials was not performed.

Section 9.2: Lead-Based Paint (LBP)

According to MSHDA guidelines, if building permits are issued before January 1, 1978, an LBP inspection and risk assessment is required. Based upon the construction dates of the storage sheds in the 2010s, a lead based paint inspection was not requested or required for this site.

Section 9.3: Radon Gas

A radon inspection was not required for the subject property, since it is not located within one of the 24 counties (Barry, Berrien, Brach, Calhoun, Cass, Clinton, Dickinson, Eaton, Hillsdale, Ionia, Iron, Jackson, Kalamazoo, Lapeer, Livingston, Lenawee, Monroe, Oakland, Otsego, Ottawa, Shiawassee, St. Joseph, Tuscola, and Washtenaw) designated by the EGLE as 25% or more homes tested equal to or above 4 picocuries/liter (pCi/L) of radon exposure. Therefore, no additional investigation is necessary.

Section 9.4: 100-Year Floodplain

According to a Federal Emergency Management Agency (FEMA) floodplain map, dated February 2, 2012 (Panel No. 26163C 0285 E), the subject property is not located within the 100-year flood zone. PM did not observe any sensitive ecological areas on the subject property, including potential wetlands, during the site reconnaissance. Furthermore, topographical features present

in the subject property area are not representative of a flood plain. Documentation of the floodplain map is included in Section 10.7.

Section 9.5: Wetlands

PM did not observe any wet areas potentially associated with wetlands on the subject property during the site reconnaissance. In addition, review of the National Wetlands Inventory (NWI) Map from the U.S. Fish and Wildlife Service and the EGLE Wetlands Map Viewer, did not identify any wetlands on the subject property. Documentation of the NWI and EGLE maps are included in Section 10.7.

Section 9.6: Electromagnetic Fields

PM did not observe any high-tension wires or substations in the vicinity of the subject property. Additionally, no cell phone towers, antennae, or arrays were observed on the subject property during the site reconnaissance. According to the Sponsor, no building-mounted cell phone antennae arrays are planned for the subject property.

Section 9.7: High Pressure Buried Gas Lines

No high-pressure gas lines were identified within 1,000 feet of the subject property.

Section 9.8: Noise Analysis

MSHDA requires that a HUD desktop noise assessment be completed for properties that are located within 1,000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated airports. The subject property is located within the applicable distance of Coleman A. Young International Airport, Windsor Airport, and 13 busy roadways. PM conducted a Desktop Noise Assessment in general accordance with the US Department of Housing and Urban Development (HUD) Noise Abatement and Control standards contained in 24 CFR 51B. The Desktop Noise Assessment is provided in Appendix 10.7. Two NALs (NAL #1 and NAL #2) were used at the northwestern and southeastern corners of the proposed building on the subject property for this analysis, based on proximity to noise sources.

Using the HUD DNL calculator, the following is a summary of the findings of the Desktop Noise Assessment.

NAL#	Combined Source DNL (dB)	Category
1 (northwest corner of proposed building)	67	Normally Unacceptable
2 (southeast corner of proposed building)	72	Normally Unacceptable

The "Normally Unacceptable" noise zone includes community noise levels from above 65 dB to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB (HUD generally gives a 1 dB variance up to 76 dB). Additionally, I-75 is sunken approximately 13 feet below grade nearest

the subject property, which will provide some noise attenuation from the traffic. The project architect will need to complete attenuation documentation for the project by completing either a Sound Transmission Classification Assessment Tool (STraCAT) form or HUD Figure 19. Interior noise levels must be mitigation for 45 dB or less.

Section 9.9: Assessment of Potential Vapor Encroachment Conditions (VECs)

PM completed a Tier I Vapor Encroachment Screen (VES) of the target property. The Tier I VES were conducted in general accordance with the guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions Designation E 2600-15* (ASTM Standard Practice E 2600-15).

The purpose of the VES was to determine if potential Vapor Encroachment Concerns (pVECs) or Vapor Encroachment Concerns (VECs) exist associated with the target property. ASTM's Standard Practice E 2600-15 defines the term VEC as the presence or likely presence of any contaminant of concern (COC) in the indoor air environment of existing or planned structures on a property caused by the release of vapor from contaminated soil or groundwater either on the property or within close proximity to the property, at a concentration that presents or may present an unacceptable health risk to occupants. A VEC can be further defined as any COC within 100 feet for soil impacts or ground water impacts of an existing/planned structure or to the target property boundary if there are no planned structures.

The scope of this Tier I VES included a review of the geologic, hydrologic, hydrogeologic, topographic maps, aerial photography, city directories, Sanborn Fire Insurance Maps, a review of previous site investigations, regulatory databases and other pertinent data obtained during the preparation of the Phase I. No subsurface investigation of the property was undertaken as part of this Tier I VES.

Section 9.9.1: Additional Historical Record Sources

Screening tests: 1) search distance test to determine if there are any known or suspected contaminated properties in the area of concern (AOC); 2) a chemical of concern (COC) test to determine for those known or suspect contaminated properties within the AOC whether or not COC are likely to be present. The critical distance is defined as the lineal distance in any direction between the nearest edge of the contaminated plume and the nearest property boundary. For contaminated properties downgradient of the subject property, the AOC is reduced to the area within the critical distance.

- Critical distance = 30 feet for dissolved petroleum hydrocarbon COC
- Critical distance = 100 feet for COC and petroleum hydrocarbon/non-petroleum/chlorinated solvents COC

PM conducted additional historical record review beyond the scope of a Phase I ESA consisting of review of city directories, aerial photography, and the regulatory database to identify additional potentially contaminated sources of COCs within the ASTM E 2600-15 Approximate Minimum Search Distances (AMSDs). The primary area of concern included a radius of 1/3 mile (1,742 feet) and 1/10 mile (528 feet) for COCs using various factors (geology, hydrogeology, COCs,

etc.). The additional historical review did not identify any further potential sources of COCs within ASTM E 2600-15 AMSDs, with the exception of:

Property Address	Distance and direction from Property	Suspect Historical Usage (dates of usage)	Historical Source	Represents VEC (yes or no with justification)
Northwestern portion of proposed Condominium Unit #2	Historical subject property address 417 Ledyard Street, former storefront within the former Priscila Inn	Clothes cleaners, potential dry cleaning between at least 1935 and 1940	City directories and PM's 2021 subsurface investigation	No, refer to Section 5.2.3.
Central portion of proposed Condominium Unit #1	Historical subject property addresses 395 and 401 Cass Avenue	Backfill from former dwelling	Sanborn maps and PM's 2021 subsurface investigation	Yes, refer to Section 5.2.3.
417 Cass Avenue	Historical subject property address, former storefront within the former Priscilla Inn	Kaufman Cleaning and Dye Company, potential dry cleaning 1916	City directories	No, based on the short timeframe of operations (i.e., less than five years) and timeframe of operations, which would not have included chlorinated solvents at the time.
2501 Cass Avenue	South adjoining property	Dry cleaner between at least 1940 and 1941, BEA site	City directories, Sanborn maps, and regulatory database	No, based on delineation of contamination in the direction of the subject property, results of PM 2021 subsurface investigation, and geology/hydrology.
479 Ledyard Street	West adjoining property	Printing operations (1967 to 2014)	City directories, Sanborn maps, and regulatory database	No, based on distance of contamination from the subject property and geology/hydrology.
2701 Cass Avenue	North adjoining property	Car rental garage (1960 to 1973), bus garage (1972 to 1986), former fuel dispensing, closed LUST site	City directories, Sanborn maps, and regulatory database	No, based on delineation of contamination in the direction of the subject property and geology/hydrology considerations.
2524-2540 Cass Avenue	Former east adjoining property, 70 feet east across Cass Avenue	Gasoline service station (1931 to 1976)	City directories, Sanborn maps, and regulatory database	No, based on lack of contamination identified near the subject property, redevelopment of the property, and geology/hydrology considerations.
2600 Clifford Street	Former east adjoining property, 140 feet east across Cass Avenue and former Clifford Street	Chemical and petroleum laboratory (1965 to 2004)	City directories, Sanborn maps, and regulatory database	No, based on delineation of contamination in the direction of the subject property, distance considerations, redevelopment of the property, and geology/hydrology considerations.

Property Address	Distance and direction from Property	Suspect Historical Usage (dates of usage)	Historical Source	Represents VEC (yes or no with justification)	
2500 Clifford Street	Former east adjoining property, 180 feet across Cass Avenue and former Clifford Street	Gasoline service station (1941 to 1982), taxi company with automotive service (1982 to 2010)	City directories, Sanborn maps, and regulatory database	No, based on delineation of contamination in the direction of the subject property, distance considerations, redevelopment of the property, and geology/hydrology considerations.	

^{*}Bold indicates a VEC exists

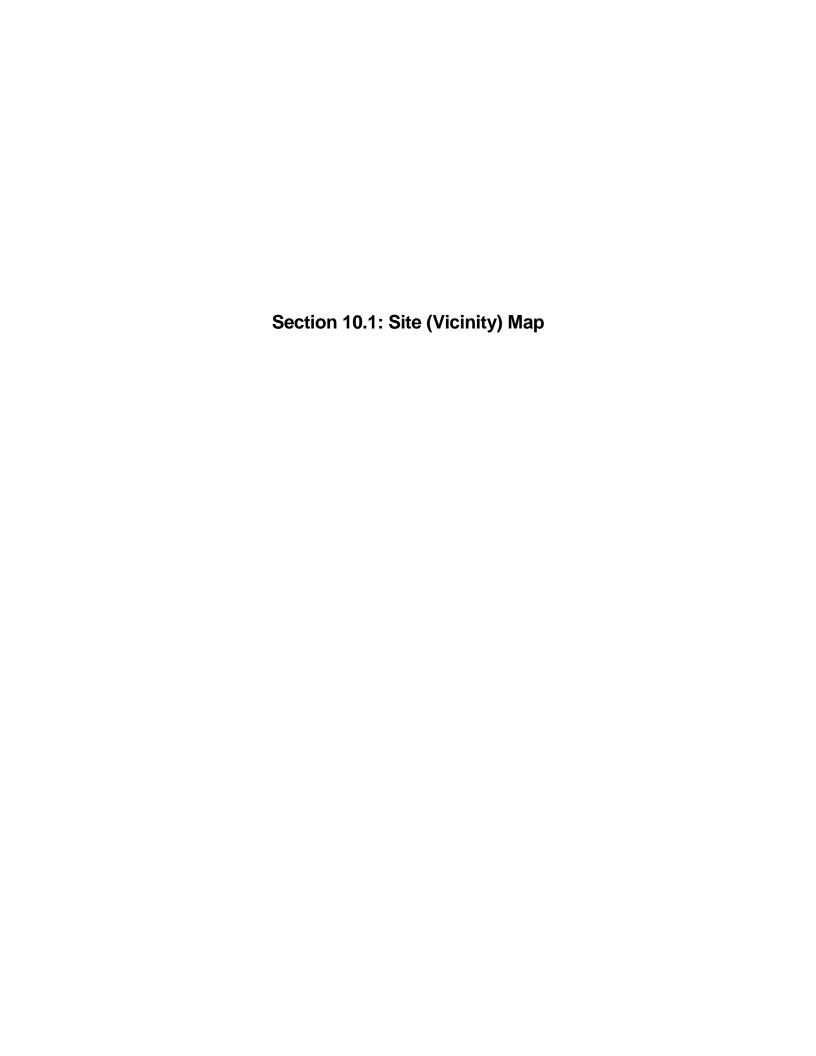
Additional properties were listed in the regulatory database, Sanborn maps, and/or city directory listings, however, based on distance considerations and regional clay geology with insufficient groundwater to act as a transport mechanism, PM has not identified these properties as VECs.

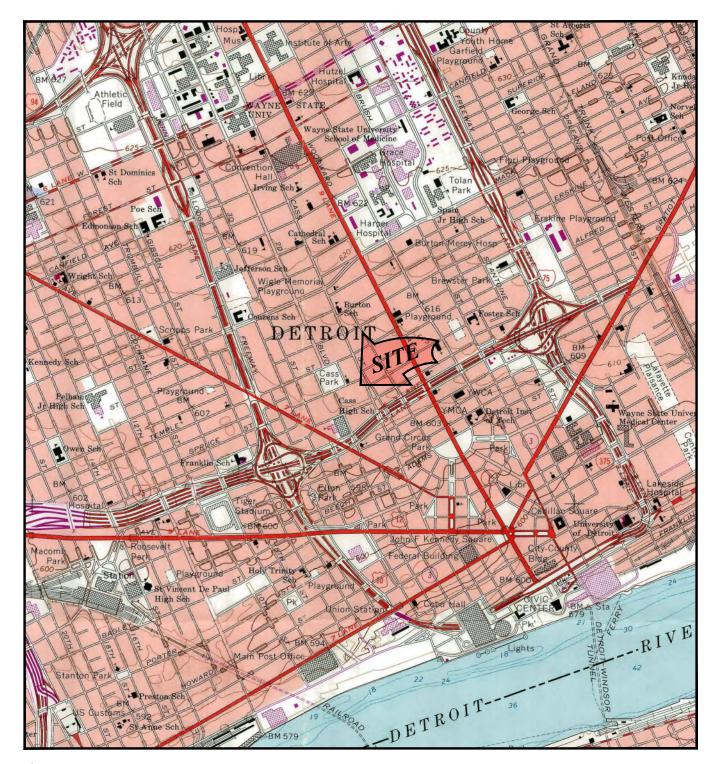
Section 9.9.2: Conclusions/Opinion

This Tier I VES did not reveal any VECs associated with the target property and/or nearby/adjoining properties; with the exception of that identified in Section 8.1.4 of this report. The screening process concludes that a VEC exists.

Section 9.10 Onsite or Nearby Blast Hazard

MSHDA requires site that contain onsite or nearby above ground storage tanks (ASTs) be evaluated according to HUD's Guidebook on Acceptable Separation Distance (ASD). PM searched an acceptable distance from the subject property in which potential ASTs could be a hazard. PM did not identify any ASTs that would require the calculation of acceptable separation distances (ASD) for thermal radiation and/or blast overpressure.





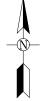


WAYNE COUNTY

FIGURE 1

PROPERTY VICINITY MAP

UNITED STATES GEOLOGICAL SURVEY, 7.5 MINUTE SERIES DETROIT, MI QUADRANGLE, 1968. PHOTO REVISED 1973 AND 1980.



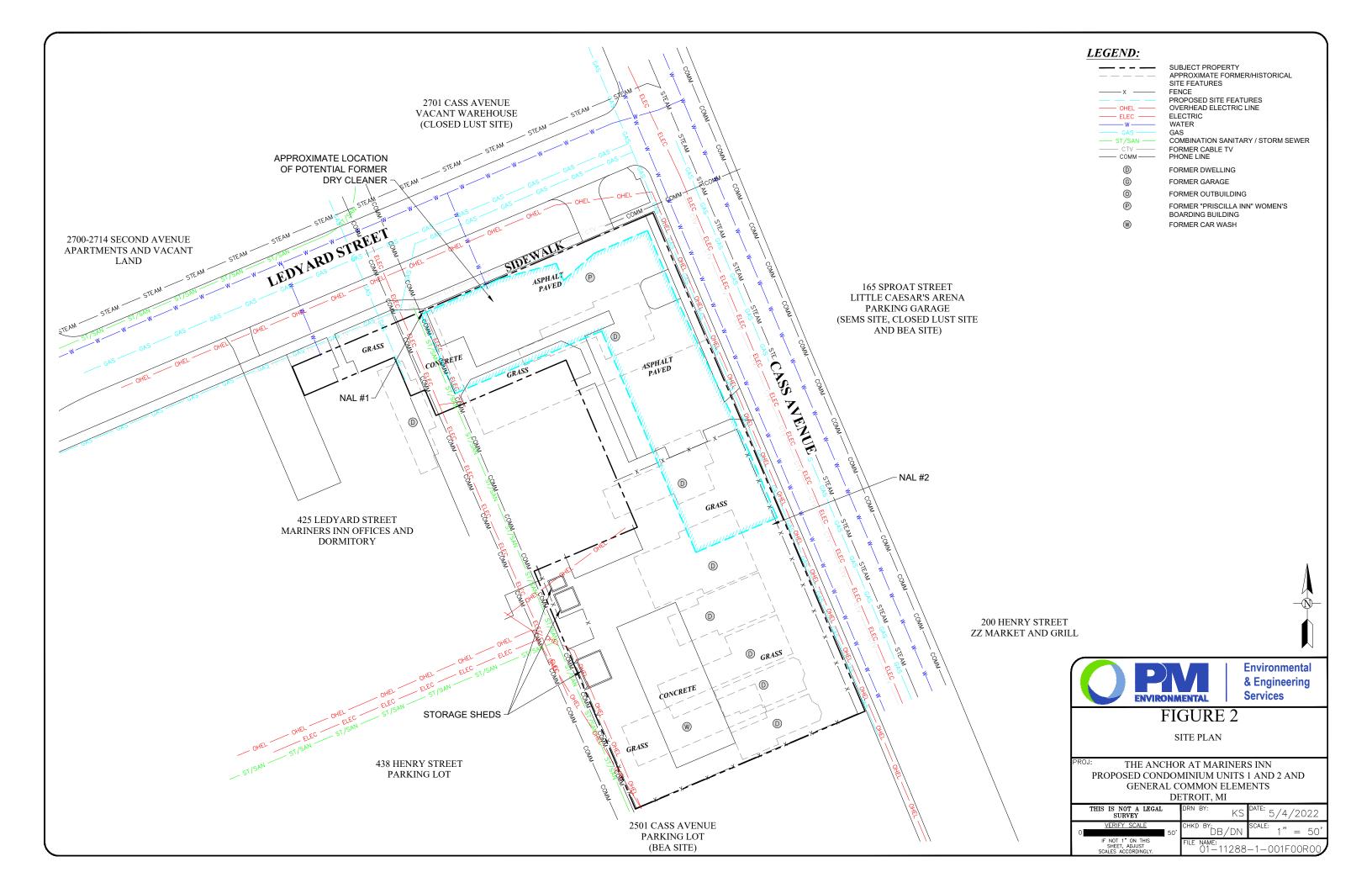


Environmental & Engineering Services

PROJ:
THE ANCHOR AT MARINERS INN
PROPOSED CONDOMINIUM UNITS 1 AND 2
AND GENERAL COMMON ELEMENTS
DETROIT, MI

	THIS IS NOT A LEGAL SURVEY		DRN	BY:	KS	DATE: 5/4/2022
0	<u>VERIFY SCALE</u>	2,000'	СНКІ	BY: BF	/DN	SCALE: " = 2,000'
	IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.		FILE	NAME: 01—	11288	-1-001F00R00





WAYNE COUNTY CONDOMINIUM SUBDIVISION PLAN NO.______EXHIBIT "B" TO THE MASTER DEED OF

MARINERS INN CONDOMINIUM

CITY OF DETROIT, WAYNE COUNTY, MICHIGAN

DEVELOPER

SCRIPPS PARK ASSOCIATES, L.L.C. 32500 TELEGRAPH, SUITE #222 BINGHAM FARMS, MI 48025 ENGINEERS & SURVEYORS

GIFFELS WEBSTER 28 W. ADAMS, SUITE 1200 DETROIT, MICHIGAN 48226

PROPERTY DESCRIPTION

PARCEL 1

LOTS 3 THROUGH 12, CASS FARM SUBDIVISION OF BLOCKS 79 AND 80, AS RECORDED IN LIBER 1, PAGE 93 OF PLATS, WAYNE COUNTY RECORDS. TOGETHER WITH ALL THAT PART OF THE NORTH—SOUTH VACATED PUBLIC ALLEY, (20 FEET WIDE) IN BLOCK BOUNDED BY SECOND BOULEVARD, CASS AVENUE, HENRY AND LEDYARD STREETS WESTERLY OF AND ABUTTING THE WEST LINE OF THE NORTH 22.83 FEET OF LOT 5, AND LOTS 6 THROUGH 9; ALSO LYING EASTERLY OF AND ABUTTING THE EAST LINE OF LOT 10 OF THE "PLAT OF THE SUBDIVISION, BLOCKS 79, 80, 81 AND 82 OF THE CASS FARM", AS RECORDED IN LIBER 1 OF PLATS, PAGES 92 AND 93, CITY OF DETROIT, WAYNE COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT THE INTERSECTION OF THE WESTERLY LINE OF CASS AVENUE (71' WIDE) AND THE SOUTHERLY LINE OF LEDYARD STREET (100' WIDE), ALSO BEING THE NORTHEAST CORNER OF LOT 9 OF BLOCK 79 OF SAID SUBDIVISION OF THE CASS FARM; THENCE ALONG SAID WESTERLY LINE, SOUTH 23 DEGREES 48 MINUTES 35 SECONDS EAST 334.34 FEET RECORD, 334.95 FEET MEASURED; THENCE SOUTH 66 DEGREES 11 MINUTES 25 SECONDS WEST 150.00 FEET; THENCE NORTH 23 DEGREES 48 MINUTES 35 SECONDS WEST 170.00' RECORD, 170.15 FEET MEASURED; THENCE NORTH 23 DEGREES 48 MINUTES 35 SECONDS WEST 207.17 FEET RECORD, 207.41 FEET MEASURED TO THE SOUTHERLY LINE OF SAID LEDYARD STREET; THENCE ALONG SAID SOUTHERLY LINE, NORTH 66 DEGREES 06 MINUTES 12 SECONDS EAST 320.00 FEET RECORD, 320.15 FEET MEASURED TO THE POINT OF BEGINNING, AND CONTAINING 1.96 ACRES.

ATTENTION: WAYNE COUNTY REGISTER OF DEEDS

THE CONDOMINIUM SUBDIVISION PLAN NUMBER MUST BE ASSIGNED IN CONSECUTIVE SEQUENCE. WHEN A NUMBER HAS BEEN ASSIGNED TO THIS PROJECT, IT MUST BE PROPERLY SHOWN IN THE TITLE (SHEET 1) AND THE SURVEYOR'S CERTIFICATE (SHEET 2).

	SHEET INDEX
1	COVER SHEET
2	SURVEY PLAN
3	SITE PLAN
4	UTILITY PLAN
5	COORDINATES AND UNIT INFORMATION

NOTE:

THIS CONDOMINIUM SUBDIVISION PLAN IS NOT REQUIRED TO CONTAIN DETAILED PROJECT DESIGN PLANS PREPARED BY THE APPROPRIATE LICENSED DESIGN PROFESSIONAL. SUCH PROJECT DESIGN PLANS ARE FILED, AS PART OF THE CONSTRUCTION PERMIT APPLICATION, WITH THE ENFORCING AGENCY FOR THE STATE CONSTRUCTION CODE IN THE RELEVANT GOVERNMENTAL SUBDIVISION. THE ENFORCING AGENCY MAY BE A LOCAL BUILDING DEPARTMENT OR THE STATE DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS.

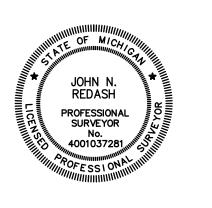
giffels webster

ENGINEERS
SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS

28 W. ADAMS STREET SUITE 1200 DETROIT, MI 48226 P (313) 962-4442 www.giffelswebster.com

MK
JNR
MPM
JNR

SEAL:





KNOW WHAT'S BELOW.

CALL BEFORE YOU DIG

DATE: ISSUE:

MARINERS INN
CONDOMINIUM
CITY OF DETROIT
WAYNE COUNTY
MICHIGAN

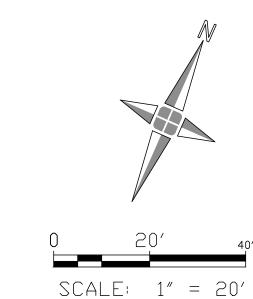
 DATE:
 12.03.2020

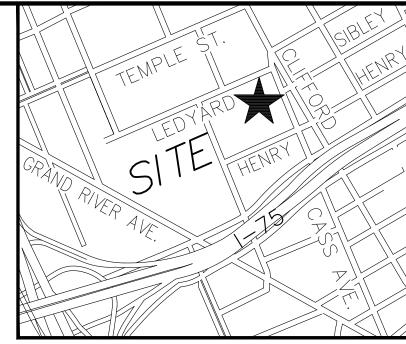
 SCALE:
 NO SCALE

 SHEET:
 1

PROJECT: 19535.05D

Copyright © 2020 Giffels Webster. No reproduction shall be made without the BENCHMARK NO.1 ELEV. 133.77'





LOCATION MAP (NOT TO SCALE)

giffels webster **ENGINEERS** SURVEYORS **PLANNERS** LANDSCAPE ARCHITECTS 28 W. ADAMS STREET **SUITE 1200**

> P (313) 962-4442 www.giffelswebster.com

> > EXECUTIVE: MK MANAGER: JNR DESIGNER: MPM Q. CTRL: JNR SECTION:

DETROIT, MI 48226

SEAL:

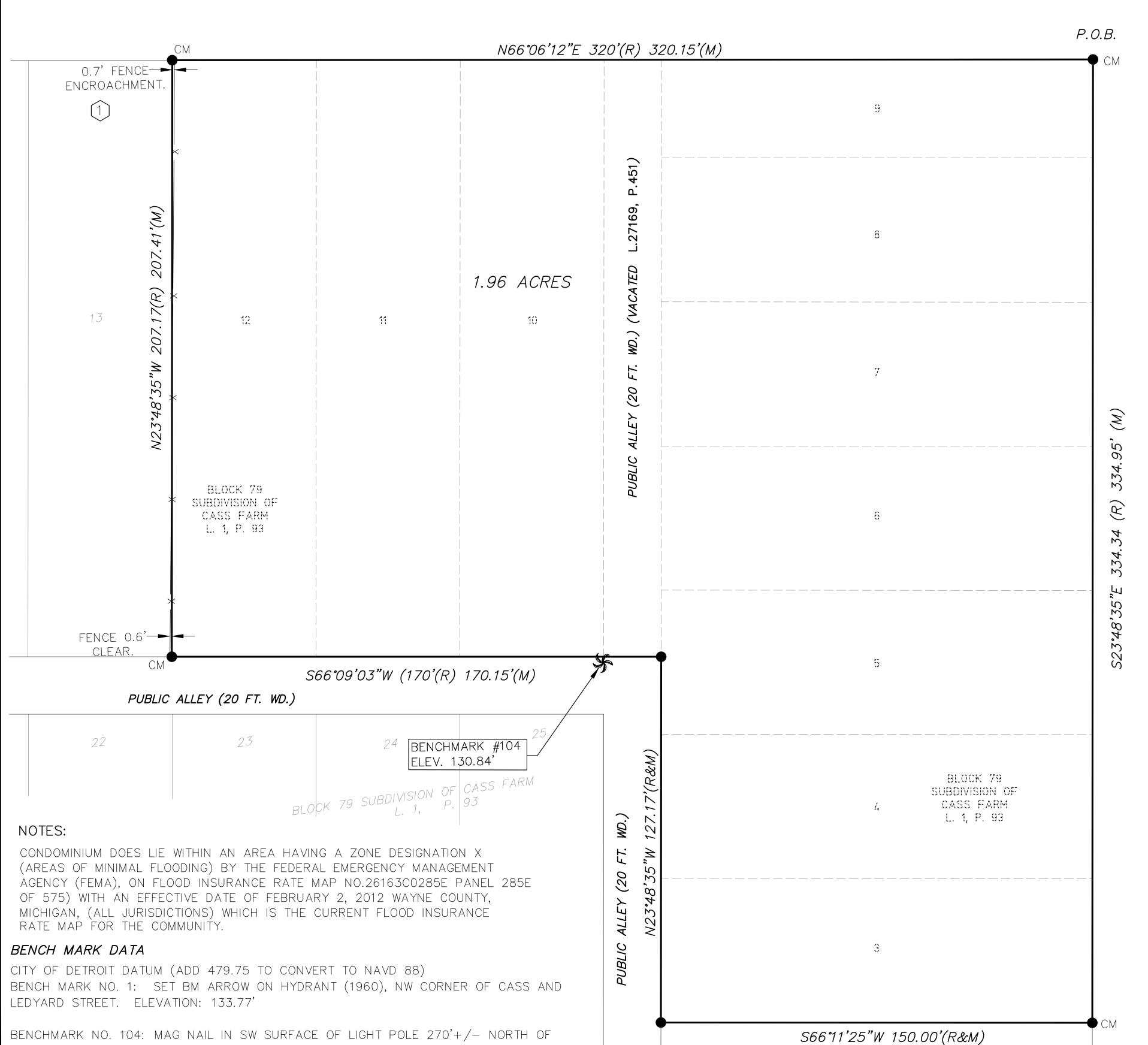
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

DATE: ISSUE:

MARINERS INN CONDOMINIUM CITY OF DETROIT **WAYNE COUNTY**

12.03.2020 SCALE: 1"=20' 2 PROJECT: 19535.05D No reproduction shall be made without th

MICHIGAN



LEDYARD STREET (100 FT. WD.)

HENRY, 210'+/- WEST OF CASS. ELEVATION: 130.84'

BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.

SURVEYOR'S CERTIFICATE

I, JOHN N. REDASH, PROFESSIONAL LAND SURVEYOR OF THE STATE OF MICHIGAN, HEREBY CERTIFY:

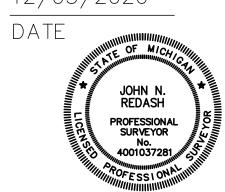
THAT THE SUBDIVISION PLAN KNOW AS WAYNE COUNTY CONDOMINIUM SUBDIVISION PLAN NO. ____ AS SHOWN ON THE ACCOMPANYING DRAWINGS, REPRESENTS A SURVEY ON THE GROUND MADE UNDER MY DIRECTION, THAT THERE ARE EXISTING ENCROACHMENTS UPON THE LANDS AND THE PROPERTY HEREIN SHOWN AND DESCRIBED.

THAT THE REQUIRED MONUMENTS AND IRON MARKERS HAVE BEEN LOCATED IN THE GROUND AS REQUIRED BY RULES PROMULGATED UNDER SECTION 142 OF ACT 59 OF THE PUBLIC ACTS OF 1978, AS AMENDED.

THAT THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS REQUIRED BY THE RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978 AS AMENDED.

THAT THE BEARINGS AS SHOWN, ARE NOTED ON THE SURVEY PLAN AS REQUIRED BY THE RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978 AS AMENDED.

12/03/2020



JOHN N. REDASH, P.S. NO. 4001037281 GIFFELS WEBSTER 28 W. ADAMS, SUITE 1200 DETROIT, MI 48226

LEGEND

--- PARCEL BOUNDARY

DENOTES AN ENCROACHMENT

C.M. CONCRETE MONUMENT

B.M. BENCH MARK

(R) RECORDED BEARING OR DISTANCE MEASURED BEARING OR DISTANCE

BENCHMARK

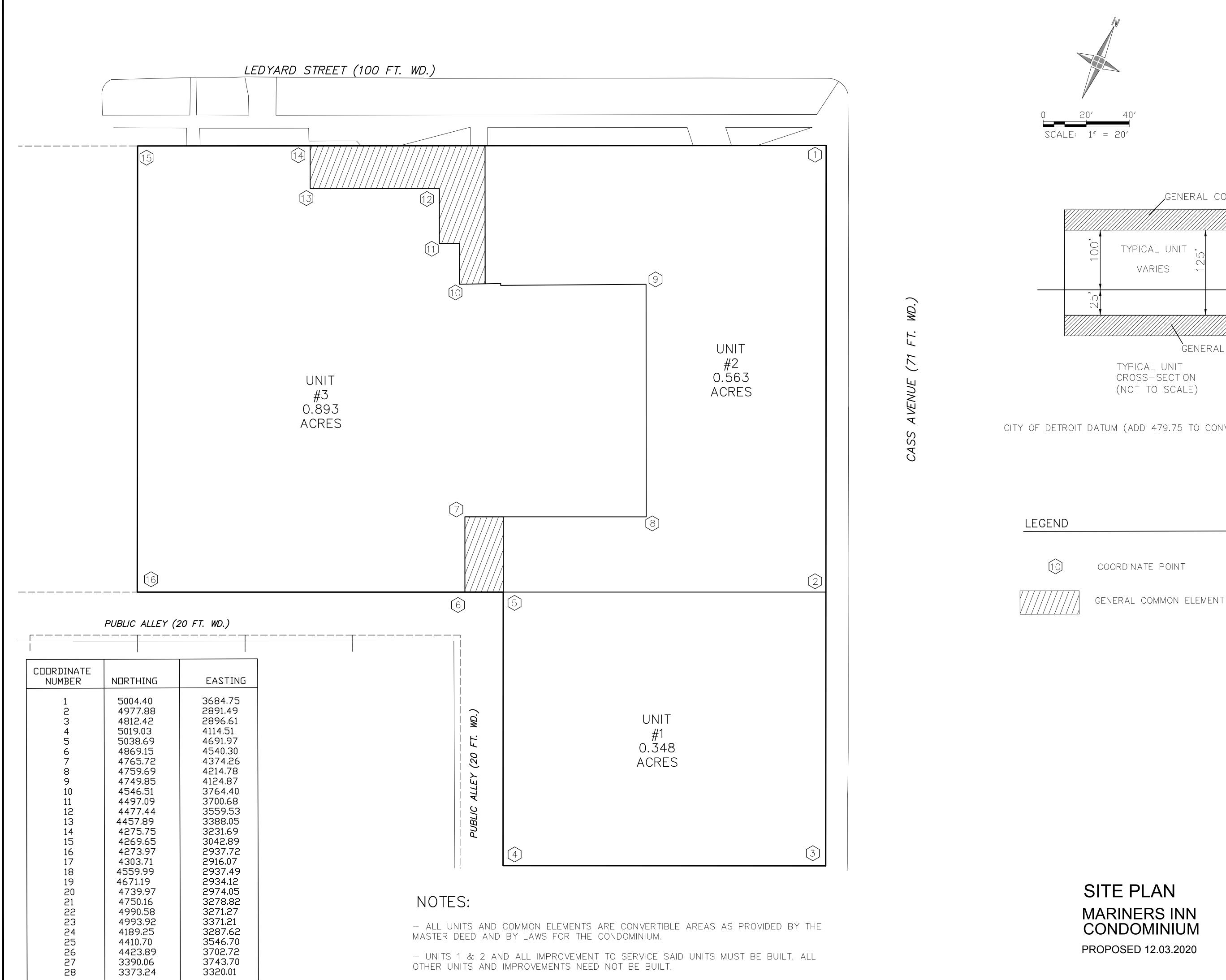
P.O.B. POINT OF BEGINNING CM
INDICATES A SET MONUMENT WHICH IS ONE-HALF (1/2) INCH DIAMETER STEEL BAR THIRTY-SIX (36) INCHES LONG, ENCASED IN

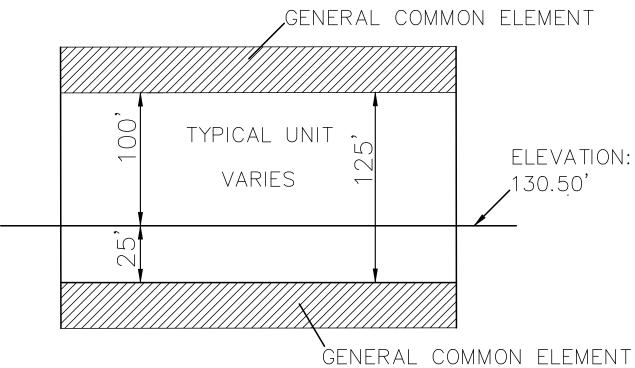
INDICATES A SET REBAR WHICH IS ONE-HALF (1/2) INCH DIAMETER STEEL BAR EIGHT (8) INCHES LONG, DRILLED AND GROUTED IN PLACE.

CONCRETE FOUR (4) INCHES IN DIAMETER.

SURVEY PLAN MARINERS INN CONDOMINIUM

PROPOSED 12.03.2020





(NOT TO SCALE)

CITY OF DETROIT DATUM (ADD 479.75 TO CONVERT TO NAVD 88)

ENGINEERS SURVEYORS **PLANNERS** LANDSCAPE ARCHITECTS

28 W. ADAMS STREET **SUITE 1200** DETROIT, MI 48226 P (313) 962-4442 www.giffelswebster.com

XECUTIVE:	MK
//ANAGER:	JNR
ESIGNER:	MPM
Q. CTRL:	JNR
SECTION:	

SEAL:

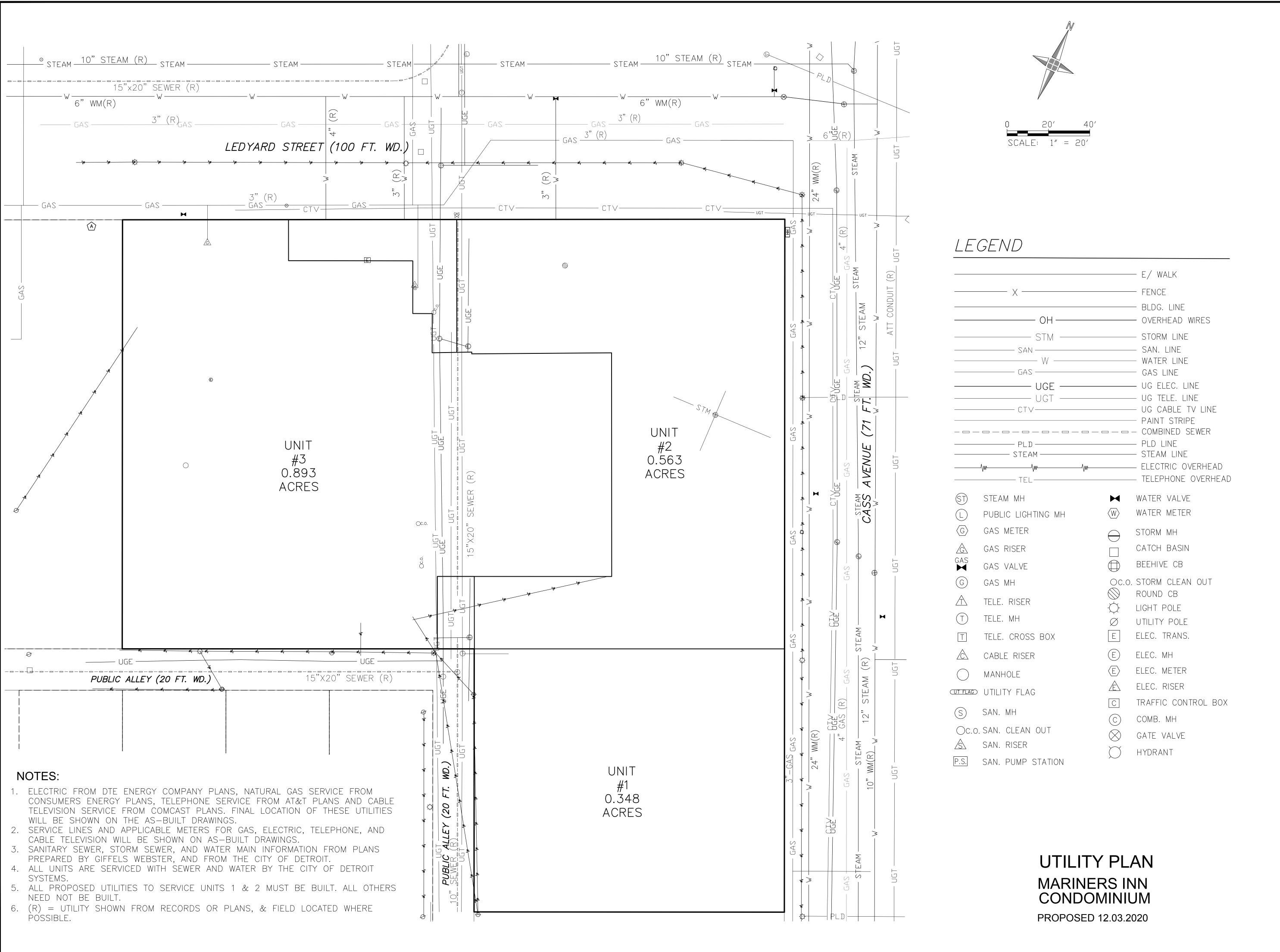


KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

DATE: ISSUE:

MARINERS INN CONDOMINIUM CITY OF DETROIT WAYNE COUNTY **MICHIGAN**

12.03.2020 SCALE: 1"=20' PROJECT: 19535.05D Copyright © 2020 Giffels Webster. No reproduction shall be made without the



giffels webster

ENGINEERS
SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS

28 W. ADAMS STREET SUITE 1200 DETROIT, MI 48226 P (313) 962-4442 www.giffelswebster.com

EXECUTIVE:	MK
MANAGER:	JNR
DESIGNER:	MPM
Q. CTRL:	JNR
SECTION:	

SEAL:





KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

DATE: ISSUE:

MARINERS INN
CONDOMINIUM
CITY OF DETROIT
WAYNE COUNTY
MICHIGAN

DATE: 12.03.2020

SCALE: 1"=20'

SHEET: 4

PROJECT: 19535.05D

Copyright © 2020 Giffels Webster.
No reproduction shall be made without the







Photographs From Site Reconnaissance PM Project No. 01-11288-1-0001 Location: Eastern and Southern Portion of 445 Ledyard Street Detroit, Michigan

Photograph 1



Subject property facing north

Photograph 2

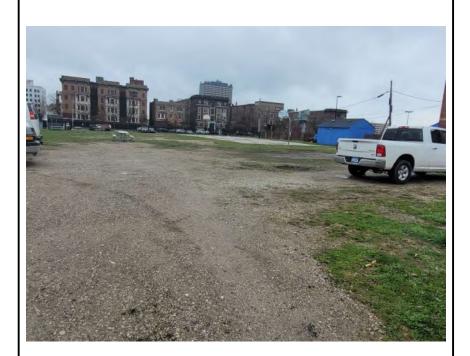


Subject property facing east



Photographs From Site Reconnaissance PM Project No. 01-11288-1-0001 Location: Eastern and Southern Portion of 445 Ledyard Street Detroit, Michigan

Photograph 3



Subject property facing south

Photograph 4



Subject property facing west



Photographs From Site Reconnaissance PM Project No. 01-11288-1-0001 Location: Eastern and Southern Portion of 445 Ledyard Street Detroit, Michigan

Photograph 5



Northeast adjoining property, 2701 Cass Avenue

Photograph 6



Northwest adjoining property, 2700-2714 Second Avenue



Photographs From Site Reconnaissance PM Project No. 01-11288-1-0001 Location: Eastern and Southern Portion of 445 Ledyard Street Detroit, Michigan

Photograph 7



East adjoining property, 165 Sproat Street

Photograph 8

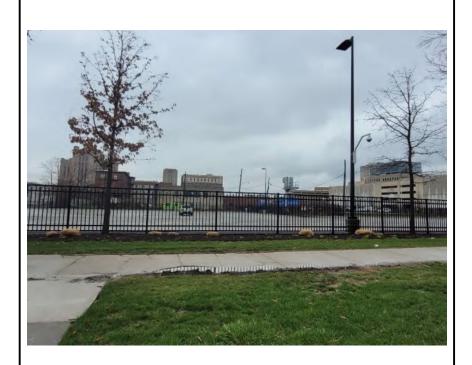


Southeast adjoining property, 210 Henry Street



Photographs From Site Reconnaissance PM Project No. 01-11288-1-0001 Location: Eastern and Southern Portion of 445 Ledyard Street Detroit, Michigan

Photograph 9



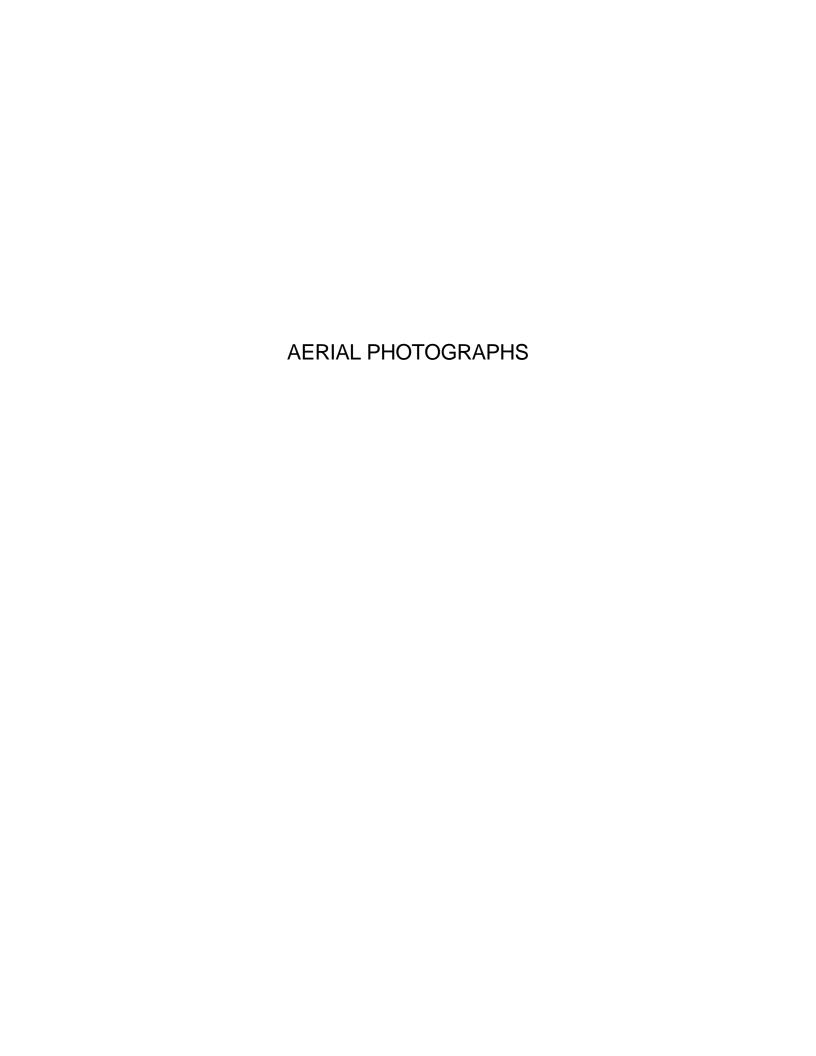
South adjoining property, 2501 Cass Avenue

Photograph 10



West adjoining property, 455-457 Ledyard Street

Section 10.4: Historical	Research Document	ation	











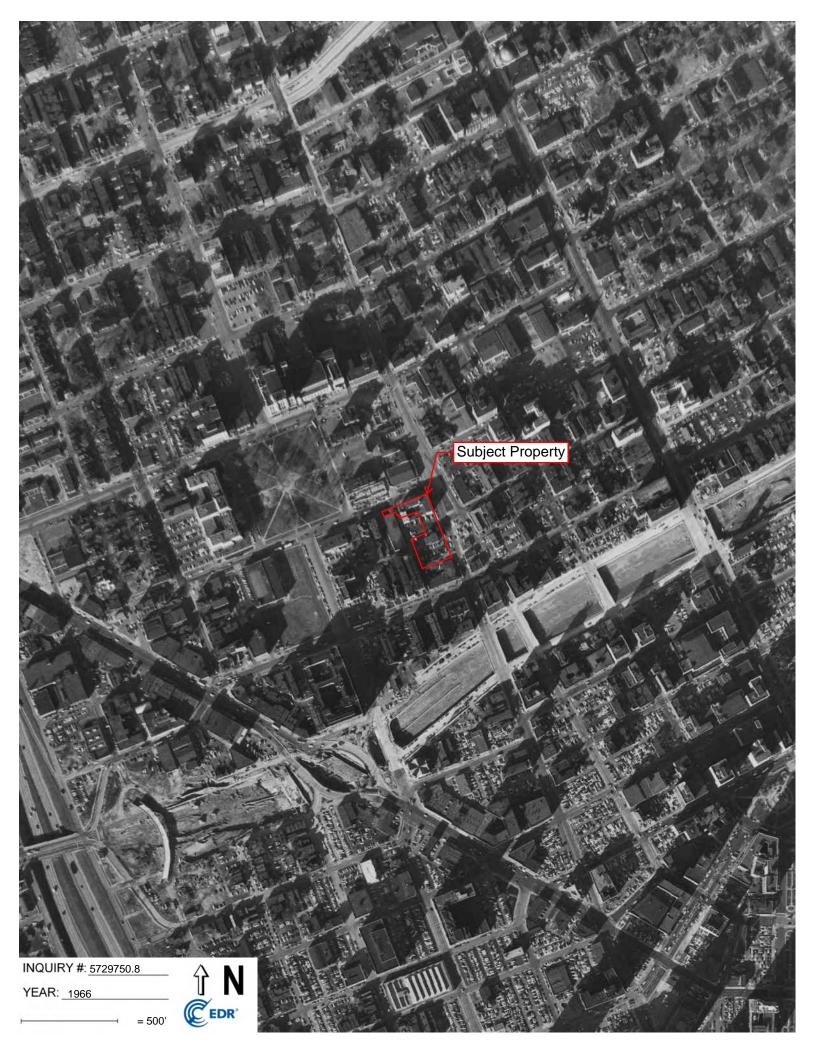


INQUIRY #: 5729750.8

YEAR: 1961

= 500'

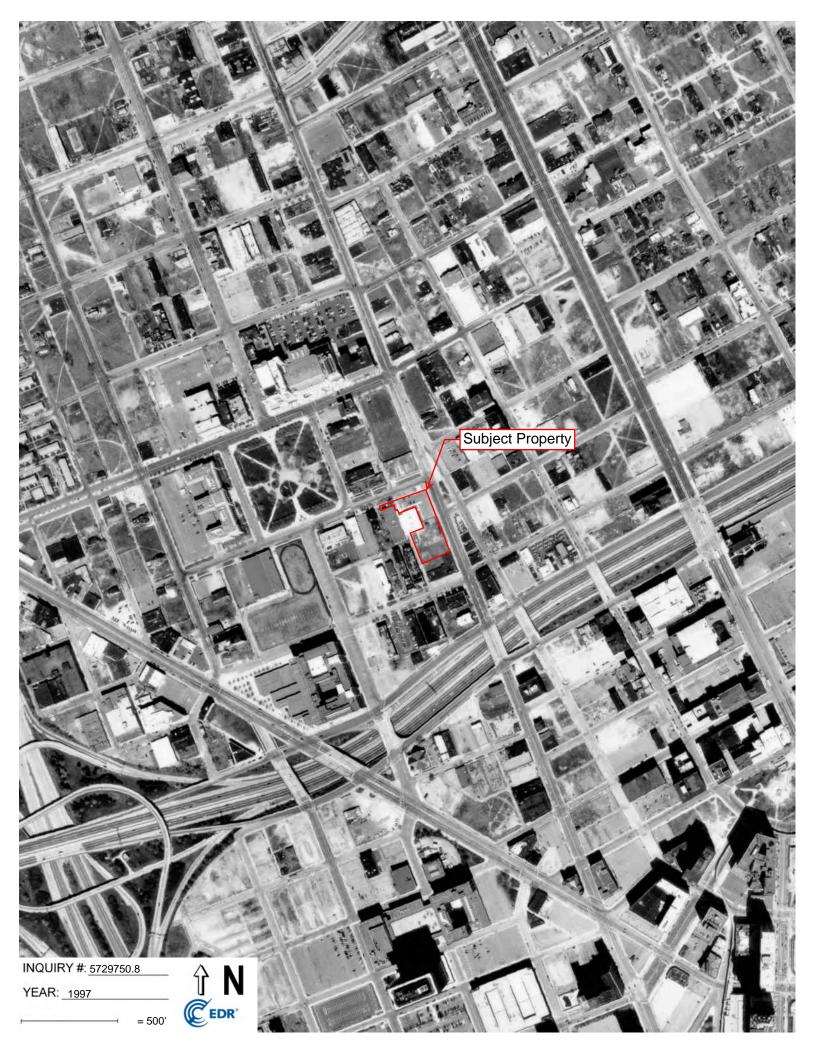
↑ N



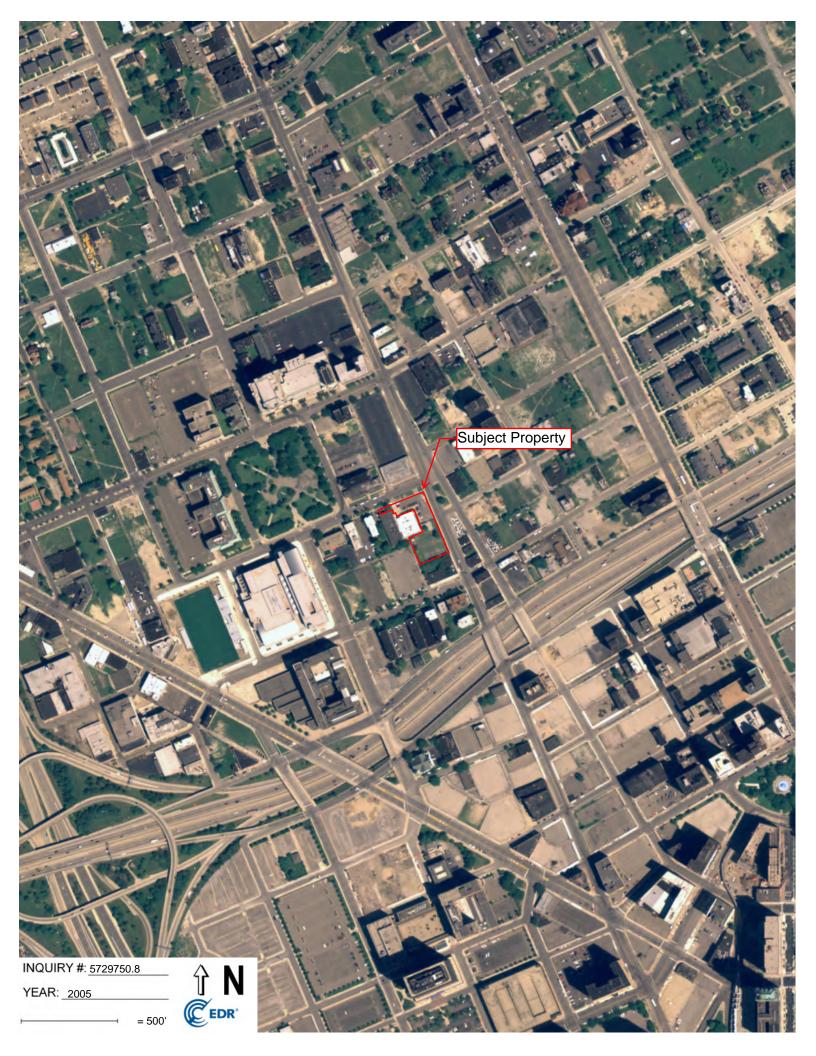




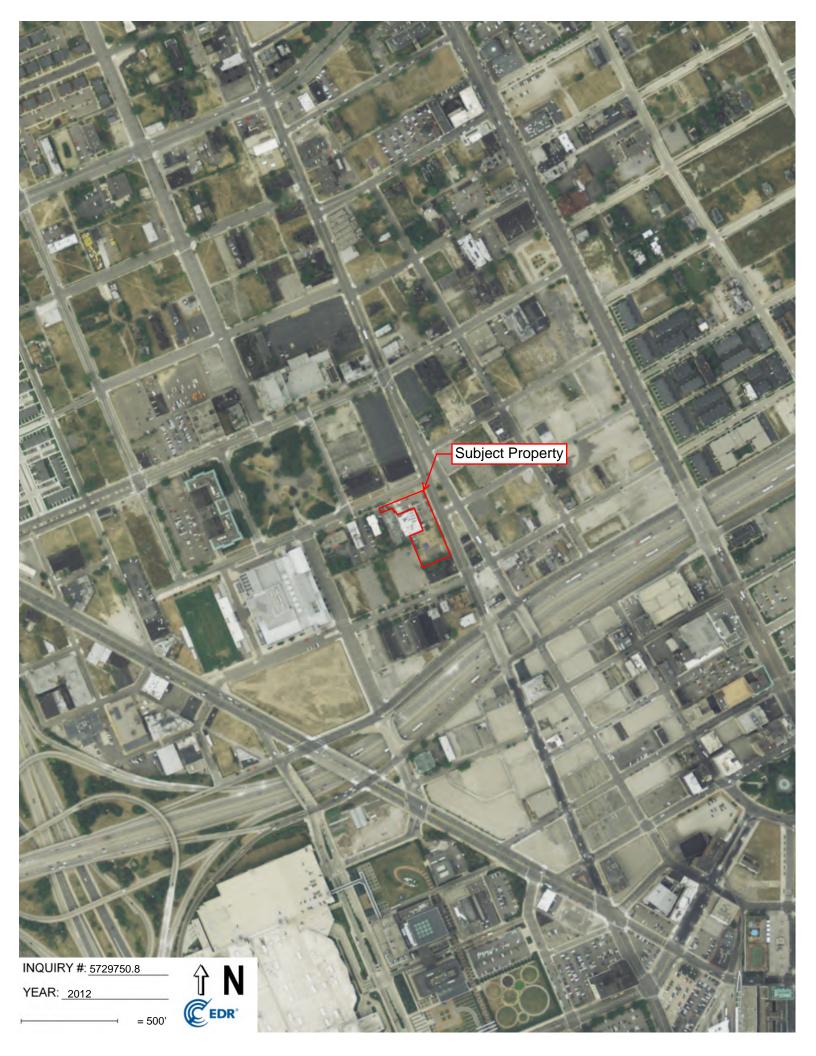


















Location: The Southern and Eastern Portion of 445 Ledyard Street Detroit, Michigan

PM Project No. 01-11288-1-0001

Aerial Year: 2021

Source: Google Earth





445 Ledyard 445 Ledyard Detroit, MI 48201

Inquiry Number: 5729750.3

July 26, 2019

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

07/26/19

Site Name: Client Name:

445 Ledyard PM Environmental, Inc. 445 Ledyard 3340 Ranger Road Detroit, MI 48201 Lansing, MI 48906

EDR Inquiry # 5729750.3 Contact: Alaina Matthews



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by PM Environmental, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 8D0A-47AC-9BBB

PO# NA

Project 01-11288-0-0001

Maps Provided:

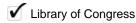
2002	1957
1996	1953
1991	1950
1989	1921
1988	1919
1983	1897
1977	1889
1961	1884



Sanborn® Library search results

Certification #: 8D0A-47AC-9BBB

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:







The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

PM Environmental, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



2002 Source Sheets



Volume 2, Sheet 18 2002



Volume 2, Sheet 19 2002



Volume 2, Sheet 20 2002



Volume 2, Sheet 32 2002



Volume Central Business District, Sheet 5 2002

1996 Source Sheets



Volume 2, Sheet 18 1996



Volume 2, Sheet 19 1996



Volume 2, Sheet 20 1996



Volume 2, Sheet 32 1996



Volume 2, Sheet 18 1991



Volume 2, Sheet 19 1991



Volume 2, Sheet 20 1991



Volume 2, Sheet 32 1991

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1991 Source Sheets





Volume Central Business Dletriutn & November 1991 Business District, Sheet 5

1989 Source Sheets







Volume Central Business District, Wallerte Central Business District, Sheet 5

1988 Source Sheets







Volume 2, Sheet 19 1988



Volume 2, Sheet 20 1988



Volume 2, Sheet 32 1988



Volume Central Business District, Sheet 5 1983

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1977 Source Sheets



Volume 2, Sheet 18 1977



Volume 2, Sheet 19 1977



Volume 2, Sheet 20 1977



Volume 2, Sheet 32 1977

1961 Source Sheets



Volume 2, Sheet 18



Volume 2, Sheet 19 1961



Volume 2, Sheet 20 1961



Volume 2, Sheet 32 1961

1957 Source Sheets



Volume 2, Sheet 18 1957



Volume 2, Sheet 19 1957



Volume 2, Sheet 20 1957



Volume 2, Sheet 32 1957



Volume 2, Sheet 18 1953



Volume 2, Sheet 19 1953



Volume 2, Sheet 20 1953



Volume 2, Sheet 32 1953

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1950 Source Sheets



Volume 2, Sheet 18 1950



Volume 2, Sheet 19 1950



Volume 2, Sheet 20 1950



Volume 2, Sheet 32 1950

1921 Source Sheets



Volume 2, Sheet 18 1921



Volume 2, Sheet 19



Volume 2, Sheet 20 1921



Volume 2, Sheet 32 1921

1919 Source Sheets



Volume 2, Sheet 5 1919



Volume 2, Sheet 23 1919



Volume 2, Sheet 24 1919



Volume 2, Sheet 5 1897



Volume 2, Sheet 23 1897



Volume 2, Sheet 24 1897

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1889 Source Sheets



Volume 3, Sheet 96 1889



Volume 1, Sheet 4 1884

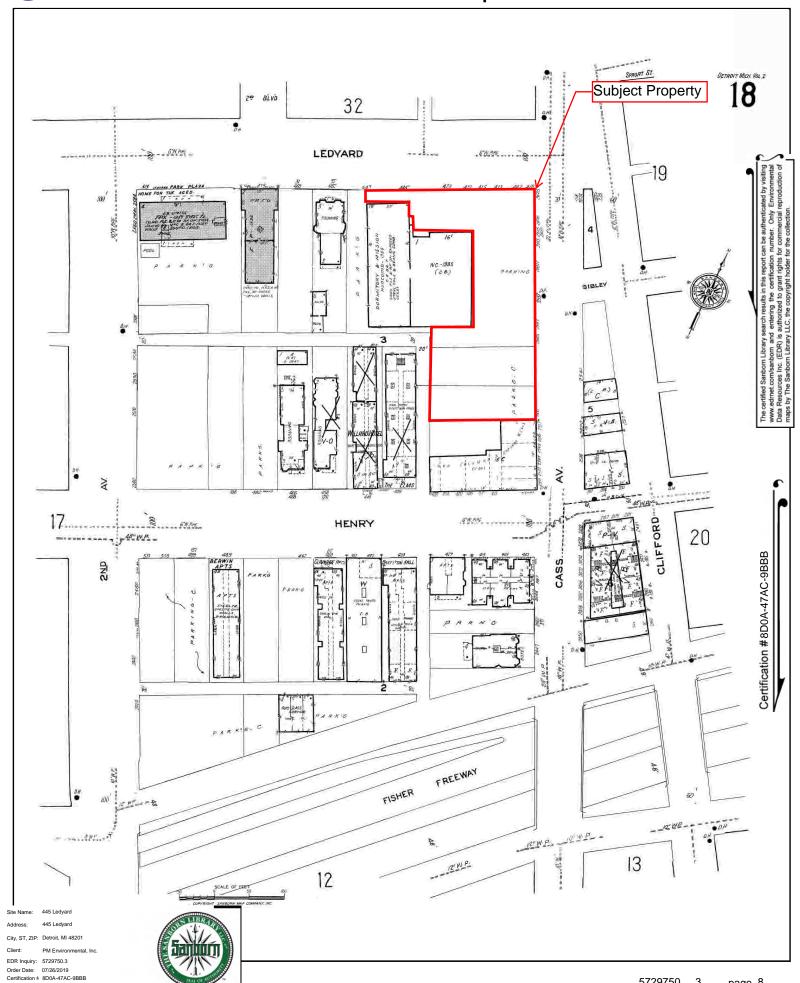


Volume 1, Sheet 4



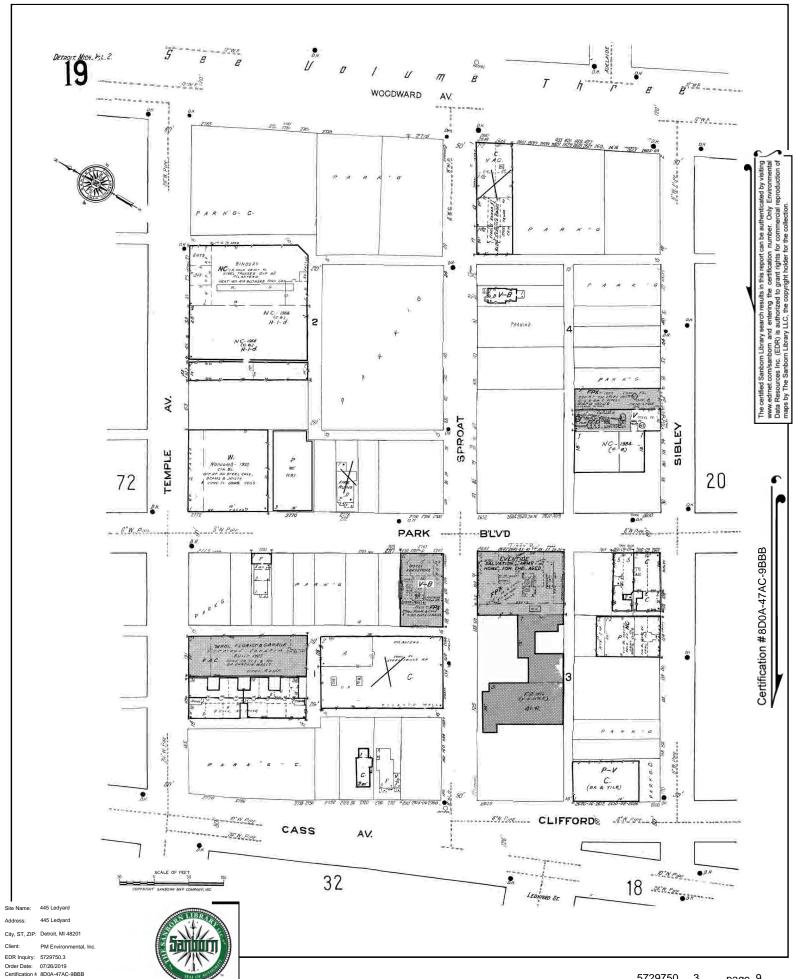
Volume 1, Sheet 8 1884





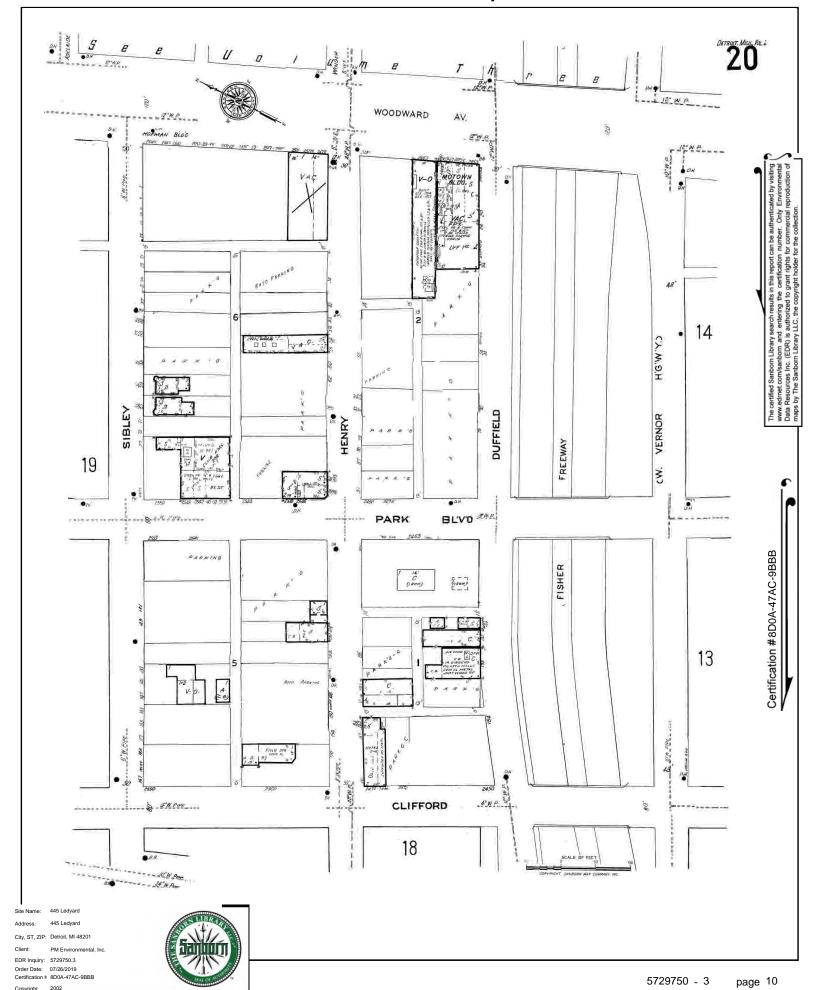


2002



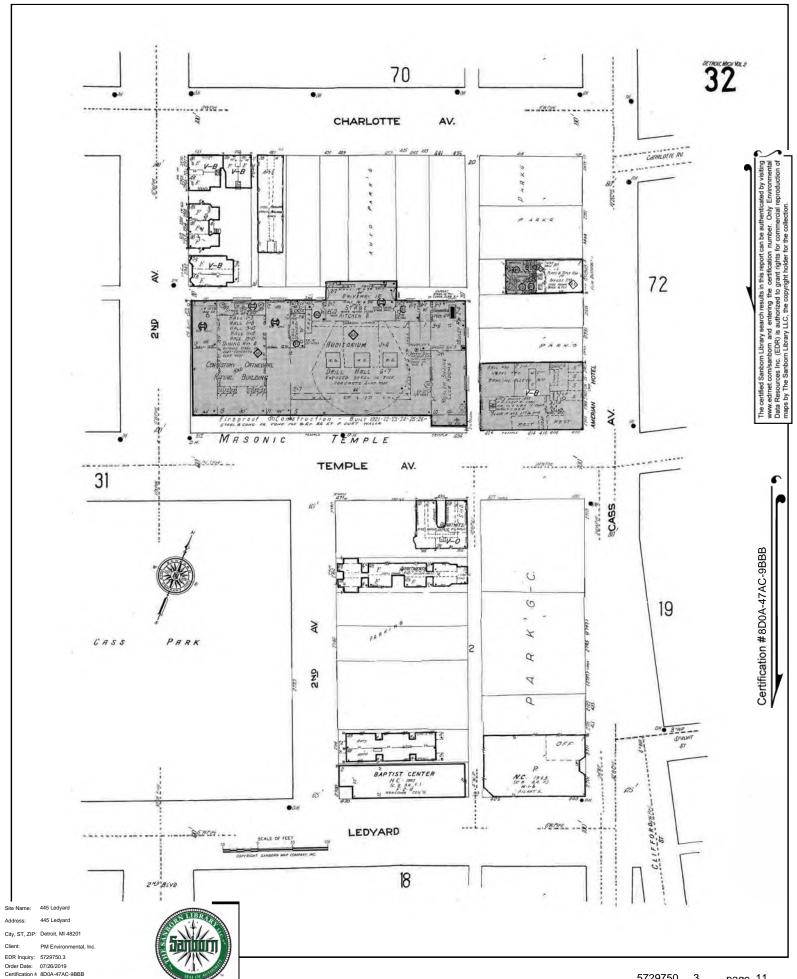


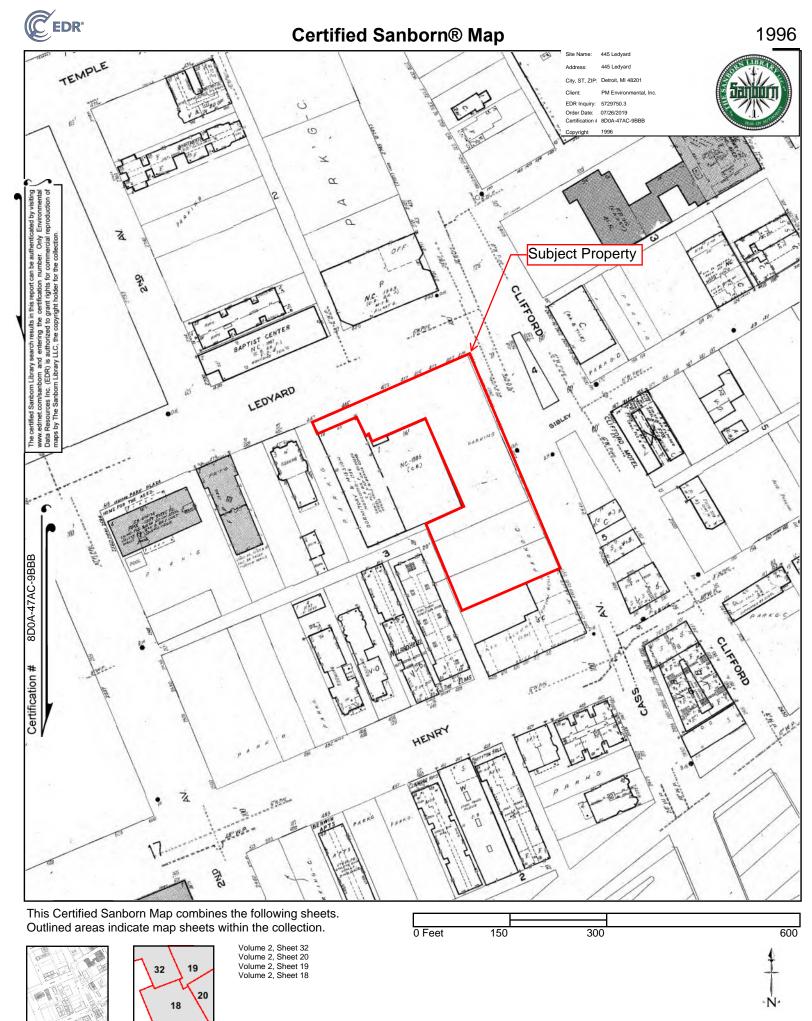
2002





Copyright 2002

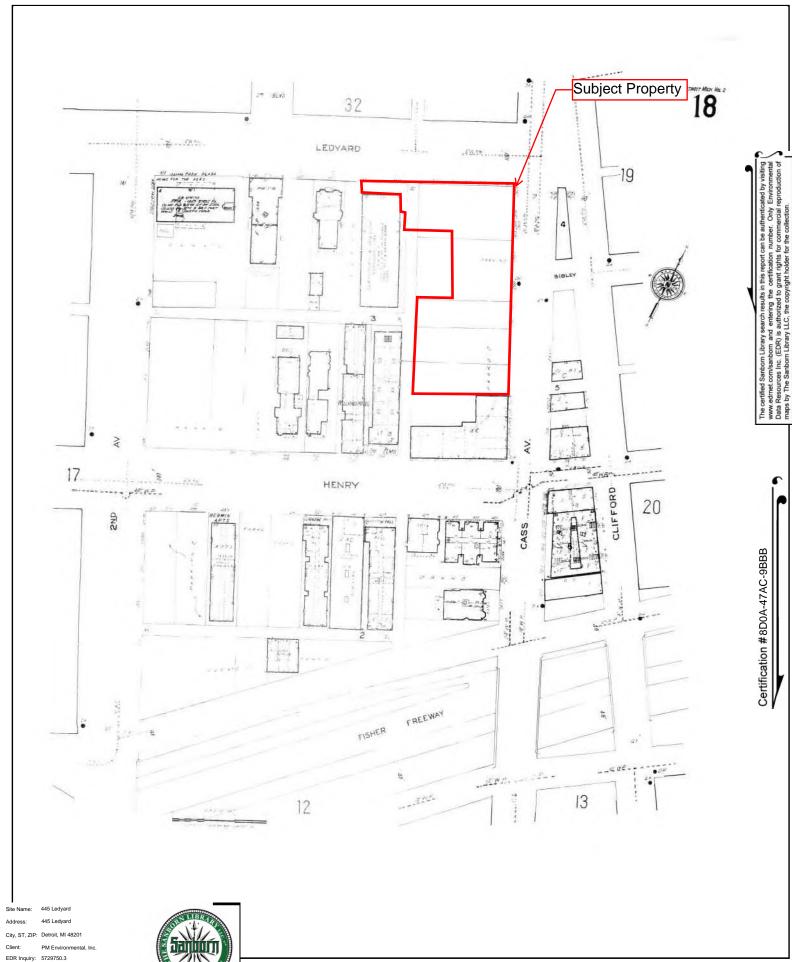






Order Date: 07/26/2019 Certification # 8D0A-47AC-9BBB

1991

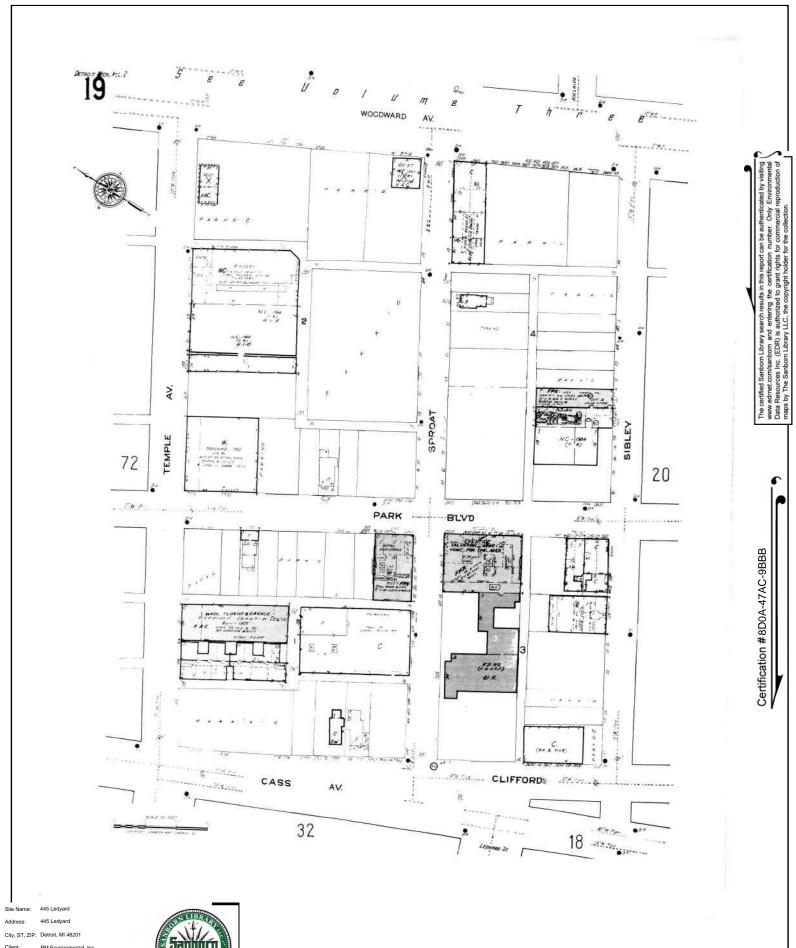


page 13



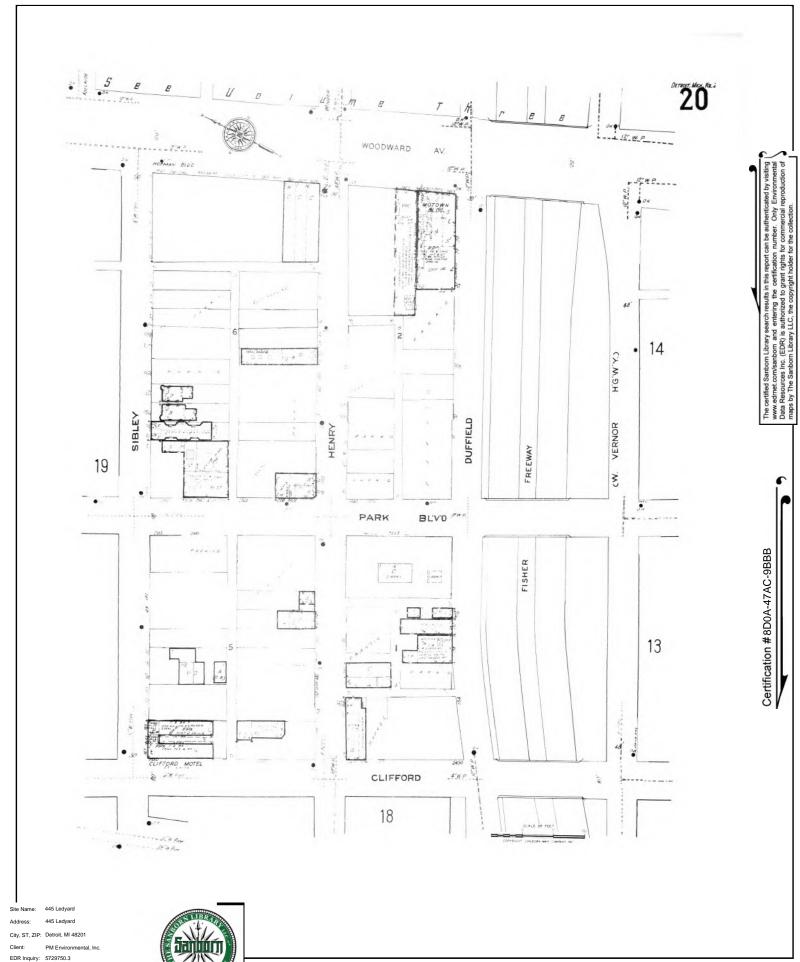
EDR Inquiry: 5729750.3 Order Date: 07/26/2019 Certification # 8D0A-47AC-9BBB

1991



5729750 - 3



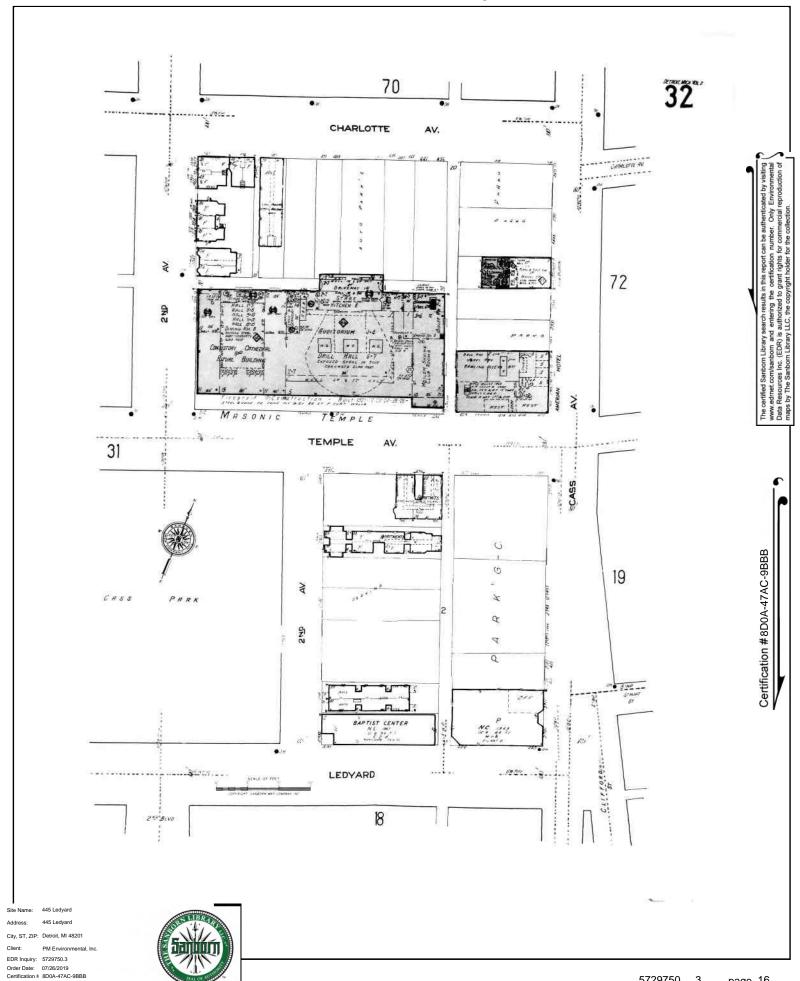


Order Date: 07/26/2019
Certification # 8D0A-47AC-9BBB
Copyright 1991

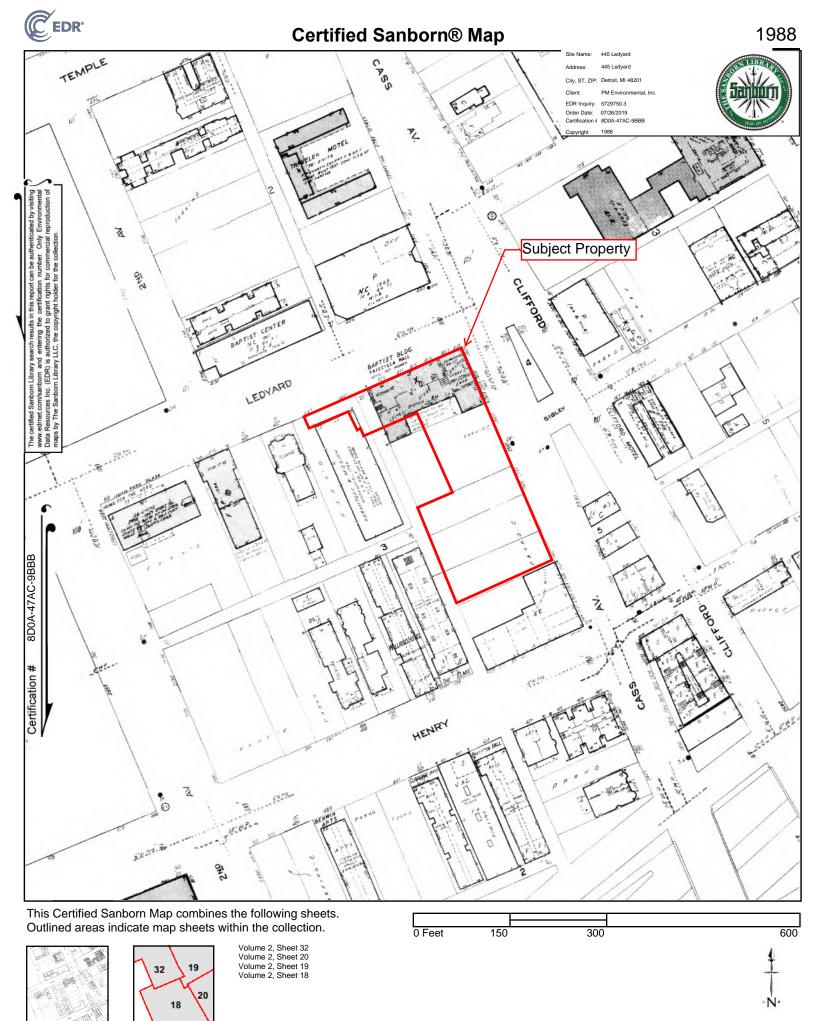
page 15

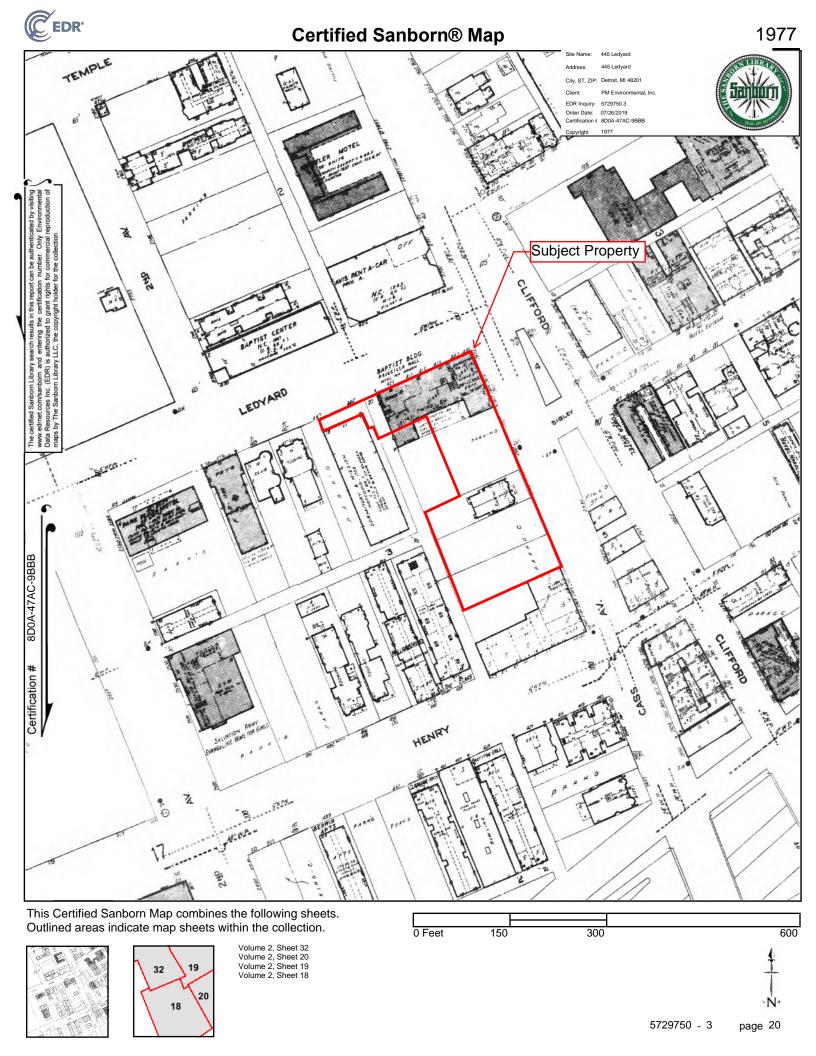


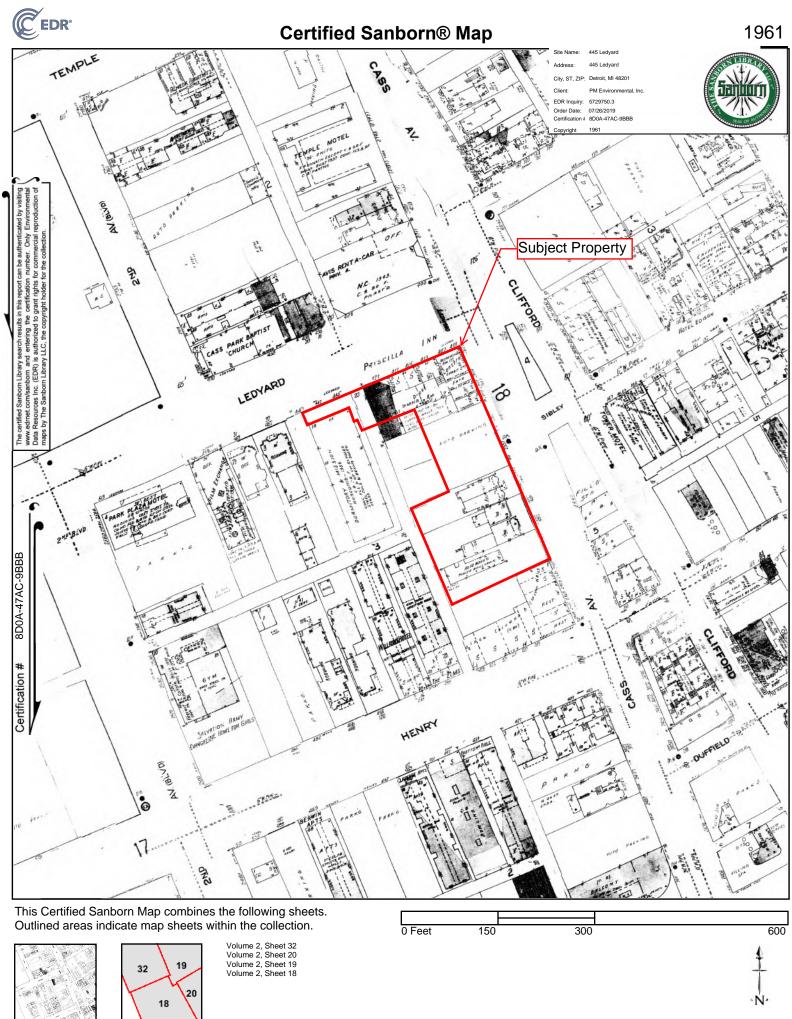
Copyright 1991

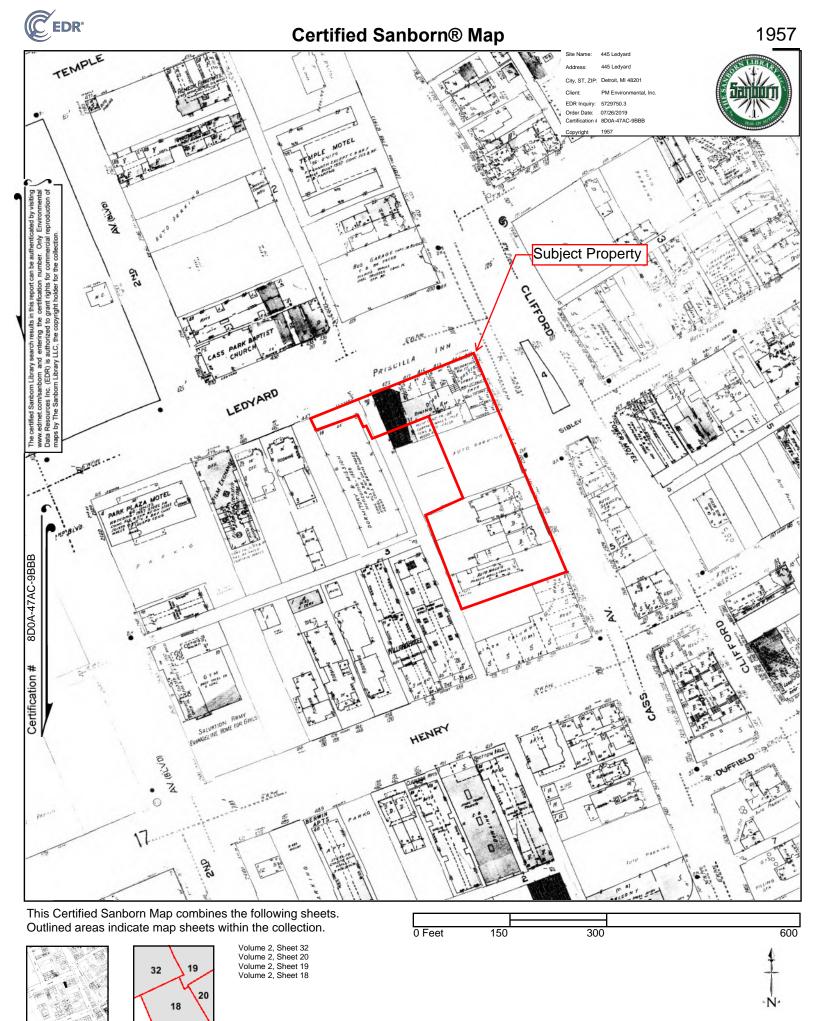


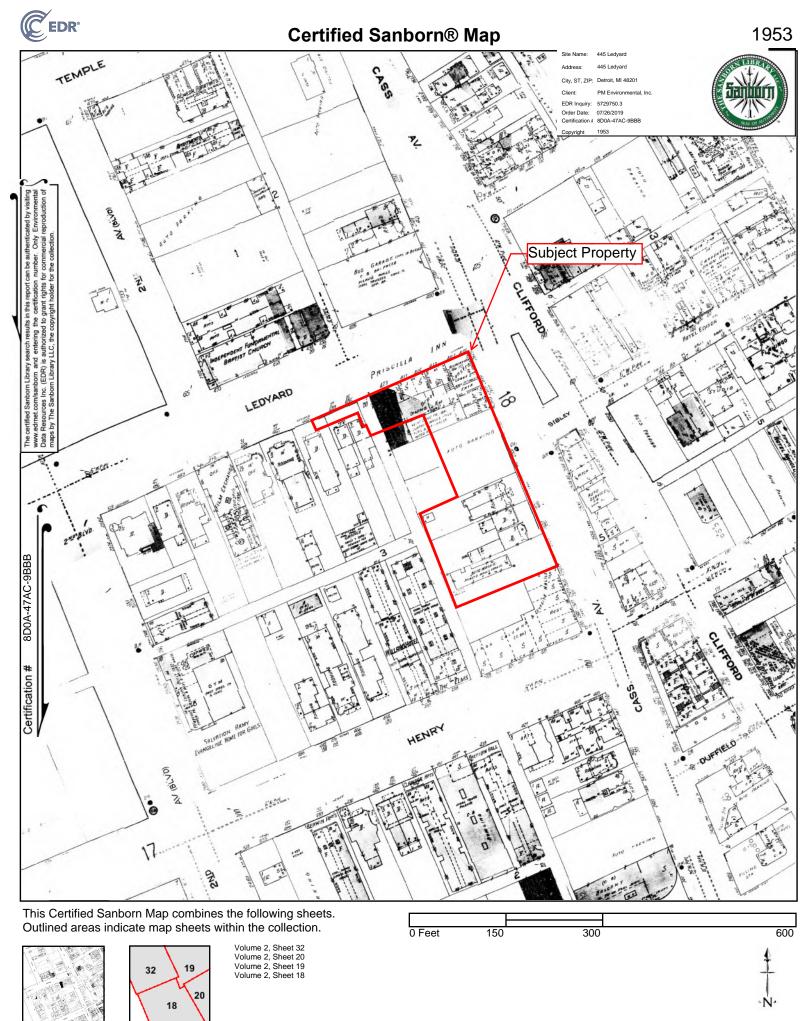
5729750 - 3

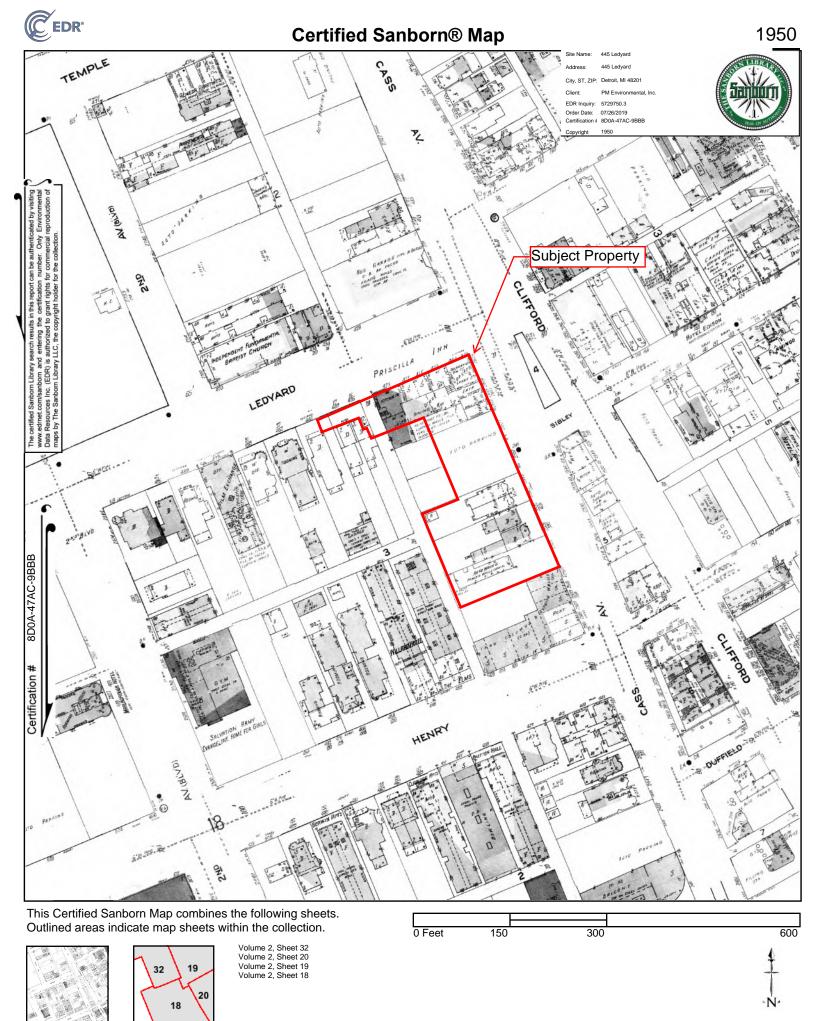








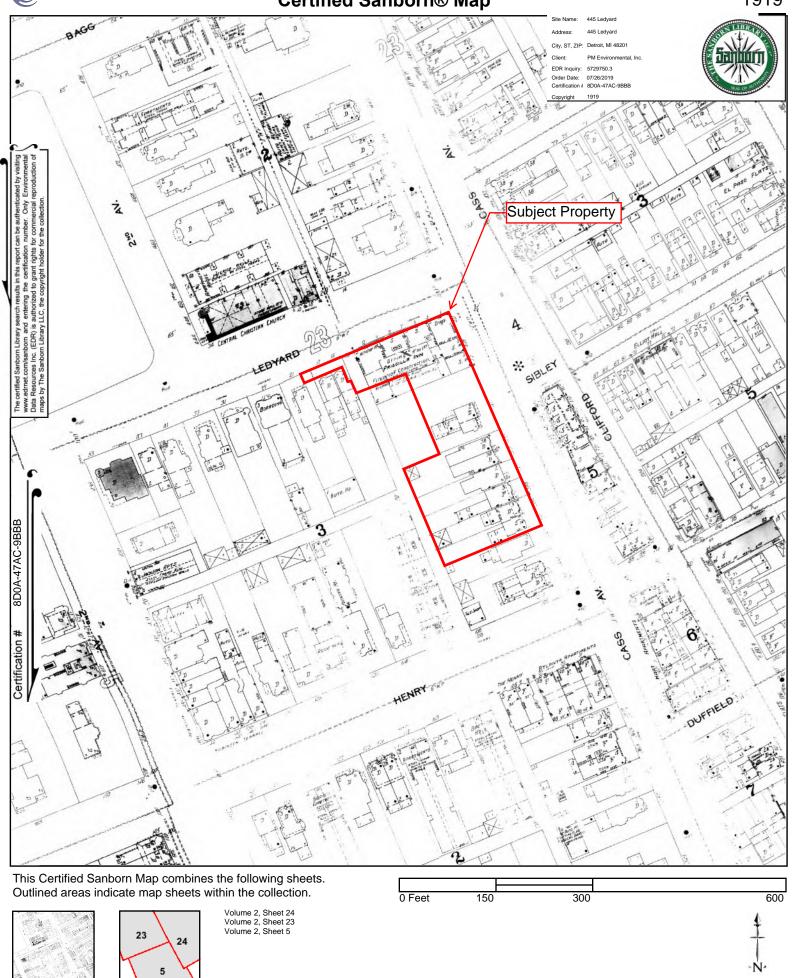




5729750 - 3

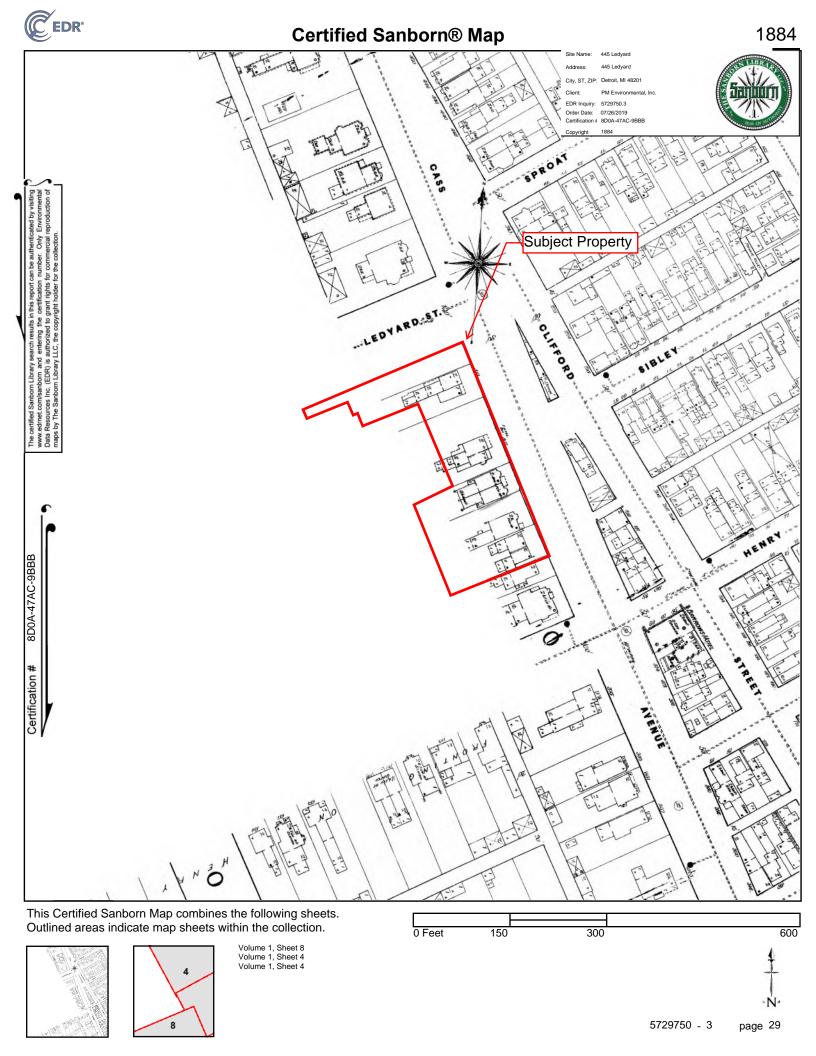
5729750 - 3

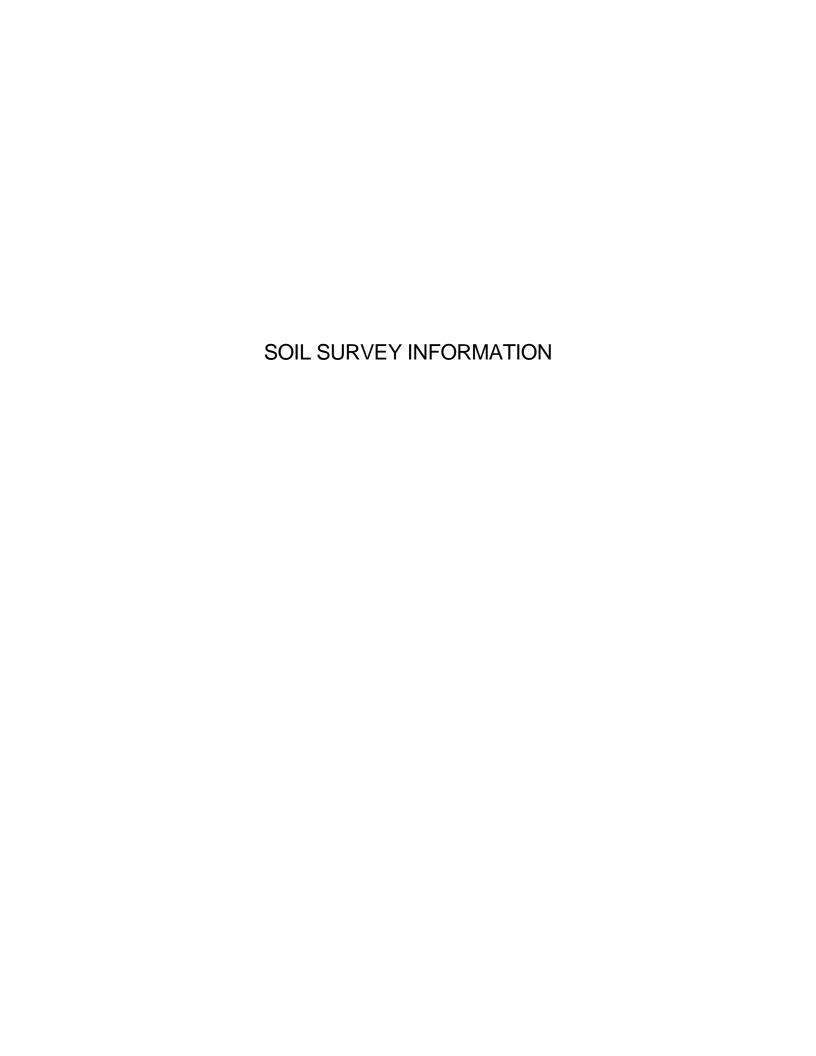
page 26



page 27

5729750 - 3



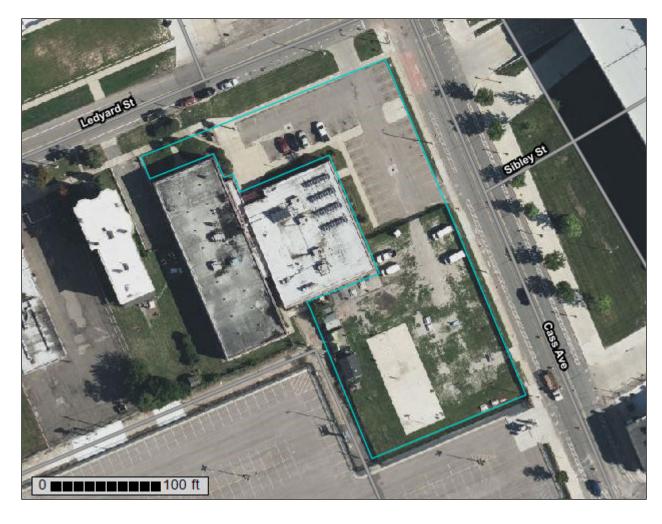


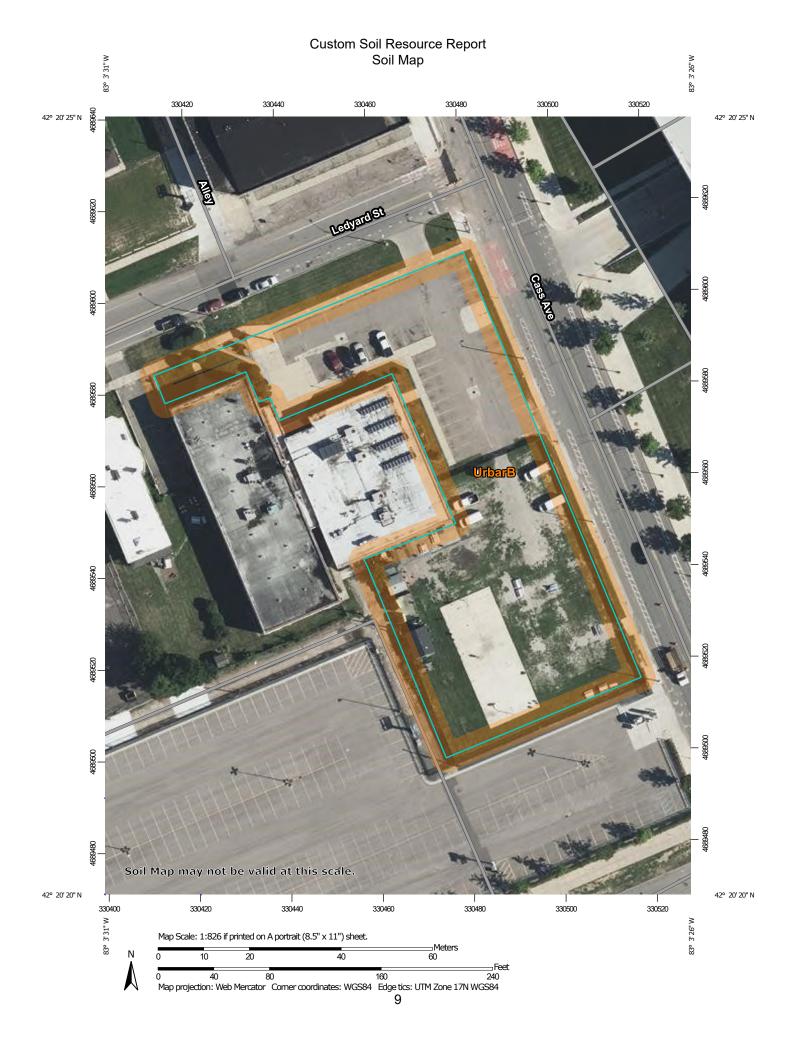


NRCS

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Wayne County, Michigan





MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

(o)

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit **Gravelly Spot**

Landfill Lava Flow



Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot



Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other

Δ

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

00

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wayne County, Michigan Survey Area Data: Version 7, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Aug 5, 2020—Aug 12. 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UrbarB	Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes	1.0	100.0%
Totals for Area of Interest		1.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Wayne County, Michigan

UrbarB—Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2whsx

Elevation: 560 to 720 feet

Mean annual precipitation: 28 to 38 inches Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 135 to 210 days

Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 80 percent

Riverfront, dense substratum, and similar soils: 19 percent

Minor components: 1 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 0 inches to manufactured layer

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

Description of Riverfront, Dense Substratum

Setting

Landform: Deltas, water-lain moraines, wave-worked till plains

Down-slope shape: Linear

Across-slope shape: Convex, linear

Parent material: Loamy human-transported material over clayey lodgment till

Typical profile

^Au - 0 to 6 inches: sandy loam

^Cu1 - 6 to 16 inches: very artifactual sandy loam ^Cu2 - 16 to 46 inches: gravelly-artifactual loam ^Cu3 - 46 to 68 inches: very artifactual loam

2Cd - 68 to 80 inches: clay

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: 56 to 78 inches to densic material

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Custom Soil Resource Report

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 28 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: B

Ecological site: F099XY007MI - Lake Plain Flats

Hydric soil rating: No

Minor Components

Riverfront, dense substratum, steep

Percent of map unit: 1 percent

Landform: Deltas, water-lain moraines, wave-worked till plains

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Qualities and Features

This folder contains tabular reports that present various soil qualities and features. The reports (tables) include all selected map units and components for each map unit. Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected

Custom Soil Resource Report

initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Custom Soil Resource Report

	Soil Features–Wayne County, Michigan								
Map symbol and	Restrictive Layer			Subsidence		Potential for frost	Risk of corrosion		
soil name	Kind	Depth to top	Thickness	Hardness	Initial	Total	action	Uncoated steel	Concrete
		Low-RV- High	Range		Low- High	Low- High			
		In	In		In	In			
UrbarB—Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes									
Urban land	Manufactured layer	0	3-16	Very strongly cemented	_	_			
Riverfront, dense substratum	Densic material	56- 68-78	2-24	Noncemented	0	0	Moderate	Low	Low
Riverfront, dense substratum, steep	Densic material	56- 68-78	2-24	Noncemented	0	0	Moderate	Low	Low



445 LEDYARD 48201 (Property Address)

Parcel Number: 02000618-9

Property Owner: EPISCOPAL CHURCH, DIOCESE OF MI

Summary Information

- > Commercial/Industrial Building Summary
 Yr Built: 1880 # of Buil
 - # of Buildings: 4
 - Total Sq.Ft.: 41,466
- > Property Tax information found

> Assessed Value: \$0 | Taxable Value: \$0

Item 1 of 15 13 Images / 2 Sketches

Owner and Taxpayer Information

Owner EPISCOPAL CHURCH, DIOCESE OF Taxpayer

4800 WOODWARD AVE DETROIT, MI 48201-1310 SEE OWNER INFORMATION

General Information for Tax Year 2022

Property Class	201 201-COMMERCIAL	Unit	01 CITY OF DETROIT
School District	DETROIT CITY SCHOOL DISTRICT	Assessed Value	\$0
WARD#	02	Taxable Value	\$0
HOPE#	4	State Equalized Value	\$0
PP CODE#	Not Available	Date of Last Name Change	03/22/2004
RELATED #	Not Available	Notes	Not Available
Historical District	Not Available	Census Block Group	Not Available
COUNCIL#	Not Available	Exemption	No Data to Display

Principal Residence Exemption Information

Homestead Date No Data to Display

Principal Residence Exemption	June 1st	Final
2022	0.0000 %	-
2021	0.0000 %	0.0000 %

Land Information

Zoning Code	B4	Total Acres	1.865
Land Value	\$2,830,980	Land Improvements	\$40,417
Renaissance Zone	No	Renaissance Zone Expiration	No Data to Display
		Date	
ECF Neighborhood	Not Available	Mortgage Code	No Data to Display
Lot Dimensions/Comments	Not Available	Neighborhood Enterprise Zone	No

	Total Frontage: 170.00 ft	Average Depth: 207.00 ft
Lot 1	170.00 ft	207.00 ft
Lot(s)	Frontage	Depth

Legal Description

S LEDYARD 3 THRU 12BLK--79 SUB PT CASS FARM L1 P93 PLATS, W C R 2/18 81,226.5 SQ FT

Sale History

Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms of Sale	Liber/Page
			•	•	•	

No sales history found.

Building Information - 9480 sq ft Rooming Houses (Commercial)

Floor Area	9,480 sq ft	Estimated TCV	Not Available
Occupancy	Rooming Houses	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1880	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Forced Air Furnace
Physical Percent Good	49%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	35 yrs

Building Information - 21240 sq ft Office Buildings (Commercial)

Floor Area	21,240 sq ft	Estimated TCV	Not Available
Occupancy	Office Buildings	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1956	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Package Heating & Cooling
Physical Percent Good	63%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	23 yrs

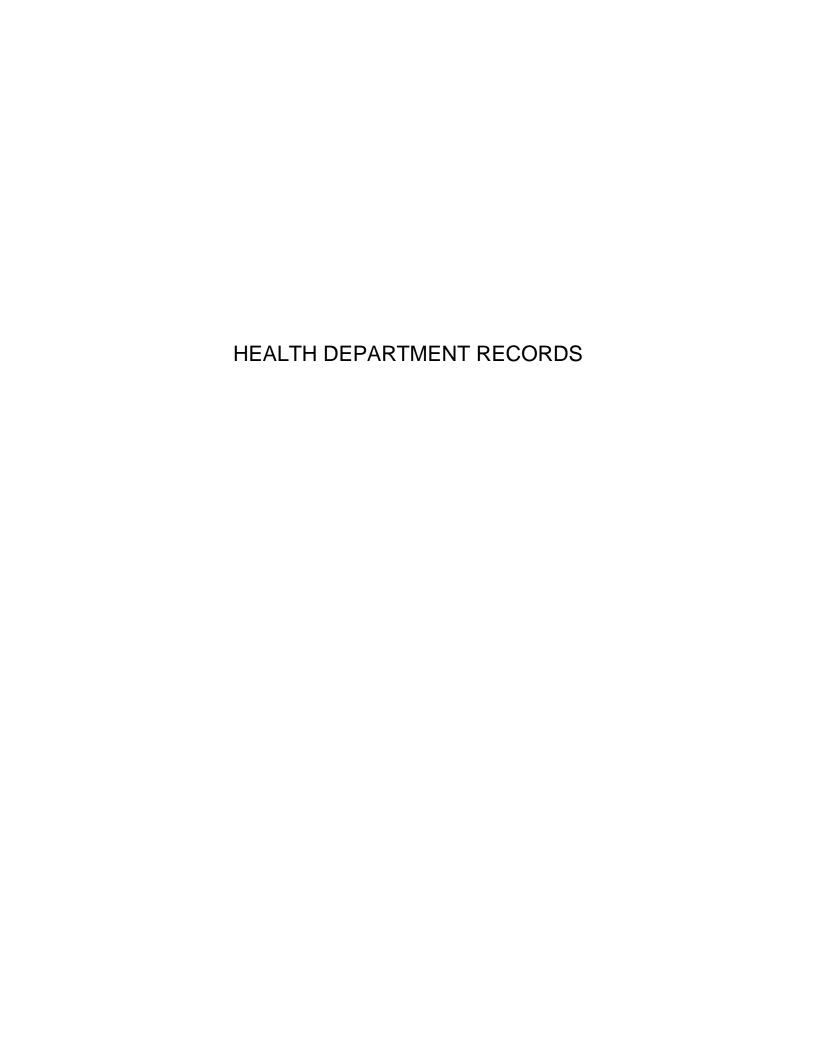
Building Information - 846 sq ft Office Buildings (Commercial)

Floor Area	846 sq ft	Estimated TCV	Not Available
Occupancy	Office Buildings	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1995	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Package Heating & Cooling
Physical Percent Good	63%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	23 yrs

Building Information - 9900 sq ft Office Buildings (Commercial)

Floor Area	9,900 sq ft	Estimated TCV	Not Available
Occupancy	Office Buildings	Class	С
Stories Above Ground	Not Available	Average Story Height	Not Available
Basement Wall Height	Not Available	Identical Units	Not Available
Year Built	1995	Year Remodeled	No Data to Display
Percent Complete	100%	Heat	Package Heating & Cooling
Physical Percent Good	63%	Functional Percent Good	100%
Economic Percent Good	100%	Effective Age	23 yrs

^{**}Disclaimer: BS&A Software provides BS&A Online as a way for municipalities to display information online and is not responsible for the content or accuracy of the data herein. This data is provided for reference only and WITHOUT WARRANTY of any kind, expressed or inferred. Please contact your local municipality if you believe there are errors in the data.





LAW DEPARTMENT

Coleman A. Young Municipal Center 2 Woodward Avenue, Suite 500 Detroit, Michigan 48226-3437 Phone 313•224•4550 Fax 313•224•5505 www.detroitmi.gov

April 11, 2022

Samantha Joines PM Environmental 560 5th Street NW Ste. 301 Grand Rapids, MI 49504

RE: Freedom of Information Act Request No. A22-04674, Dated March 25, 2022, Concerning City of Detroit Records Pertaining to the Following Addresses/Properties 445 Ledyard St, Detroit (PID: 02000618-9), 401-457 Ledyard Street, 2527-2625 Cass Ave, 1-27 Ledyard St 389-419 Cass Ave

Dear Ms. Joines:

This letter serves as the City of Detroit's response to the above-referenced matter. Your request was received at the City of Detroit Law Department Freedom of Information Act Section, via facsimile or email, on March 25, 2022. Because your request was received by electronic transmission, pursuant to Section 5(1) of the Michigan Freedom of Information Act (the "Act"), MCL 15.235(1); it is deemed to have been received at the Law Department on the next business day, March 28, 2022.

Your request seeks:

Requesting all City records concerning the following

445 Ledyard St, Detroit (PID: 02000618-9) Historical: 401-457 Ledyard Street 2527-2625 Cass Ave Pre-1921 Addresses: 1-27 Ledyard St 389-419 Cass Ave

We are interested in obtaining files related to records of health department inspections, violations, historical well log or septic information, environmental concerns or issues, etc.

Your request is denied pursuant to MCL 15.235(5)(b), for the reason that based on information provided by Detroit Health Department (DHD) it is our understanding that DHD does not possess any record that corresponds to the description in your request.

You can find the summary of the City of Detroit Freedom of Information Act procedures and guidelines at www.detroitmi.gov and specifically at https://detroitmi.gov/how-do-i/request-document/foia-freedom-information-act-request.



Please be advised that, due to the COVID-19 pandemic, the City of Detroit Law Department would prefer that all letters, payments and other correspondence pertaining to new or pending FOIA requests be sent via email or the U.S. Mail. We will send all correspondence to members of the public via U.S. Mail and/or Email as appropriate. Please contact Jack Dietrich at 313-237-5030, if this policy creates a hardship for you. Thank you in advance for your compliance with this policy.

Please note that pursuant to Section 10 and 10a of the Act, MCL 15.240 and 15.240a, a person receiving a written denial of a request or receiving a letter to submit the labor costs may do one of the following:

- 1) Submit a written appeal to the head of the public body denying the request. Such appeal, if submitted, should specifically state the word "appeal" and identify the reason or reasons for reversal of the disclosure denial. MCL 15.240(1)(a) and MCL 15.240a(1)(a); or
- 2) Commence an action in the circuit court to compel the disclosure of the public records within 180 days after the public body's denial of the request, MCL 15.240(1)(b), or 45 days after the public body's request for labor costs, MCL 15.240a(1)(b). If a court finds that the information withheld by a public body is not exempt from disclosure, or that the labor costs requested by the public body exceeds the amount permitted, the requesting party may receive the requested record and, at the discretion of the court, reasonable attorney fees and /or cost. MCL 15.240(6) and (7), and MCL 15.240a(6) and (7).

Very truly yours,

Marwa ElShazly

Paralegal

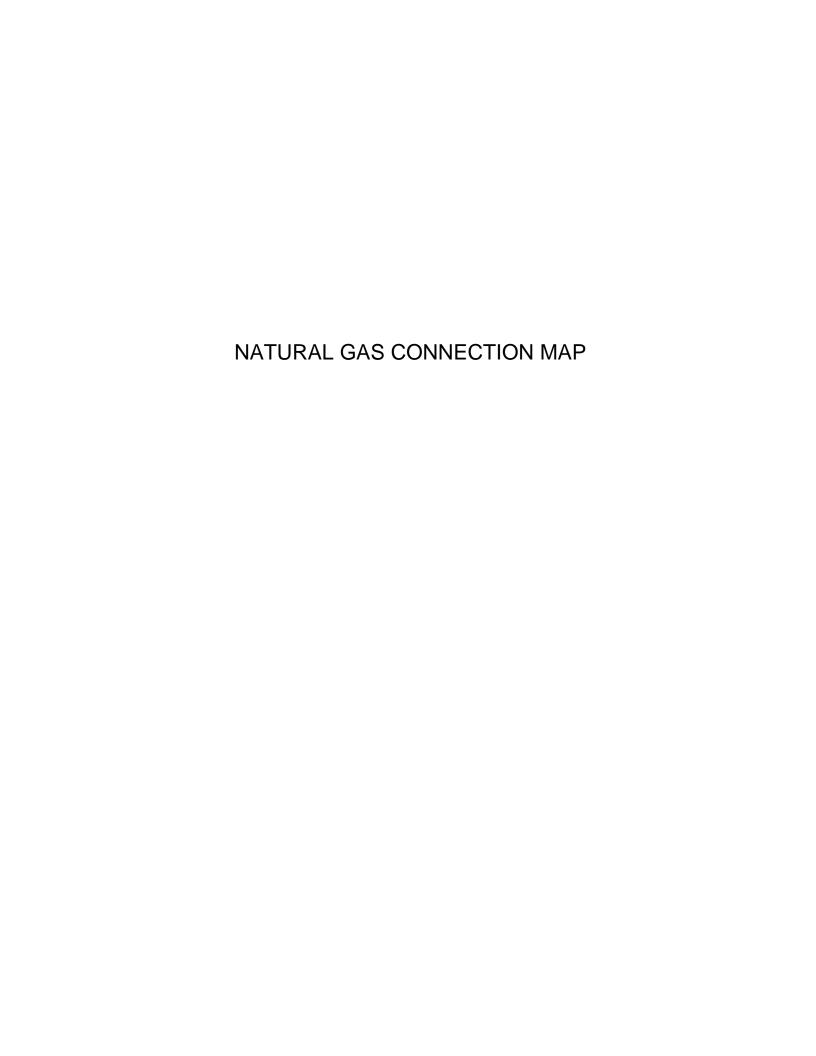
Freedom of Information Section

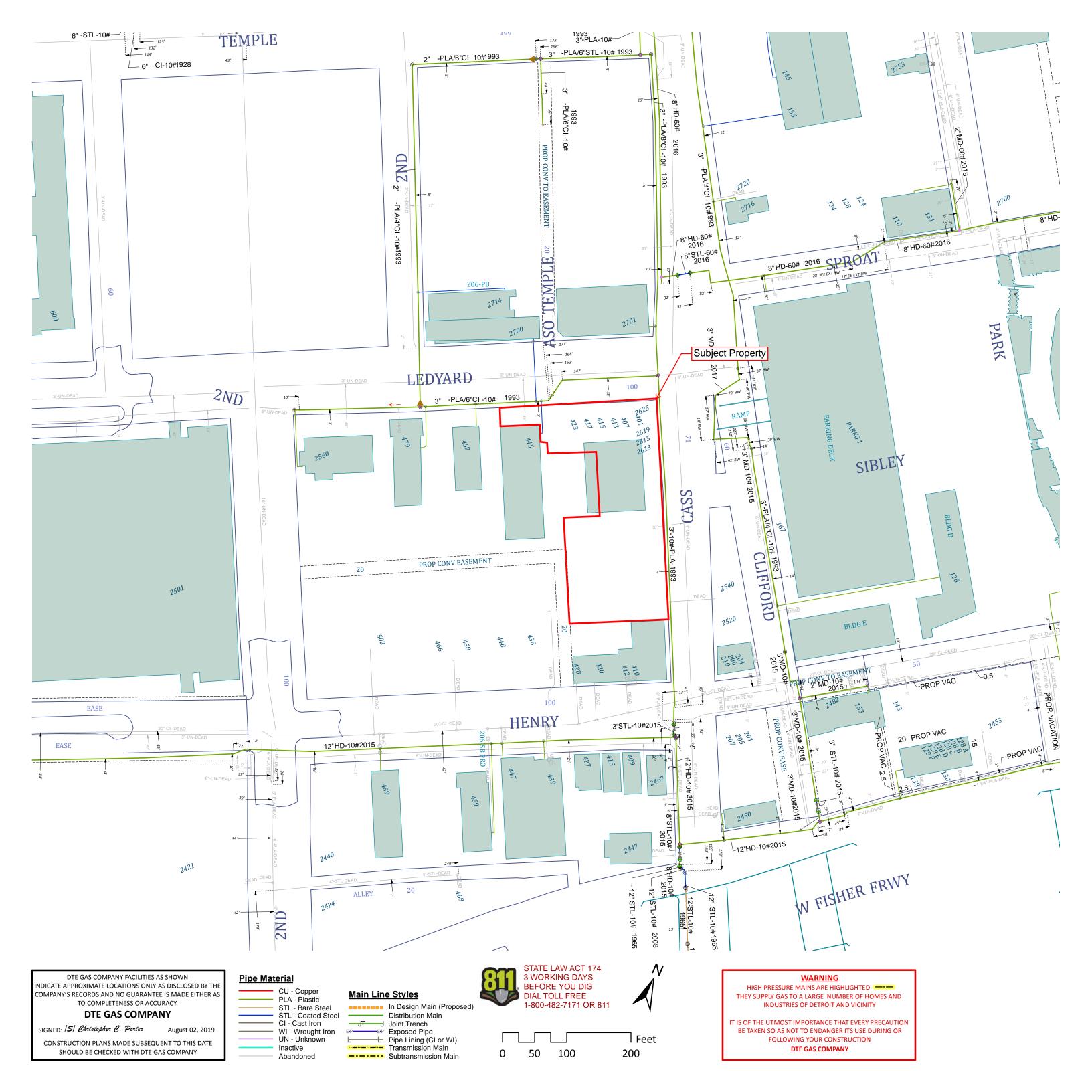
Marwa Elshazly

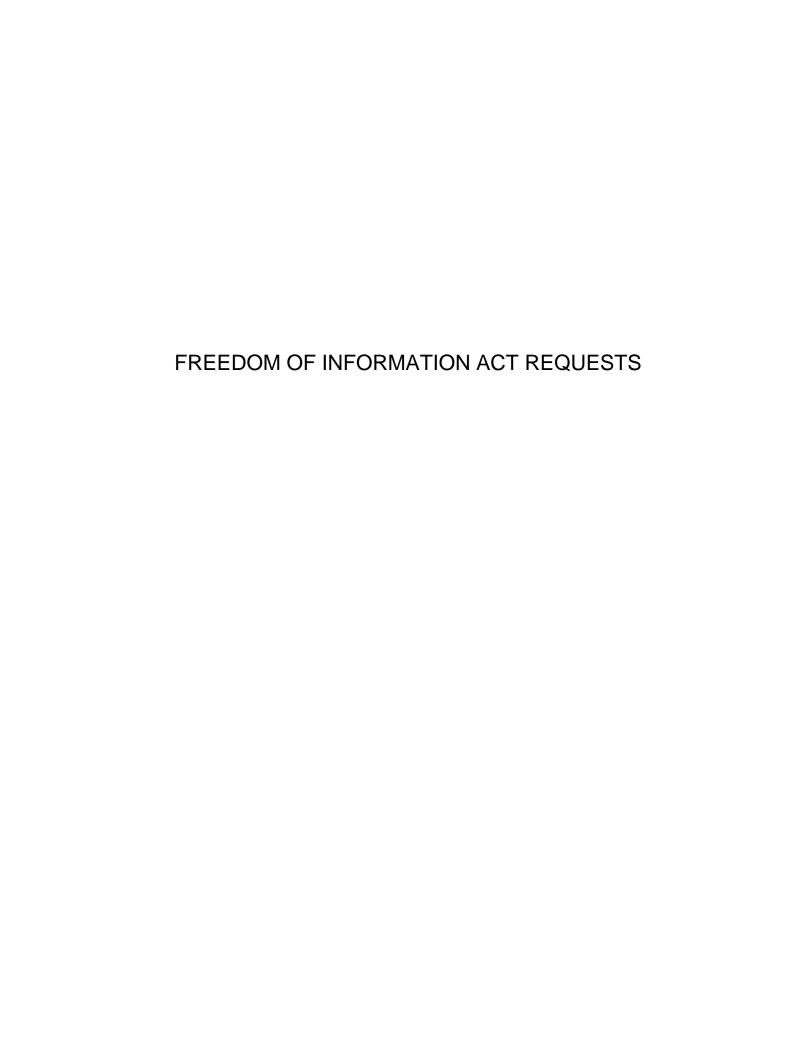
City of Detroit

(313) 237-6665

MME/







Corporate Headquarters Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906

f: 877.884.6775 t: 517.321.3331 Michigan Locations
Berkley Bay City
Grand Rapids Lansing
Oak Park

March 25, 2022

City of Detroit FOIA Coordinator City of Detroit Law Department 2 Woodward Avenue, Suite 500 Detroit, Michigan 48226

FOIA Coordinator:

Please accept this as a request to review and possibly copy FIRE DEPARTMENT files for the following address(es):

445 Ledyard St, Detroit (PID: 02000618-9)

Historical: 401-457 Ledyard Street 2527-2625 Cass Ave

Pre-1921 Addresses: 1-27 Ledyard St 389-419 Cass Ave

Information we are interested in obtaining includes:

- Records of emergency responses or HAZMAT responses;
- Illegal Dumping; and
- Historic records of UST/ASTs.

Please contact me regarding the availability of information and potential fees associated with reproduction prior to reproducing any material.

When the information has been gathered, please send files to me at Nagengast@pmenv.com or by fax to 877-884-6775. Please contact me via phone if it is required that I pick up any information that is available in person. If you have any questions or concerns regarding this request, please contact me by email or by phone at (248) 414-1429. Thank you.

Sincerely,

PM Environmental, Inc.

Devon Nagengast Staff Consultant

In 2nt

4080 West Eleven Mile Road

Berkley, MI 48072

PME Project No: 01-11988-1-0001 DN (5/4/22)



Corporate Headquarters Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906

f: 877.884.6775 t: 517.321.3331 Michigan Locations
Berkley Bay City
Grand Rapids Lansing
Oak Park

March 25, 2022

Detroit Health Department Environmental Safety 3245 E. Jefferson Ave. / Ste. 100 Detroit, MI 48207-4222

Phone: 313-876-0135

Dear Lisa Jones:

Please accept this FOIA request to receive copies of information in your files relative to the following site:

445 Ledyard St, Detroit (PID: 02000618-9)

Historical: 401-457 Ledyard Street 2527-2625 Cass Ave

Pre-1921 Addresses: 1-27 Ledyard St 389-419 Cass Ave

We are interested in obtaining files related to records of health department inspections, violations, historical well log or septic information, environmental concerns or issues, etc.

Please contact me regarding the availability of information and potential fees associated with reproduction <u>prior to reproducing any material.</u>

When the information has been gathered, please send the files to the address in the signature below. In addition, please contact me at 616-330-2950 or email me at Joines@pmenv.com if you have any questions or concerns regarding this request. Thank you.

Sincerely,

PM Environmental, Inc.,

Samantha Joines
Staff Consultant

560 5th Street NW, Suite 301

Grand Rapids, MI 49504

PME Project No: 01-11988-1-0001 DN (5/4/2022)

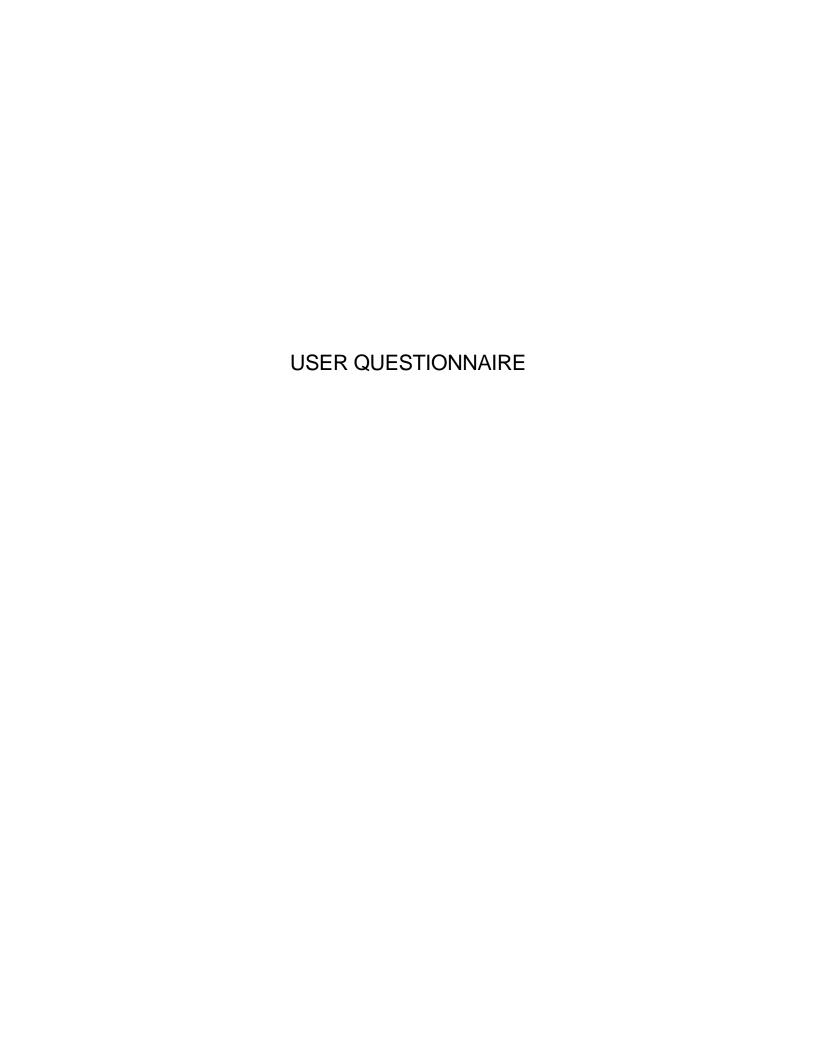
Previous Site Investigations are included in Adobe Tab



Section 10.5: Regulatory Records Documentation

ENVIRONMENTAL DATABASE SEARCH OMITTED

Section 10.6: Intervie	ew Documentation	





SECTION VIII: 2021 - USER'S ENVIRONMENTAL QUESTIONNAIRE AND DISCLOSURE STATEMENT

The Authority requires the completion of its "User's Environmental Questionnaire and Disclosure Statement" to fulfill Section 6, User's Responsibilities of the ASTM Standard E 1527-13. The checklist is to be completed and signed by the <u>sponsor (developer)</u>, and returned to the Environmental Professional conducting the Phase I. This questionnaire is to be reviewed by the Environmental Professional and incorporated into their Phase I report (the completed User's Questionnaire is to be included in Appendix 10.6 of the Phase I report). Failure to properly complete this process will result in delays.

In preparing this document, the "User" (Sponsor) must make a good faith effort to answer the questions in the checklist. The User or a preparer designated by the User presents that to the best of his/her knowledge, the above statements and facts are true and correct and that to the best of the preparer's knowledge, no material facts have been omitted or misstated. Time and care should be taken to check whatever records are in the User's possession. If any of the following questions are answered in the affirmative or if answers are unknown, are qualified, or cannot be obtained, the burden is on the Environmental Professional to determine whether further inquiry is appropriate. The User should document the reason for any affirmative answer to provide the Environmental Professional with all appropriate information. Moreover, the Environmental Professional must determine if further inquiry in any area where the property owner provides incomplete information is warranted, providing written explanation for their recommendation(s).

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments"), the User must provide the following information (if available) to the Environmental Professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

User's (Sponsor's) Name: Cinnaire Solutions Corporation					
User's (Sponsor's) Telephone No.: 313-544-4009					
User's (Sponsor's) F	ax No.:				
Subject Property: _	The Ancho	r at Mariners Inn	(New C	onstruction)	
Property Address:	445 Ledyard				
City: Detroit		State:	MI	Zip: 48201	



1.0 Environmental Cleanup Liens:

Are you aware of any environmental cleanup liens against the property that are filed, recorded, or unrecorded under federal, tribal, state, or local law?

____YES ____NO (If "YES," please describe)

2.0 Activity and Land Use Limitations:

Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed, recorded or unrecorded in a registry under federal, tribal, state or local law?

____YES ____NO (If "YES," please describe)

3.0 Specialized Knowledge or Experience of the User:

As the user of this ESA do you have any knowledge or experience related to the property or nearby properties that could be material to any environmental conditions of this property?

____YES ___NO (If "YES," please describe)

Are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

YES VNO (If "YES," please describe)

4.0 Relationship of Purchase Price to Fair Market Value:

Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

____YES ____NO (If "YES," please describe)

If you conclude that there is a difference, have you considered whether the lower price is because contamination is known or believed to be present at the property?

YES NO (If "YES," please describe)

The property will be controlled through a long term ground lease and a discounted price due to the mission alignement of the lessor and lessee.

10

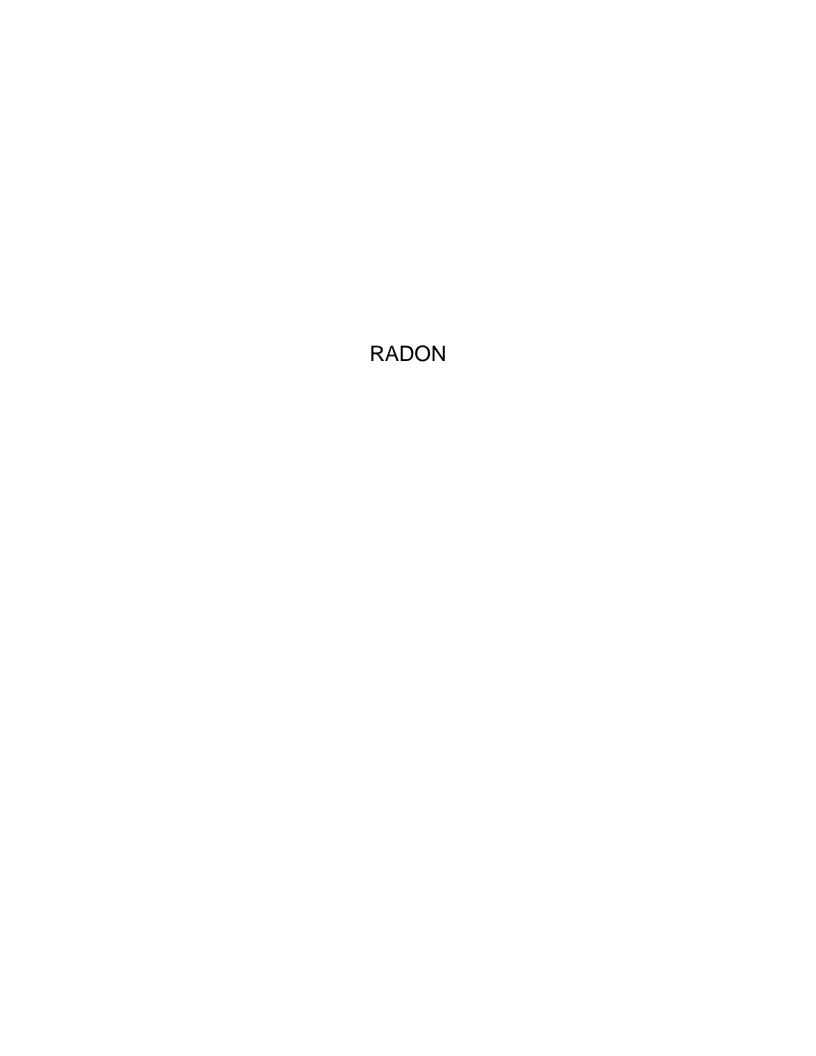


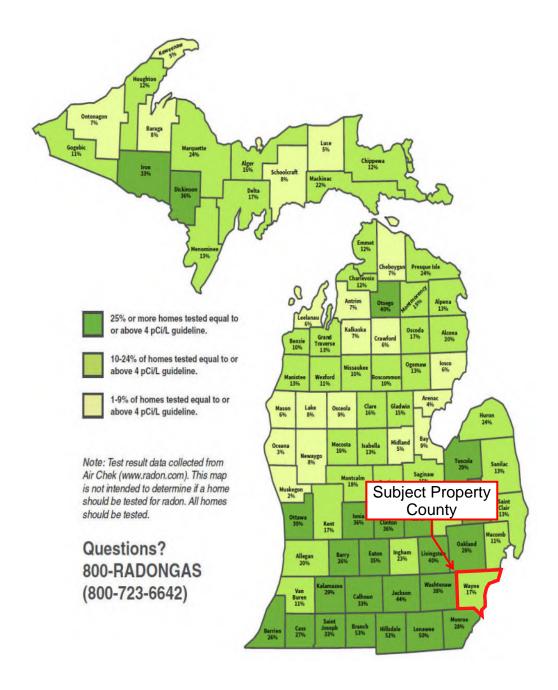
Commonly Known or Reasonably Ascertainable Information: 5.0

Are you aware of commonly known or reasonably ascertainable information about the property that would

help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,
Do you know the past uses of the property? Please list: Parking
Do you know the specific chemicals that are present or once were present at the property? YESNO (If "YES," please describe)
Do you know of spills or other chemical releases that have taken place at the property? YESNO (If "YES," please describe)
Do you know of any environmental cleanups that have taken place at the property? YESNO (If "YES," please describe)
6.0 Presence or Likely Presence of Contamination:
As the user of this ESA and based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property? YES_V_NO (If "YES," please describe)
User's Signature: 4/14/2021
User's Printed Name: Edward Potas

Section 10.7: Special Contractual Conditions between User and Environmental Professional





Stay Connected







DEQ Calendar, Events and Training

DEQ Contacts

Environmental Assistance Center Do you have an environmental question or concern? Call our Environmental Assistance Center at 1-800-662-9278.

Staff Directory Media Contact **DEQ FOIA Information**

Our Performance

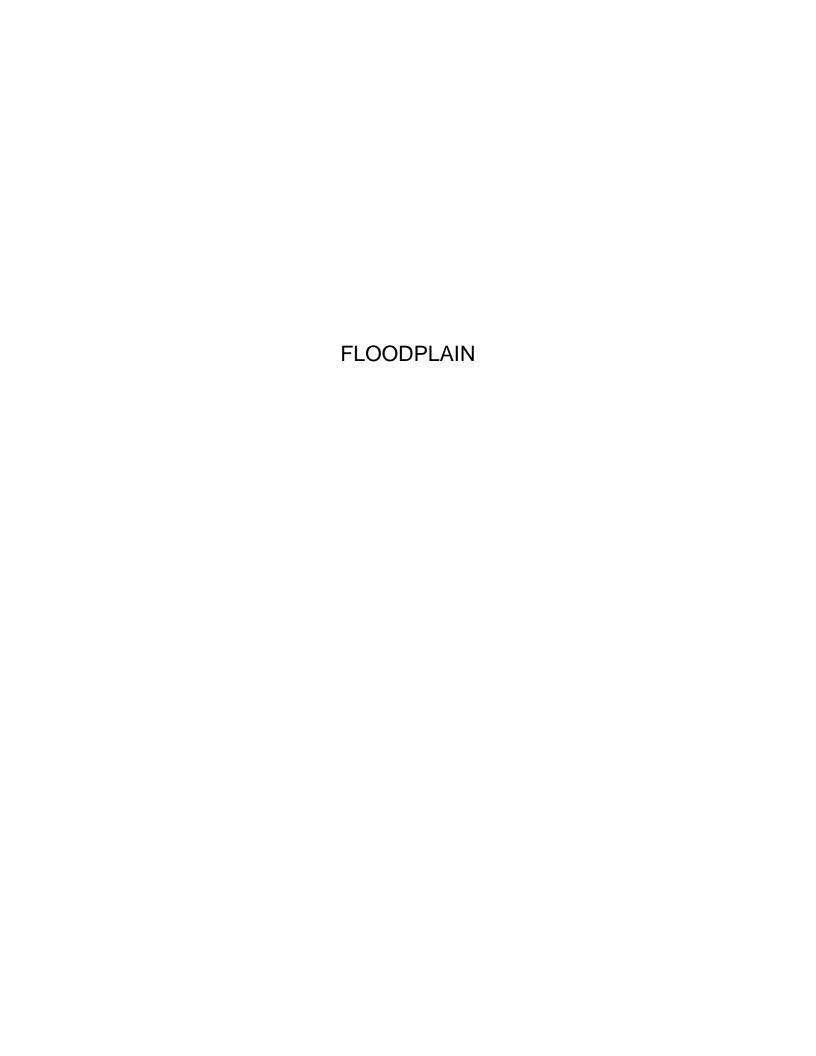
OPEN Michigan DEQ Scorecard

DEQ Documents

Reports Forms **Publications** Maps & Data

DEQ Regulations

DEQ Policies Laws & Rules **Permits** Regulatory Reinvention Boards and Advisory Groups



National Flood Hazard Layer FIRMette

250

500

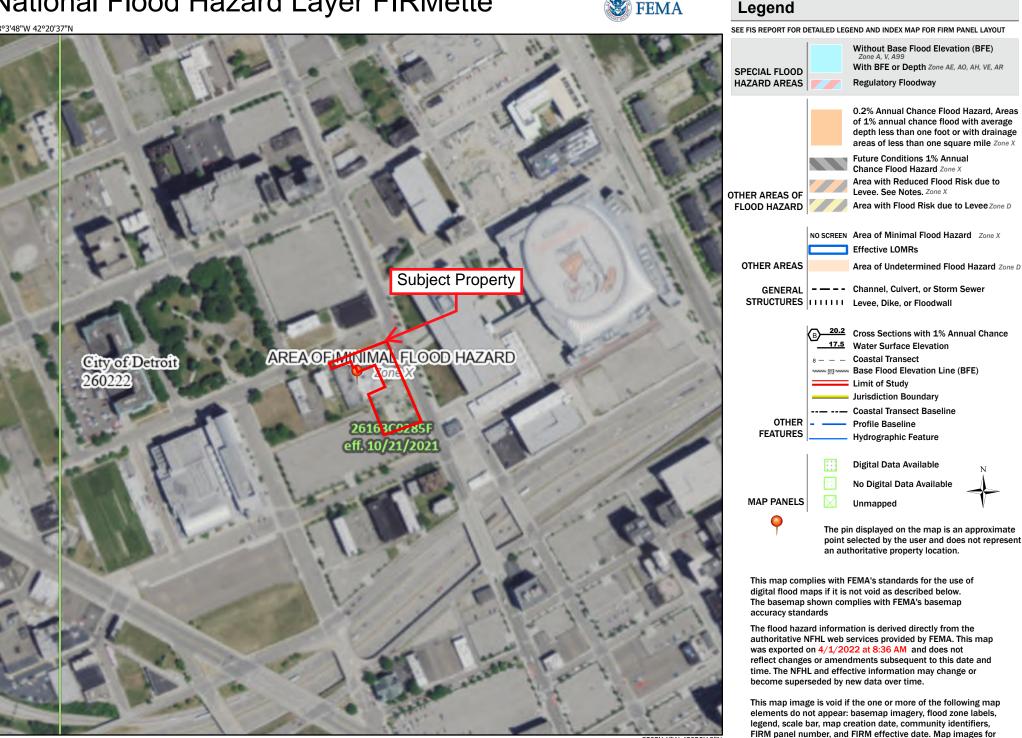
1,000

1,500



unmapped and unmodernized areas cannot be used for

regulatory purposes.



1:6.000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

2.000



Wetlands Map Viewer

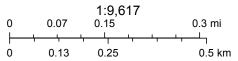


April 1, 2022 Part 303 Final Wetlands Inventory

Wetlands as identified on NWI and MIRIS maps

Soil areas which include wetland soils

Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils

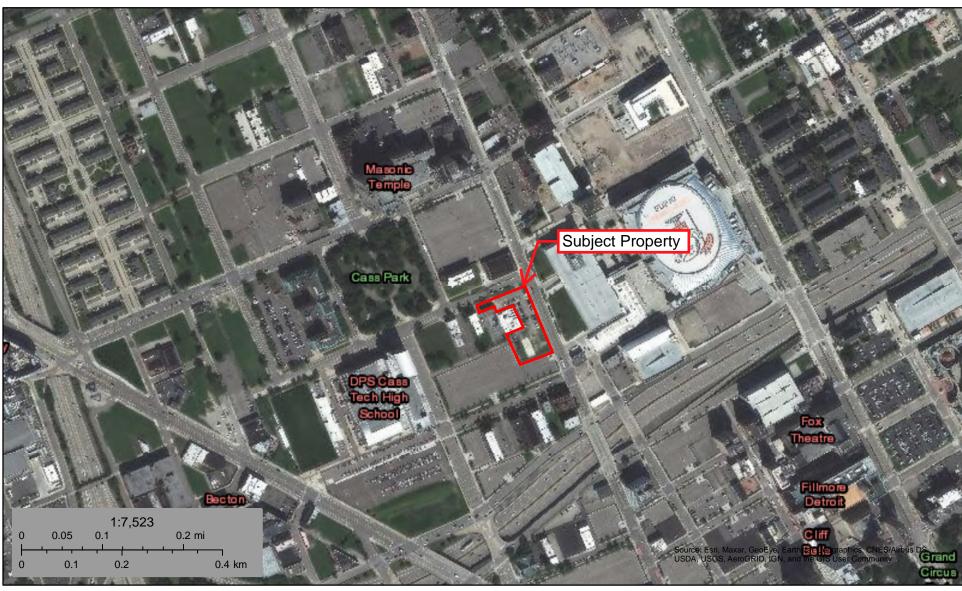


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



April 1, 2022

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

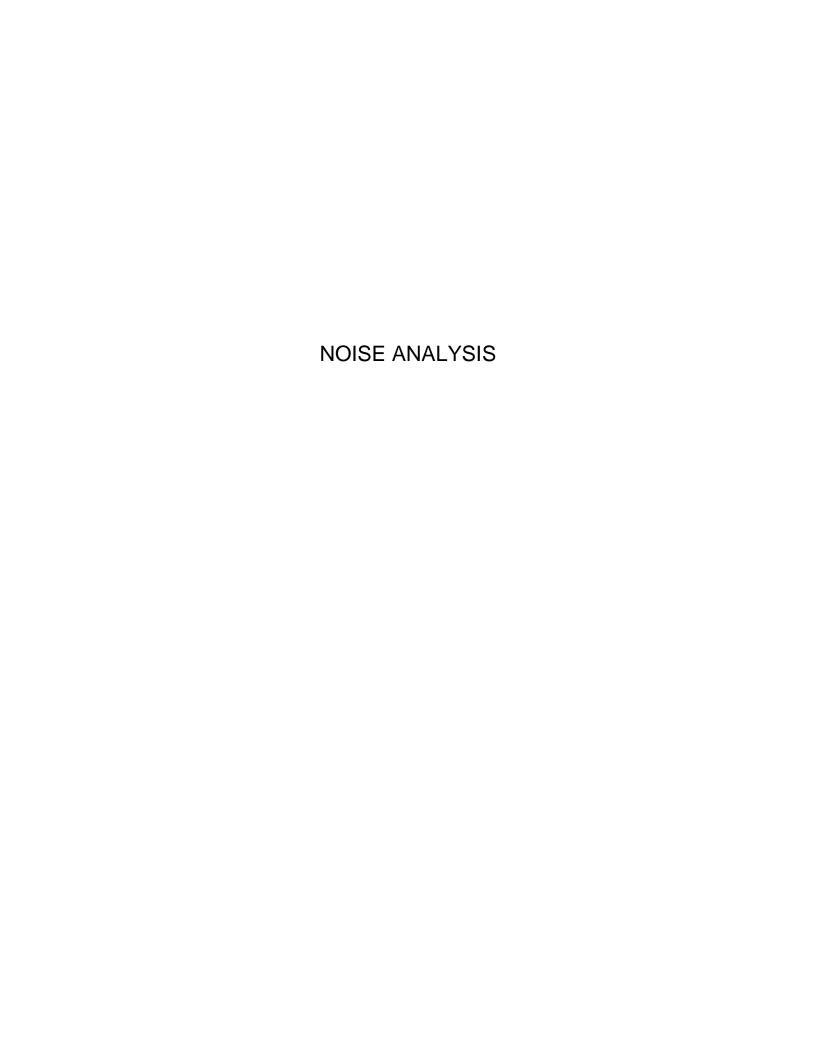
Lake

Other

Riverine



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.





Environmental & Engineering Services Nationwide



ENVIRONMENTAL SERVICES

BUILDING ARCHITECTURE, ENGINEERING & SCIENCE

INDUSTRIAL HYGIENE SERVICES

BROWNFIELDS & ECONOMIC INCENTIVES CONSULTING

DESKTOP NOISE ASSESSMENT

The Anchor at Mariners Inn

Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and General Common Elements
Located in the Eastern and Southern Portions of 445 Ledyard Street, Detroit, Michigan
PM Project Number 01-11288-1-0001

Prepared for:

Cinnaire Solutions Corporation

2111 Woodward Avenue, Suite 600 Detroit, Michigan 48201 *Prepared by:*

PM Environmental

4080 West Eleven Mile Road Berkley, Michigan 48072

Know Your Risk. Take Control. Work with the Experts.

www.pmenv.com

Corporate Headquarters Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906

f: 877.884.6775 t: 517.321.3331

Michigan Locations

Berkley **Bay City Grand Rapids** Lansing Oak Park

May 19, 2022

Mr. Edward Potas **Cinnaire Solutions Corporation** 2111 Woodward Avenue, Suite 600 Detroit, Michigan 48201

Re: Phase I Environmental Site Assessment of The Anchor at Mariners Inn

Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and

General Common Elements

Located in the Eastern and Southern Portions of 445 Ledyard Street,

Detroit, Michigan

PM Environmental Project No. 01-11288-1-0001

Dear Mr. Potas:

PM Environmental (PM) has completed the Desktop Noise Assessment of the above referenced property. This Desktop Noise Assessment was conducted in general accordance with the US Department of Housing and Urban Development (HUD) Noise Abatement and Control standards contained in 24 CFR 51B. This report was also prepared in conformance with Michigan State Housing Development Authority's (MSHDA's) Environmental Review Requirements for 2022.

The purpose of the Desktop Noise Assessment was to gather sufficient information to develop an independent professional opinion regarding possible noise concerns associated with the subject property through designated Noise Assessment Locations (NALs) on the subject property.

The Desktop Noise Assessment for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for THE ANCOR AT MARINERS INN, LDHA, LP, CINNAIRE SOLUTIONS CORPORTATION, MARINERS INN, PROTESTANT EPISCOPAL CHURCH OF THE DIOCESE OF MICHIGAN, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY to rely on PM's Desktop Noise Assessment report.

If you have any questions related to this report, please do not hesitate to contact our office at 248.336.9988.

Sincerely,

PM ENVIRONMENTAL

Devon Nagengast Staff Consultant

Peter S. Bosanic, P.E., EP

Principal

Desktop Noise Assessment of the Mariners Inn Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and General Common Elements Located in the Eastern and Southern Portions of 445 Ledyard Street, Detroit, Michigan PM Environmental Project No. 01-11288-1-0001; May 19, 2021

TABLE OF CONTENTS

	Introduction	
2.0	Evaluation of Noise Sources	2
	: Airports	
	: Major Roadways	
	: Railroads	
	Calculations	
4.0	Conclusions	4
	References	

APPENDICES

Appendix A: NAL Location Map

Appendix B: Airport Noise Contour Map Appendix C: Noise Source Information

Appendix D: Day-Night Level Electronic Assessments

1.0 INTRODUCTION

PM Environmental, Inc. (PM) was retained to conduct a Desktop Noise Assessment of the Mariners Inn located at the Eastern and Southern Portion of 445 Ledyard Street, Detroit, Wayne County, Michigan (hereafter referred to as the "subject property"). This Desktop Noise Assessment was conducted in general accordance with the US Department of Housing and Urban Development (HUD) Noise Abatement and Control standards contained in 24 CFR 51B. This report was also prepared in conformance with MSHDA's Environmental Review Requirements for 2022.

THIS REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF THE ANCOR AT MARINERS INN, LDHA, LP, CINNAIRE SOLUTIONS CORPORTATION, MARINERS INN, PROTESTANT EPISCOPAL CHURCH OF THE DIOCESE OF MICHIGAN, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

The proposed development/rehabilitation utilizes state sources of funding. This assessment was conducted to provide the noise level and associated noise category at each designated Noise Assessment Location (NAL) at the subject property. This assessment does not include an evaluation of noise attenuation but general guidance is provided at the end of this assessment.

MSHDA requires that a noise assessment be completed properties that are located within 1,000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated airports.

The noise level calculated at a NAL is known as the day-night average sound level or DNL. A calculated DNL can fall within three categories:

- 1. Acceptable: DNL not exceeding 65 decibels (dB)
- 2. Normally Unacceptable: DNL above the 65 dB threshold but not exceeding 75 dB
- 3. Unacceptable: DNL above 75 dB

Two NALs (NAL #1 and NAL #2) on the subject property were used for this analysis based on proximity to noise sources. A map with the subject property boundaries, buildings, and NALs is included as Appendix A.

The following is a summary of the applicable noise sources identified at each NAL.

NAL #1 (northwest corner of proposed building)

Noise Source with Applicable Distance	Name	Distance to NAL
Airporto	Coleman A. Young International Airport	4.80 miles northeast
Airports	Windsor Airport	6.34 miles southeast
	Ledyard Street	50 feet north
	Temple Street	582 feet north
	2 nd Avenue	450 feet west
Busy Road(s)	Cass Avenue	194 feet east
	Clifford Street	600 feet southeast
	Southbound Interstate-75 (I-75) Service Drive	773 feet south

Noise Source with Applicable Distance	Name	Distance to NAL	
	Southbound I-75 Off Ramp	815 feet south	
	I-75	912 feet south	

NAL #2 (southeast corner of proposed building)

Noise Source with Applicable Distance	Name	Distance to NAL
Airports	Coleman A. Young International Airport	4.80 miles northeast
Airports	Windsor Airport	6.30 miles southeast
	Ledyard Street	225 feet north
	Temple Street	760 feet north
	Cass Avenue	38 feet east
	Clifford Street	340 feet southeast
Busy Road(s)	Southbound I-75 Service Drive	563 feet south
	Southbound I-75 Off Ramp	604 feet south
	I-75	680 feet south
	Northbound I-75 Service Drive	780 feet south
	2 nd Avenue	620 feet west

The noise sources identified within the table are further discussed below.

2.0 EVALUATION OF NOISE SOURCES

2.1: Airports

Coleman A. Young is located approximately 4.80 miles northeast of the subject property. Based on the Noise Contour Map for the airport (Appendix B), the airport is not within a distance of concern.

Windsor International Airport is located approximately 6.32 miles southeast. Based on the Noise Contour Map for the airport (Appendix B), the site is not within a distance of concern.

2.2: Major Roadways

The major roadways near the site are:

- Ledyard Street
- Temple Street
- 2nd Avenue
- Cass Avenue
- Clifford Street
- Southbound I-75 Service Drive
- Southbound I-75 Off Ramp
- I-75
- Northbound I-75 Service Drive

AADT data was available Michigan Department of Transportation (MDOT) for 2020. However, due to what appeared to be much lower than expected traffic associated with COVID restrictions,

Desktop Noise Assessment of the Mariners Inn Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and General Common Elements Located in the Eastern and Southern Portions of 445 Ledyard Street, Detroit, Michigan PM Environmental Project No. 01-11288-1-0001; May 19, 2021

the 2020 data was not utilized in the calculations. Traffic projections for all roadways are provided in Appendix C.

Ledyard Street has one-lane eastbound and westbound sections. Speed limit signs were not posted along Ledyard Street; however, based on the nearby speed limits and residential area, the speed limit is likely 25 mph. A stop sign is located within 160 feet of NAL #1 and within 225 feet of NAL #2. Traffic counts were obtained through the Michigan Department of Transportation (MDOT). Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Temple Street has one-lane eastbound and westbound sections, with a center turn lane. Speed limit signs were not posted along Temple Street; however, based on the nearby speed limits and downtown commercial area, the speed limit is likely 35 mph. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts were obtained through the Michigan MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Cass Avenue has one-lane northbound and southbound sections, with a center turn lane. The speed limit is 35 mph near the subject property. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts were obtained through MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Clifford Street has three-lane northbound sections. Speed limit signs were not posted along Clifford Street; however, based on the nearby speed limits and downtown commercial area, the speed limit is likely 35 mph. A stop sign is located within 600 feet of NAL #1 and 340 feet of NAL #2. Traffic counts were obtained through MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Southbound I-75 Service Drive has three-lane southbound sections. The speed limit is expected to vary based on the nature of the roadway; however, PM approximated the average speed near the subject property to be 35 mph. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts were obtained through MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Southbound I-75 Off Ramp has two-lane southbound sections. The speed limit is expected to vary based on the nature of the roadway; however, PM approximated the average speed near the subject property to be 50 mph. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts were obtained through MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

I-75 has a four-lane northbound and southbound sections. The speed limit is 55 mph near the subject property. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts were obtained through the MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Northbound I-75 Service Drive has three-lane northbound sections. The speed limit is expected to vary based on the nature of the roadway; however, PM approximated the average speed near the subject property to be 35 mph. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts were obtained through MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

2nd Avenue four-lane northbound sections. The speed limit is 25 mph near the subject property. A stop sign is located within 450 feet of NAL #1. Traffic counts were obtained through MDOT. Projections were calculated through 2032. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

N2.3: Railroads

No railroad tracks were identified within 3,000 feet of the subject property.

3.0 CALCULATIONS

Using the HUD DNL calculator, the noise level at NAL #1 from the noise sources, as predicted for operations in 2032, is 67 dB. This result is Normally Unacceptable.

Using the HUD DNL calculator, the noise level at NAL #2 from the noise sources, as predicted for operations in 2032, is 72 dB. This result is Normally Unacceptable.

Noise DNL calculator worksheets for each NAL are provided in Appendix D.

4.0 CONCLUSIONS

The following is a summary of the findings of this assessment.

NAL#	Combined Source DNL (dB)	Category
1 (northwest corner of proposed building)	67	Normally Unacceptable
2 (southeast corner of proposed building)	72	Normally Unacceptable

HUD ATTENUATION GUIDANCE

The "Normally Unacceptable" noise zone includes community noise levels from above 65 dB to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB (HUD generally gives a 1 dB variance up to 76 dB). Additionally, I-75 is sunken approximately 13 feet below grade nearest the subject property, which will provide some noise attenuation from the traffic. The project architect will need to complete attenuation documentation for the project by completing either a Sound Transmission Classification Assessment Tool (STraCAT) form or HUD Figure 19. Interior noise levels must be mitigation for 45 dB or less.

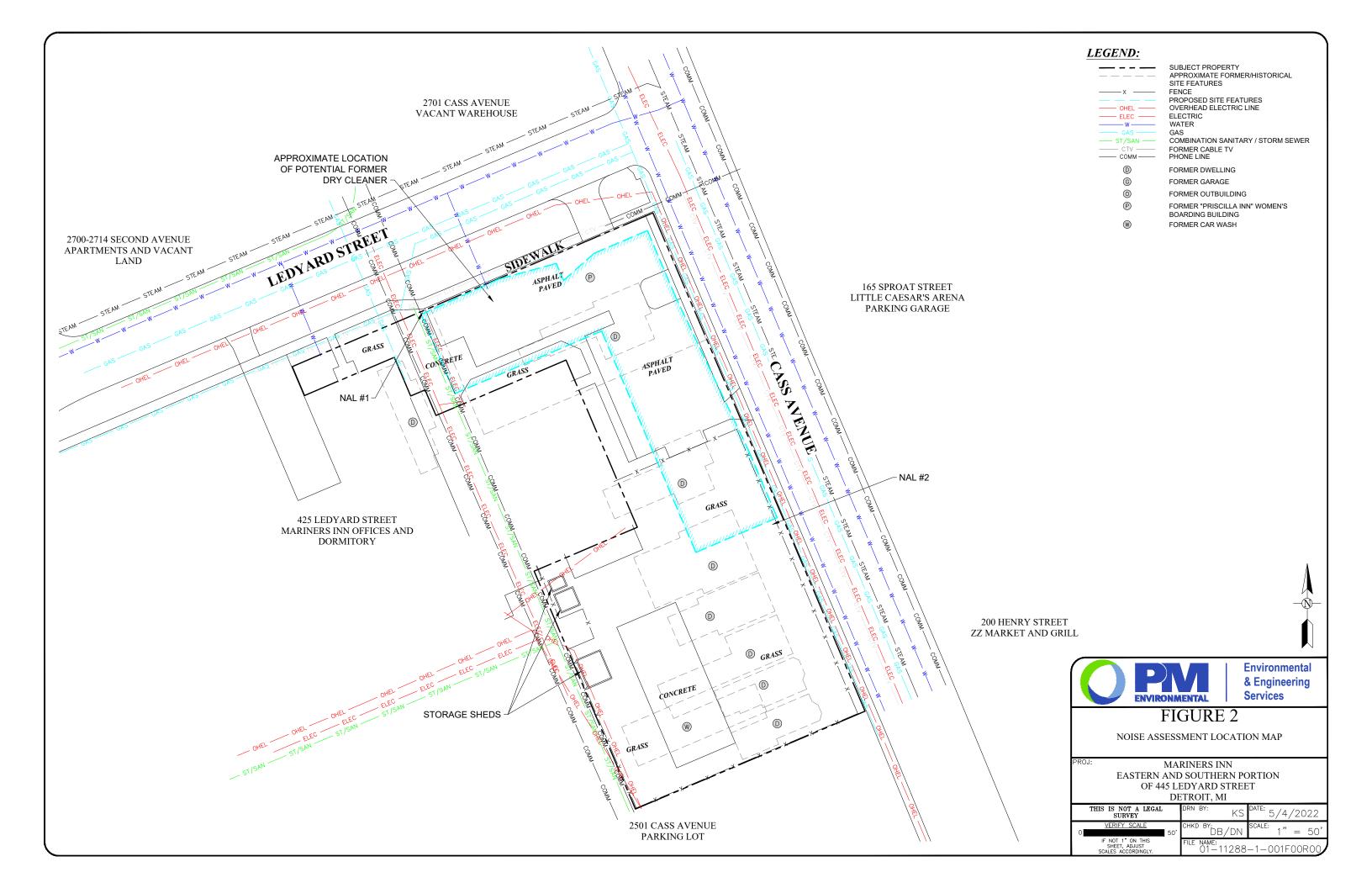
Desktop Noise Assessment of the Mariners Inn Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and General Common Elements Located in the Eastern and Southern Portions of 445 Ledyard Street, Detroit, Michigan PM Environmental Project No. 01-11288-1-0001; May 19, 2021

5.0 REFERENCES

- 24 CFR Part 51 Subpart B
- The Noise Guidebook, U.S. Department of Housing and Urban Development,
- Michigan Department of Transportation (MDOT)
- https://www.hudexchange.info/programs/environmental-review/dnl-calculator/

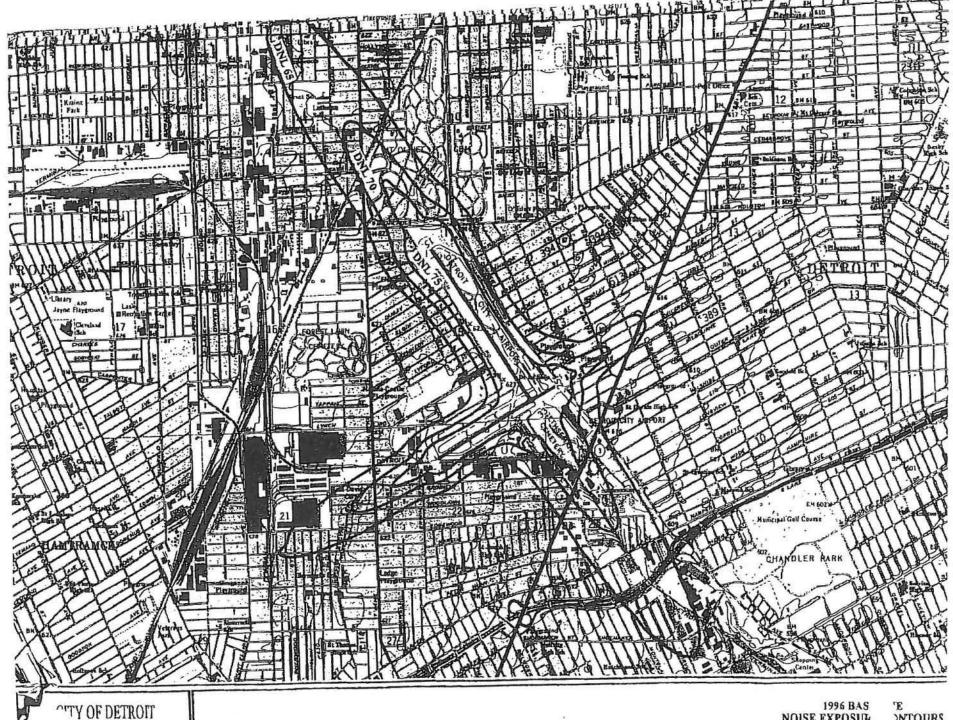
Appendix A





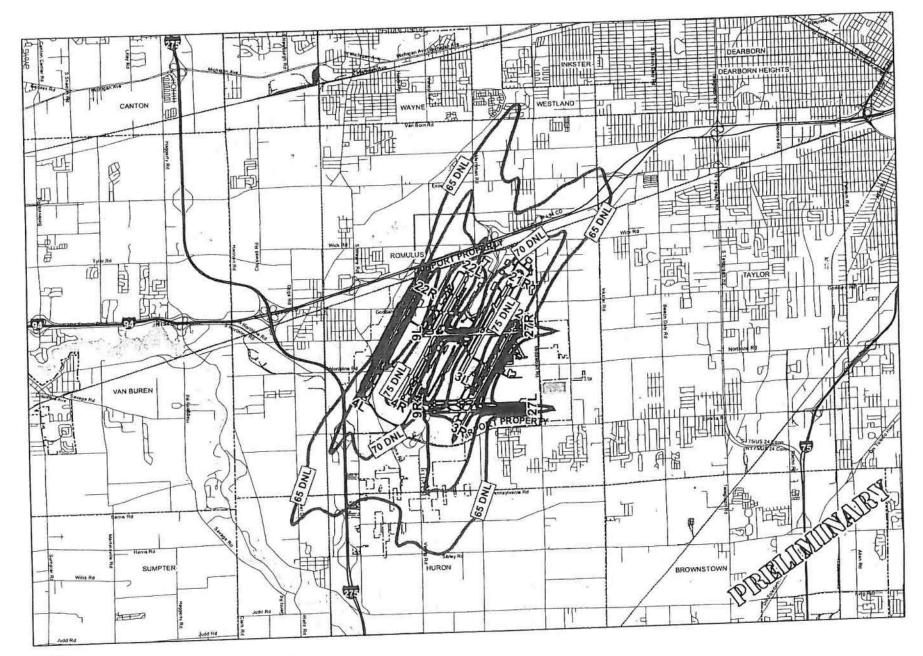
Appendix B





... APORT DEPARTMENT

NOISE EXPOSUR ONTOURS

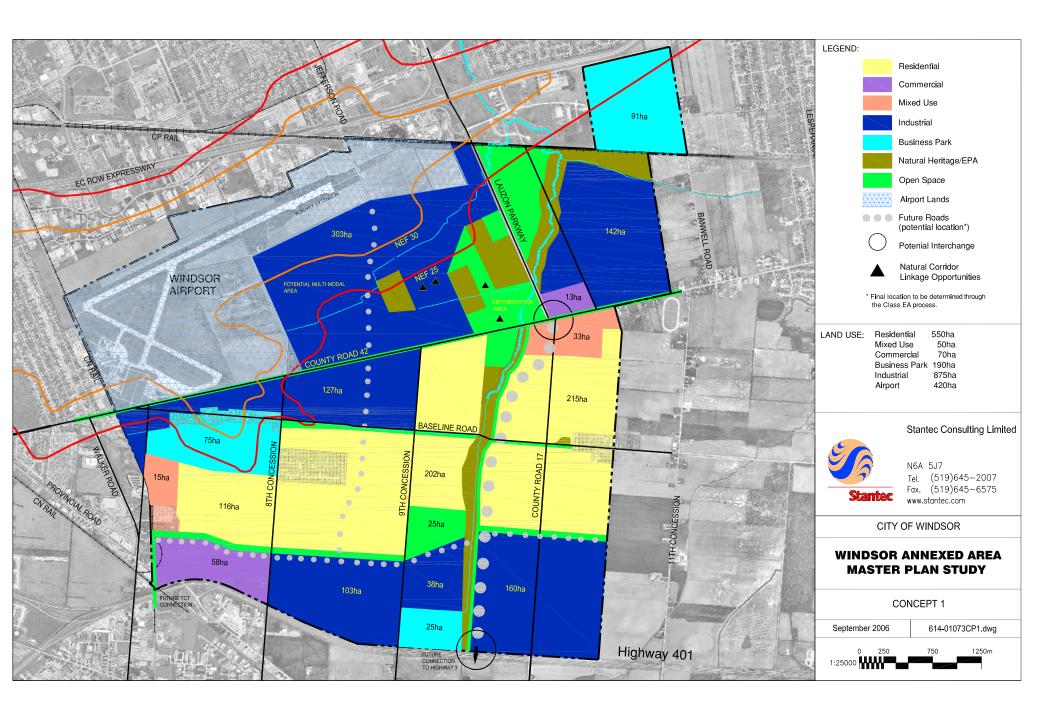




Existing (2004) Noise Contour

Source Michigan Department of Natural Resources, SEMCOG

DETIZOIT METIZOPALTAN WAYNE GUNTY ALRPORT



Appendix C



Auto and Heavy Truck 10-year ADT Projections Nothbound 2nd Avenue

	Cars	% Change	Trucks	% Change
2018	671	#REF!	17	#REF!
2019	668	0	28	65
	Avg % change:	#REF!	Avg % change:	#REF!
	Avg % change (Last 5-yr Trend):	#REF!	Avg % change (Last 5-yr Trend):	#REF!
	% Change/Year Assumption	1	%/Year Change Assumption	1

2031 Projections

	Cars	Trucks
2018	671	17
2019	668	28
2020	675	28
2021	681	29
2022	688	29
2023	695	29
2024	702	29
2025	709	30
2026	716	30
2027	723	30
2028	731	31
2029	738	31
2030	745	31
2031	753	32
2032	760	32

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT	
760	32	

Auto and Heavy Truck 10-year ADT ProjectionsCass Avenue

	Cars	% Change	Trucks	% Change
2018	6115	NA	152	NA
2019	6084	-1	237	56
	Avg % change:	-1	Avg % change:	56
	Avg % change (Last 5-yr Trend):	-1	Avg % change (Last 5-yr Trend):	56
	% Change/Year Assumption	1	%/Year Change Assumption	1

2032 Projections

	Cars	Trucks
2018	6115	152
2019	6084	237
2020	6145	239
2021	6206	242
2022	6268	244
2023	6331	247
2024	6394	249
2025	6458	252
2026	6523	254
2027	6588	257
2028	6654	259
2029	6721	262
2030	6788	264
2031	6856	267
2032	6924	270

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT	
6924	270	

Auto and Heavy Truck 10-year ADT Projections *Clifford Street*

	Cars	% Change	Trucks	% Change
2018	2329	NA	58	NA
2019	2317	-1	92	59
	Avg % change:	-1	Avg % change:	59
	Avg % change (Last 5-yr Trend):	-1	Avg % change (Last 5-yr Trend):	59
	% Change/Year Assumption	1	%/Year Change Assumption	1

2032 Projections

	Cars	Trucks
2018	2329	58
2019	2317	92
2020	2340	93
2021	2364	94
2022	2387	95
2023	2411	96
2024	2435	97
2025	2460	98
2026	2484	99
2027	2509	100
2028	2534	101
2029	2559	102
2030	2585	103
2031	2611	104
2032	2637	105

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT
2637	105

58

Auto and Heavy Truck 10-year ADT Projections *1-75*

	Cars	% Change	Trucks	% Change
2018	88699	NA	11082	NA
2019	106103	20	13687	24
	Avg % change:	20	Avg % change:	24
	Avg % change (Last 5-yr Trend):	20	Avg % change (Last 5-yr Trend):	24
	% Change/Year Assumption	1	%/Year Change Assumption	1

2032 Projections

	Cars	Trucks
2018	88699	11082
2019	106103	13687
2020	107164	13824
2021	108236	13962
2022	109318	14102
2023	110411	14243
2024	111515	14385
2025	112630	14529
2026	113757	14674
2027	114894	14821
2028	116043	14969
2029	117204	15119
2030	118376	15270
2031	119560	15423
2032	120755	15577

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT	
120755	15577	

Auto and Heavy Truck 10-year ADT Projections *Ledyard Street*

		Cars	% Change	Trucks	% Change
2	018	1679	NA	42	NA
2	019	1671	0	68	62
		Avg % change:	0	Avg % change:	62
		Avg % change (Last 5-yr Trend):	0	Avg % change (Last 5-yr Trend):	62
		% Change/Year Assumption	1	%/Year Change Assumption	1

2032 Projections

	Cars	Trucks
2018	1679	42
2019	1671	68
2020	1688	69
2021	1705	69
2022	1722	70
2023	1739	71
2024	1756	71
2025	1774	72
2026	1792	73
2027	1809	74
2028	1828	74
2029	1846	75
2030	1864	76
2031	1883	77
2032	1902	77

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT
1902	77

Auto and Heavy Truck 10-year ADT Projections *Northbound I-75 Service Drive*

	Cars	% Change	Trucks	% Change
2018	3779	NA	95	NA
2019	3760	-1	151	59
	Avg % change:	-1	Avg % change:	59
	Avg % change (Last 5-yr Trend):	-1	Avg % change (Last 5-yr Trend):	59
	% Change/Year Assumption	1	%/Year Change Assumption	1

	Cars	Trucks
2018	3779	95
2019	3760	151
2020	3798	153
2021	3836	154
2022	3874	156
2023	3913	157
2024	3952	159
2025	3991	160
2026	4031	162
2027	4072	164
2028	4112	165
2029	4153	167
2030	4195	168
2031	4237	170
2032	4279	172

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT
4279	172

Auto and Heavy Truck 10-year ADT ProjectionsSouthbound Cass Avenue

	Cars	% Change	Trucks	% Change
20	18 705	NA	19	NA
20	19 433	-39	105	453
	Avg % change:	-39	Avg % change:	453
	Avg % change (Last 5-yr Trend):	-39	Avg % change (Last 5-yr Trend):	453
	% Change/Year Assumption	1	%/Year Change Assumption	1

	Cars	Trucks
2018	705	19
2019	433	105
2020	437	106
2021	442	107
2022	446	108
2023	451	109
2024	455	110
2025	460	111
2026	464	113
2027	469	114
2028	474	115
2029	478	116
2030	483	117
2031	488	118
2032	493	119

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT	
493	119	

Auto and Heavy Truck 10-year ADT Projections

Southbound I-75 Off Ramp

	Cars	% Change	Trucks	% Change
2018	7077	NA	566	NA
2019	7042	0	563	-1
	Avg % change:	0	Avg % change:	-1
	Avg % change (Last 5-yr Trend):	0	Avg % change (Last 5-yr Trend):	-1
	% Change/Year Assumption	1	%/Year Change Assumption	1

- 1	2002 Frojections				
_	Cars	Trucks			
2018	7077	566			
2019	7042	563			
2020	7112	569			
2021	7184	574			
2022	7255	580			
2023	7328	586			
2024	7401	592			
2025	7475	598			
2026	7550	604			
2027	7625	610			
2028	7702	616			
2029	7779	622			
2030	7857	628			
2031	7935	634			
2032	8014	641			

Predicted 2032 Auto AADT	Predicted 2032 Truck AADT
8014	641

Auto and Heavy Truck 10-year ADT Projections Southbound I-75 Service Drive

	Cars	% Change	Trucks	% Change
2018	1296	NA	31	NA
2019	1290	0	50	61
	Avg % change:	0	Avg % change:	61
	Avg % change (Last 5-yr Trend):	0	Avg % change (Last 5-yr Trend):	61
	% Change/Year Assumption	1	%/Year Change Assumption	1

	Cars	Trucks
2018	1296	31
2019	1290	50
2020	1303	51
2021	1316	51
2022	1329	52
2023	1342	52
2024	1356	53
2025	1369	53
2026	1383	54
2027	1397	54
2028	1411	55
2029	1425	55
2030	1439	56
2031	1454	56
2032	1468	57

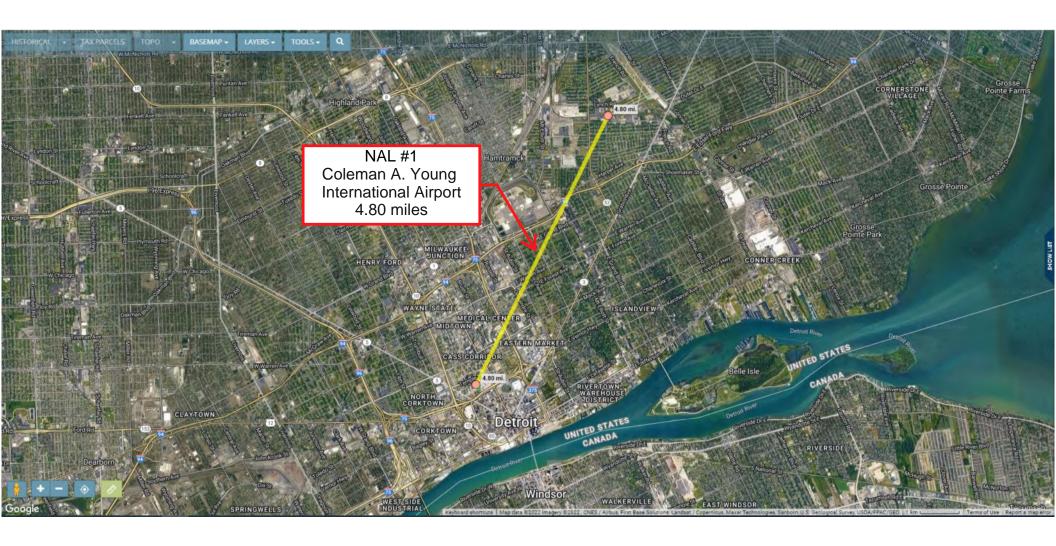
Predicted 2032 Auto AADT	Predicted 2032 Truck AADT	
1468	57	

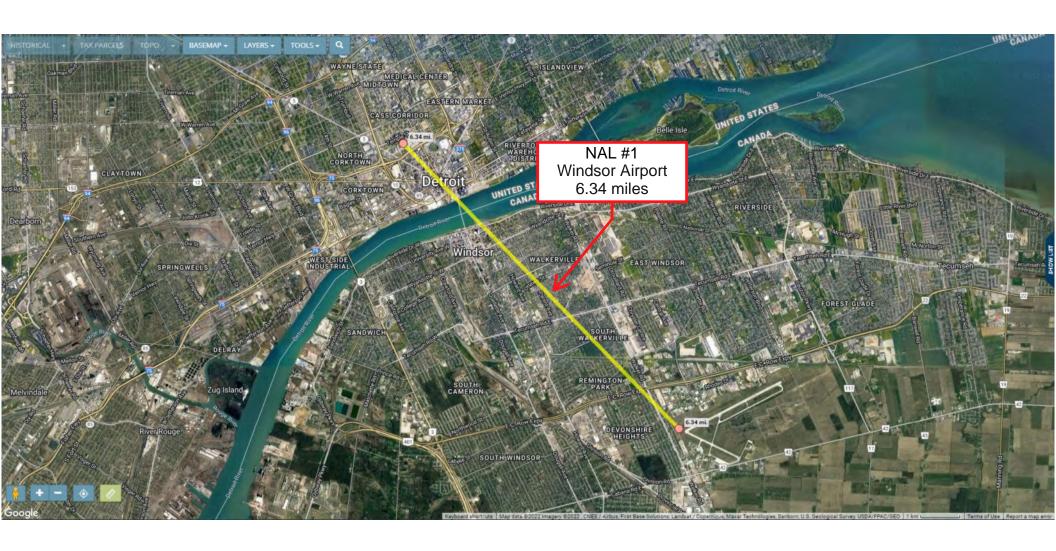
Auto and Heavy Truck 10-year ADT Projections *Temple Street*

	Cars	% Change	Trucks	% Change
2018	4139	NA	103	NA
2019	4118	-1	164	59
	Avg % change:	-1	Avg % change:	59
	Avg % change (Last 5-yr Trend):	-1	Avg % change (Last 5-yr Trend):	59
	% Change/Year Assumption	1	%/Year Change Assumption	1

	Cars	Trucks
2018	4139	103
2019	4118	164
2020	4159	166
2021	4201	167
2022	4243	169
2023	4285	171
2024	4328	172
2025	4371	174
2026	4415	176
2027	4459	178
2028	4504	179
2029	4549	181
2030	4594	183
2031	4640	185
2032	4687	187

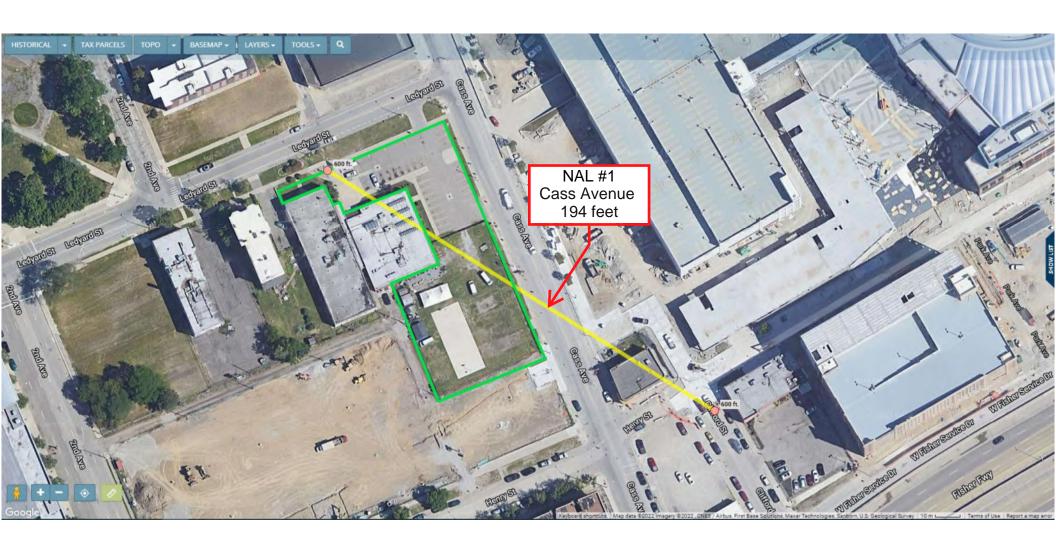
Predicted 2032 Auto AADT	Predicted 2032 Truck AADT	
4687	187	







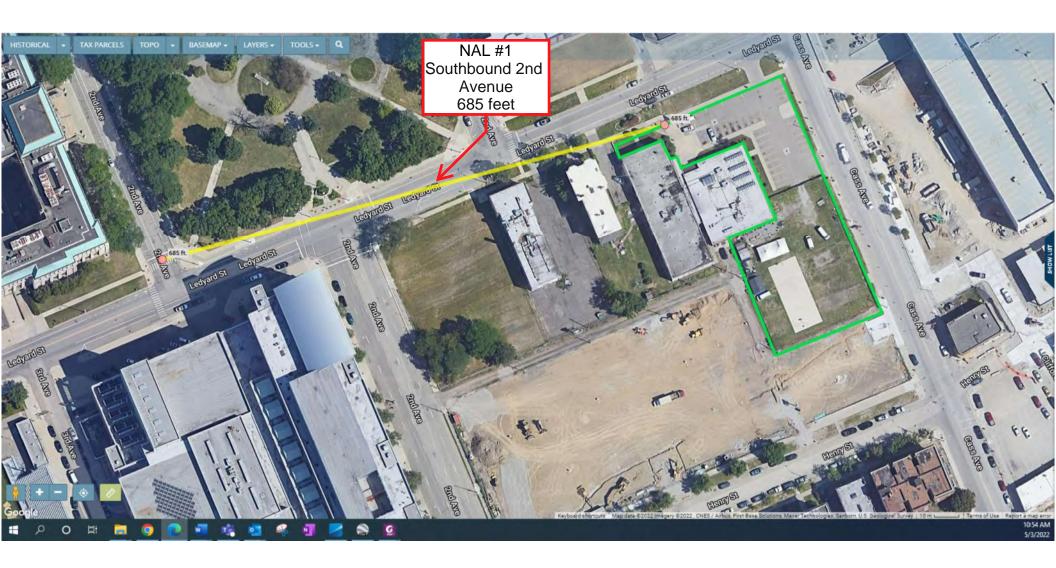


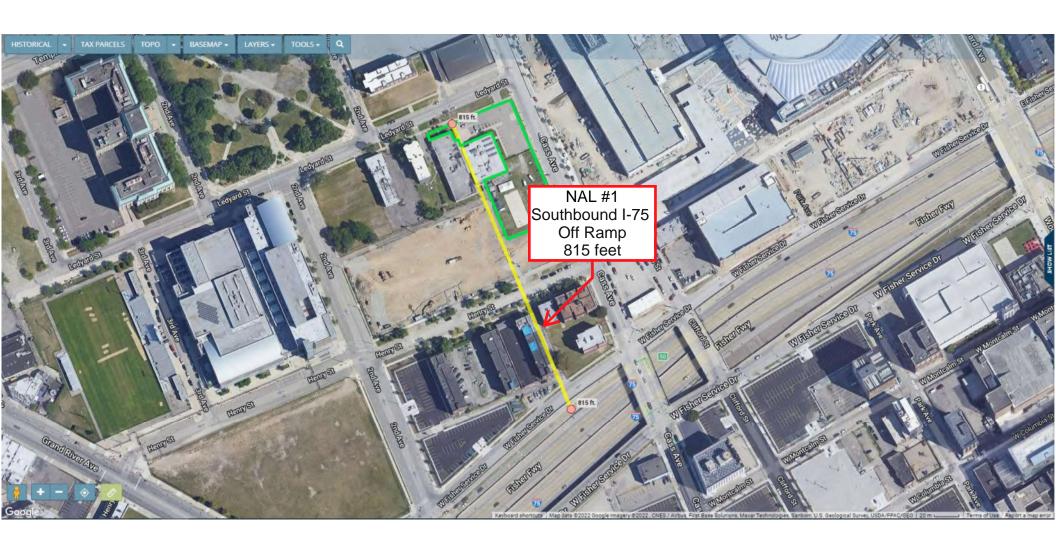




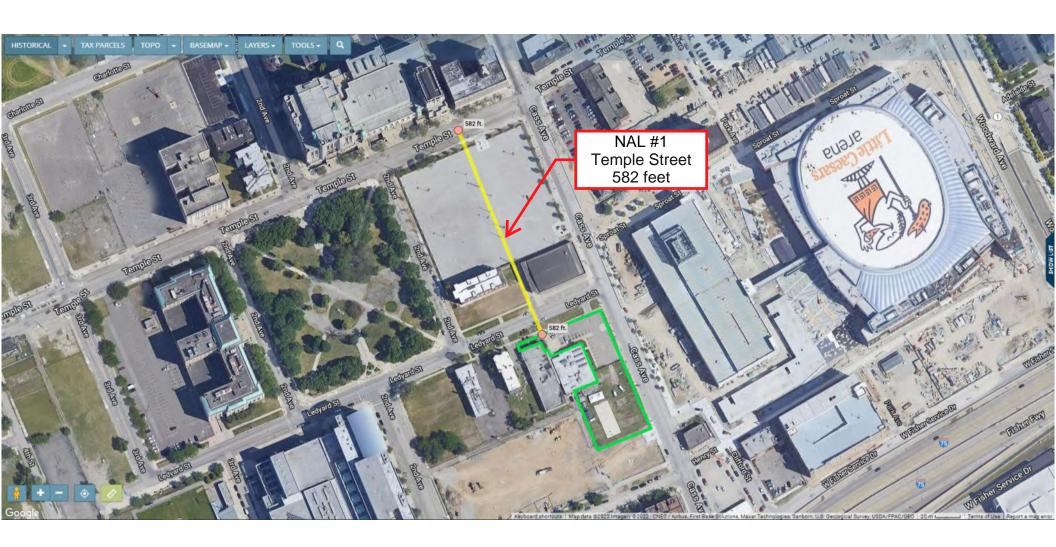




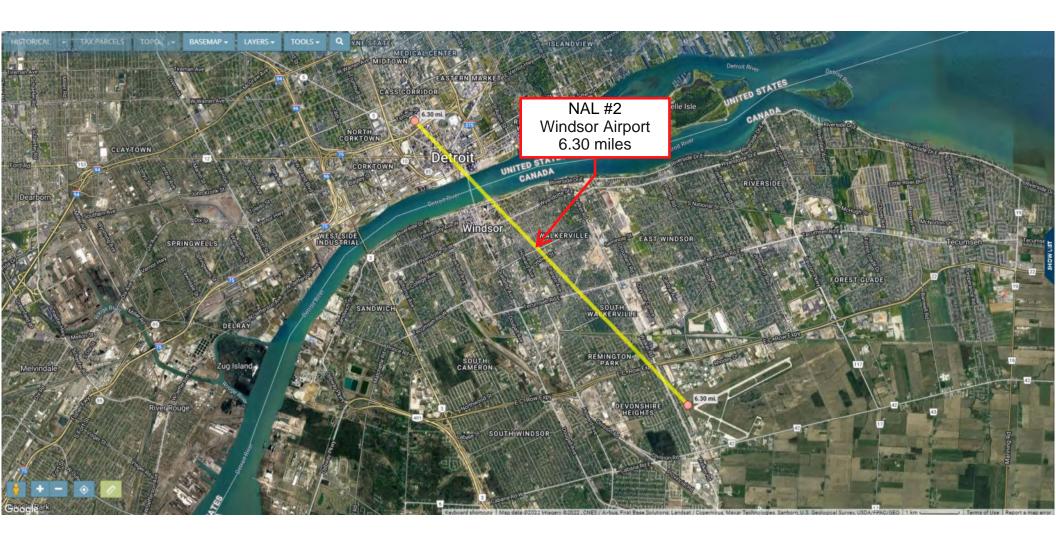




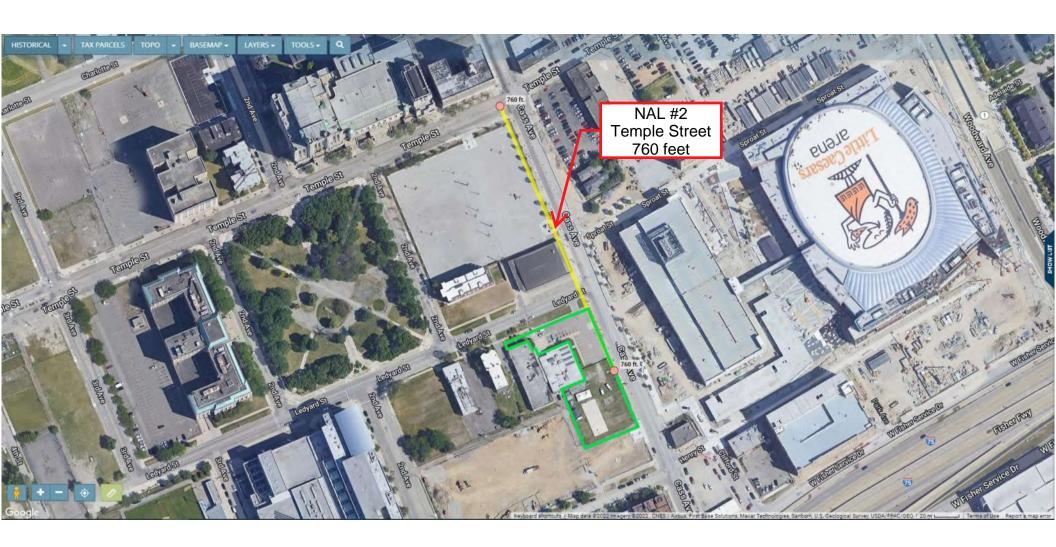




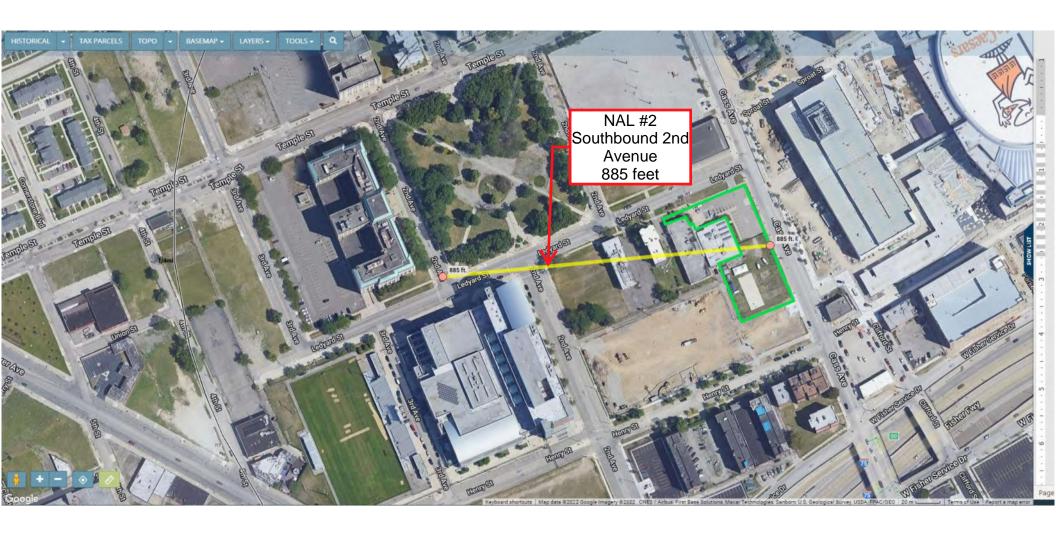






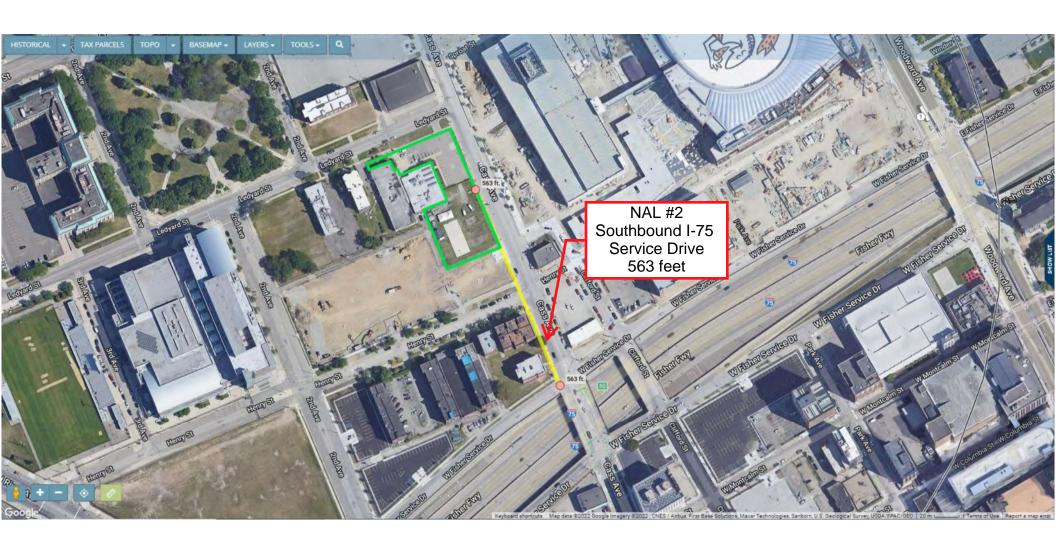


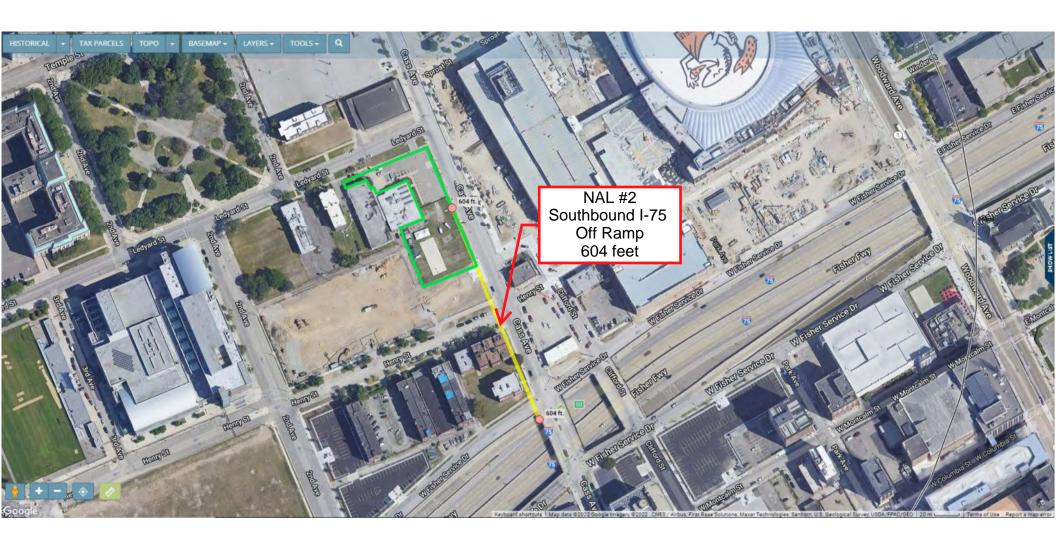


















Appendix D



Home (/) > Programs (/programs/) > Environmental Review (/programs/environmental-review/) > DNL Calculator

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- Note #1: Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- Note #2: DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	The Anchor at Mariners	II	
Record Date	05/17/2022		
	0371772022		
User's Name	DNL 1		
Road # 1 Name:	Ledyard Street		
Road #1			
Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Trucks 🗹
Effective Distance	50	50	50
Distance to Stop Sign	160	160	160
Average Speed	25	25	25
Average Daily Trips (ADT)	1902	39	38
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	49	42	63
Calculate Road #1 DNL	63	Reset	
Road # 2 Name:	Temple Street		
Road #2			
Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Trucks 🗹

Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	4687	94	93
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	45	38	48
Calculate Road #2 DNL	50	Reset	

Road # 3 Name:	2nd Avenue
Roau # 5 Name.	

Road #3

Vehicle Type	Cars 🗹	Medium Trucks 🗸	Heavy Trucks 🗸
Effective Distance	232	232	232
Distance to Stop Sign			
verage Speed	25	25	25
erage Daily Trips (ADT)	760	16	16
ght Fraction of ADT	15	15	15
ad Gradient (%)			2
hicle DNL	40	33	46
Calculate Road #3 DNL	47	Reset	

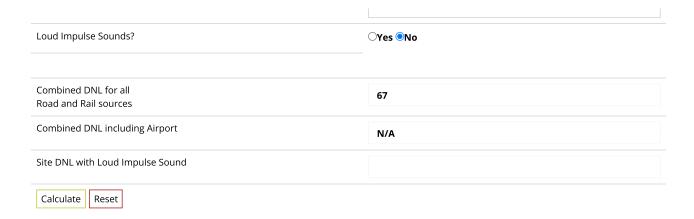
Poad # / Name:	Cass Avenue
Rodu # 4 Name.	cuss /// ciruc

Road #4

Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Trucks 🗹
Effective Distance	194	194	194
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	6924	135	135
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	53	46	57
Calculate Road #4 DNL	59	Reset	

Road # 5 Name:	Clifford Street				
Road #5					
Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Trucks 🗸		
Effective Distance	600	600	600		
Distance to Stop Sign	600	600	600		
Average Speed	35	35	35		
Average Daily Trips (ADT)	2637	53	52		
Night Fraction of ADT	15	15	15		
Road Gradient (%)			2		
Vehicle DNL	42	35	48		
Calculate Road #5 DNL	49	Reset			
Road # 6 Name: Southbound I-75 Service Drive					
Road #6					
Vehicle Type	Cars 🗹	Medium Trucks ☑ Heavy Trucks ☑			
Effective Distance	733	733	733		
Distance to Stop Sign					
Average Speed	35	35	35		
Average Daily Trips (ADT)	1468	29	28		
Night Fraction of ADT	15	15	15		
Road Gradient (%)			2		
Vehicle DNL	38	31	41		
Calculate Road #6 DNL	43	Reset			
Road # 7 Name:	Southbound I-75 Off Ra	атр			
Road #7					
Vehicle Type	Cars 🗹	Medium Trucks 🔽	Heavy Trucks 🗹		
Effective Distance	815	815	815		
Distance to Stop Sign					
Average Speed	50	50	50		
			1-1		

Average Daily 111h2 (AD1)	8014	321	320	
Night Fraction of ADT	15	15	15	
Road Gradient (%)			2	
Vehicle DNL	48	44	51	
Calculate Road #7 DNL	53	Reset		
Road # 8 Name:	I-75			
Road #8				
Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Truc	cks 🗹
Effective Distance	912	912	912	
Distance to Stop Sign				
Average Speed	55	55	55	
Average Daily Trips (ADT)	120755	779	778	
Night Fraction of ADT	15	15	15	
Road Gradient (%)			2	
Vehicle DNL	60	48	55	
Calculate Road #8 DNL	61	Reset		
Road # 9 Name:	Southbound Cass Aven	ue		
Road #9				
Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Truc	cks 🗹
Effective Distance	685	685	685	
Distance to Stop Sign				
Average Speed	25	25	25	
Average Daily Trips (ADT)	493	59	59	Vehicles with a Gross
Night Fraction of ADT	15	15	15	26,000 pounds and th
Road Gradient (%)			2	trucks, as well as sem recreational vehicles,
Vehicle DNL	31	32	45	commercial vehicles f stated.
Calculate Road #9 DNL	45	Reset		
Add Road Source Add Rail So	urce			



Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- No Action Alternative: Cancel the project at this location
- Other Reasonable Alternatives: Choose an alternate site
- Mitigation
 - o Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See The Noise Guidebook (/resource/313/hud-noise-guidebook/)
 - Construct noise barrier. See the Barrier Performance Module (/programs/environmental-review/bpm-calculator/)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Home (/) > Programs (/programs/) > Environmental Review (/programs/environmental-review/) > DNL Calculator

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Road # 1 Name:	Ledyard Street
User's Name	NAL 2
Record Date	05/17/2022
Site ID	The Anchors at Mariners Inn

Vehicle Type	Cars 🔽	Medium Trucks 🗸	Heavy Trucks 🗸
Effective Distance	225	225	225
Distance to Stop Sign	160	160	160
Average Speed	25	25	25
Average Daily Trips (ADT)	1902	39	38
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	39	32	53
Calculate Road #1 DNL	53	Reset	

Road # 2 Name:	Temple Street	

Vehicle Type	Cars 🔽	Medium Trucks 🗸	Heavy Trucks 🗹
Effective Distance	760	760	760
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	4687	94	93
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	43	36	46
Calculate Road #2 DNL	48	Reset	

Road # 3 Name:	2nd Avenue

Road #3

Vehicle Type	Cars 🔽	Medium Trucks 🗸	Heavy Trucks 🗸
Effective Distance	620	620	620
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	760	16	16
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	33	27	40
Calculate Road #3 DNL	41	Reset	

Road # 4 Name:	Cass Avenue

Vehicle Type	Cars 🔽	Medium Trucks 🗸	Heavy Trucks 🔽
Effective Distance	38	38	38
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	6924	135	135
Night Fraction of ADT	15	15	15

Road Gradient (%)			2
Vehicle DNL	64	57	67
Calculate Road #4 DNL	69	Reset	

ı	Road # 5 Name:	Clifford Street	
			н

Road #5

Vehicle Type	Cars 🔽	Medium Trucks 🗸	Heavy Trucks 🗸
Effective Distance	340	340	340
Distance to Stop Sign	340	340	340
Average Speed	35	35	35
Average Daily Trips (ADT)	3637	53	52
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	45	36	51
Calculate Road #5 DNL	52	Reset	

Road # 6 Name:	Southbound I-75 Service Drive	

Vehicle Type	Cars 🗹	Medium Trucks 🗸	Heavy Trucks 🗹	
Effective Distance	563	563	563	
Distance to Stop Sign				

Average Speed	35	35	35
Average Daily Trips (ADT)	1468	29	28
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	40	33	43
Calculate Road #6 DNL	45	Reset	

Road # 7 Name: Southbound I-75 Off Ramp

Road #7

Vehicle Type	Cars 🗸	Medium Trucks 🗹	Heavy Trucks 🗸
Effective Distance	604	604	604
Distance to Stop Sign			
Average Speed	50	50	50
Average Daily Trips (ADT)	8014	321	320
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	50	46	53
Calculate Road #7 DNL	55	Reset	

Road # 8 Name:	1.75
	1,70

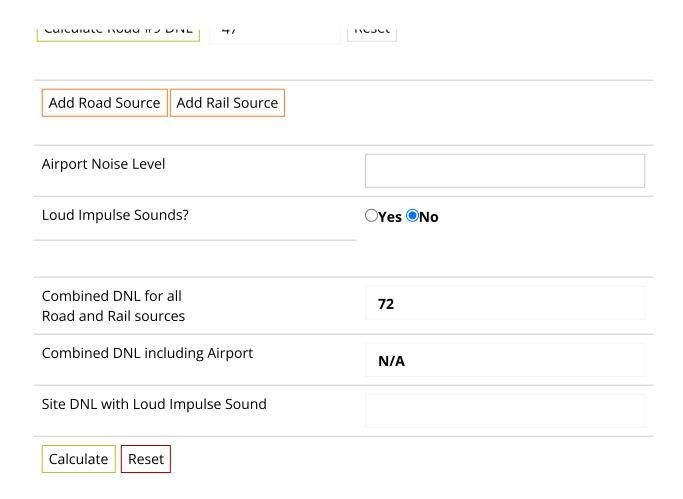
Daad 40

KOAU #8

Vehicle Type	Cars 🔽	Medium Trucks 🗹	Heavy Trucks 🗸
Effective Distance	680	680	680
Distance to Stop Sign			
Average Speed	55	55	55
Average Daily Trips (ADT)	120755	7789	7788
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	62	60	67
Calculate Road #8 DNL	69	Reset	

Road # 9 Name:	Northbound I-75 Service Drive	
		н

Vehicle Type	Cars 🔽	Medium Trucks 🗹	Heavy Trucks 🗹
Effective Distance	780	780	780
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	4279	86	86
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	39	32	46
Calculate Road #9 DNI	<i>1</i> 7	Reset	



Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

• **No Action Alternative**: Cancel the project at this location

- Other Reasonable Alternatives: Choose an alternate site
- Mitigation
 - Contact your Field or Regional Environmental Officer (/programs/environmentalreview/hud-environmental-staff-contacts/)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (/resource/313/hud-noise-guidebook/)
 - Construct noise barrier. See the Barrier Performance Module (/programs/environmental-review/bpm-calculator/)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

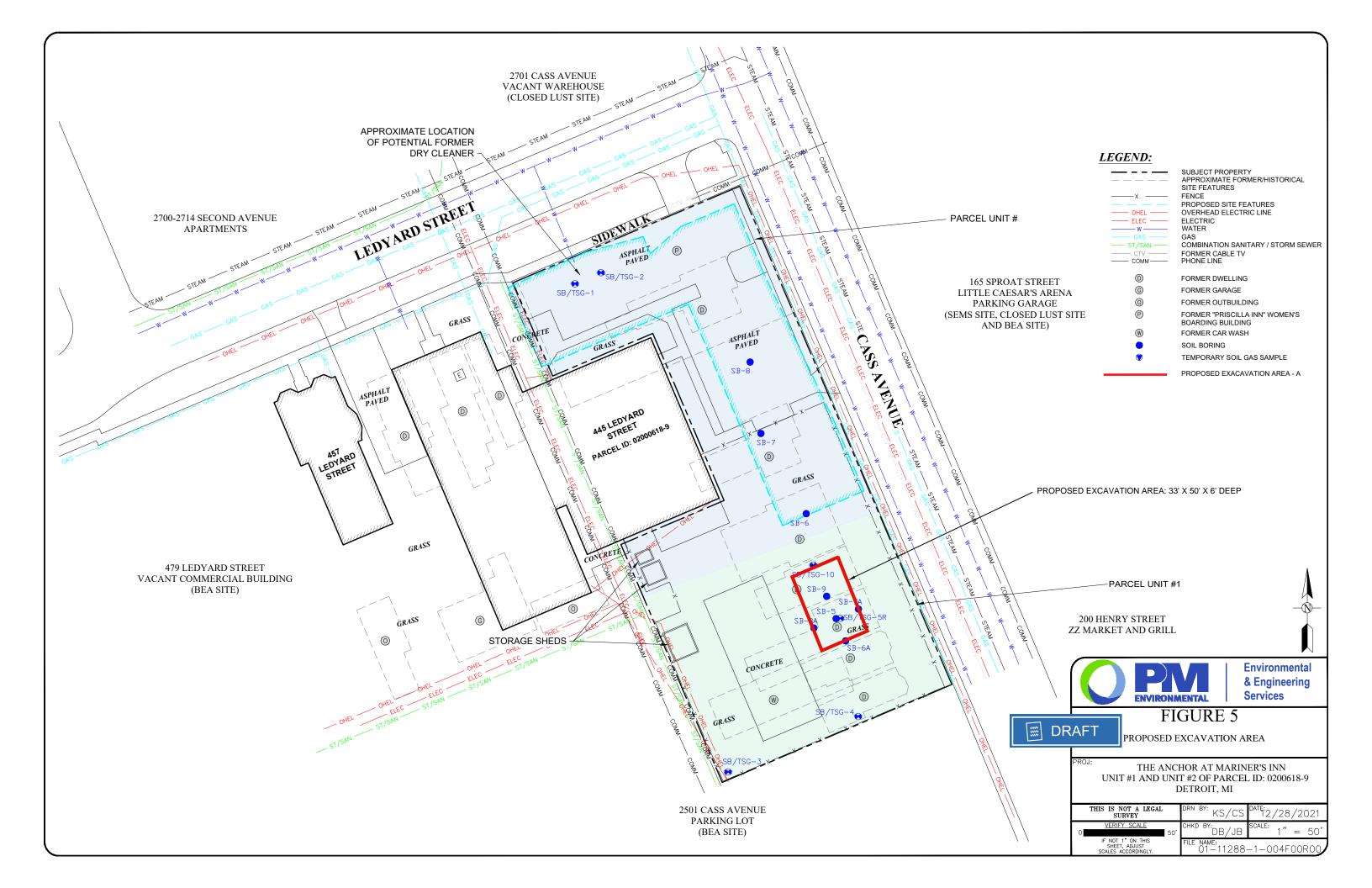
Draft Summary of Soil Analytical Results

Location (date)	Sample Depth (feet bgs)	Analysis	Compounds Exceeding the Part 201 Cleanup Criteria and Screening Levels
SB-1 (06/2021)	Soil: 4.0-5.0 and 8.0-9.0	VOCs and PNAs	None
SB-2 (06/2021)	Soil: 4.0-5.0 and 8.0-9.0	VOCs and PNAs	None
SB-3 (06/2021)	Soil: 1.0-2.0 and 5.0-6.0	VOCs and PNAs	None
SB-4	Soil: 3.5-4.5	VOCs, PNAs, PCBs, and MI-10 metals	None
(06/2021)	Soil: 6.0-7.0	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-5 (06/2021)	Soil: 3.5-4.5	VOCs, PNAs, PCBs, and MI-10 metals	DC(R): benzo(a)pyrene, benzo(b)fluoranthene DC(NR): benzo(a)pyrene GSIP: fluoranthene, naphthalene, phenanthrene, mercury
(00/2021)	Soil: 7.0-8.0	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-6 (06/2021)	Soil: 5.5-6.5 and 14.0-15.0	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-7 (06/2021)	Soil: 1.0-2.0 and 5.5-6.5	VOCs, PNAs, PCBs, and MI-10 metals	None
SB-8 (06/2021)	Soil: 1.0-2.0 and 7.0-8.0	VOCs, PNAs, PCBs, and MI-10 metals	None
	Soil: 0.5-1.5	VOCs and PNAs	DC(R): benzo(a)pyrene GSIP: fluoranthene
SB-5R (11/2021)	Soil: 4.5-5.5 and 5.5-6.5	VOCs and PNAs	None
SB-6A (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None

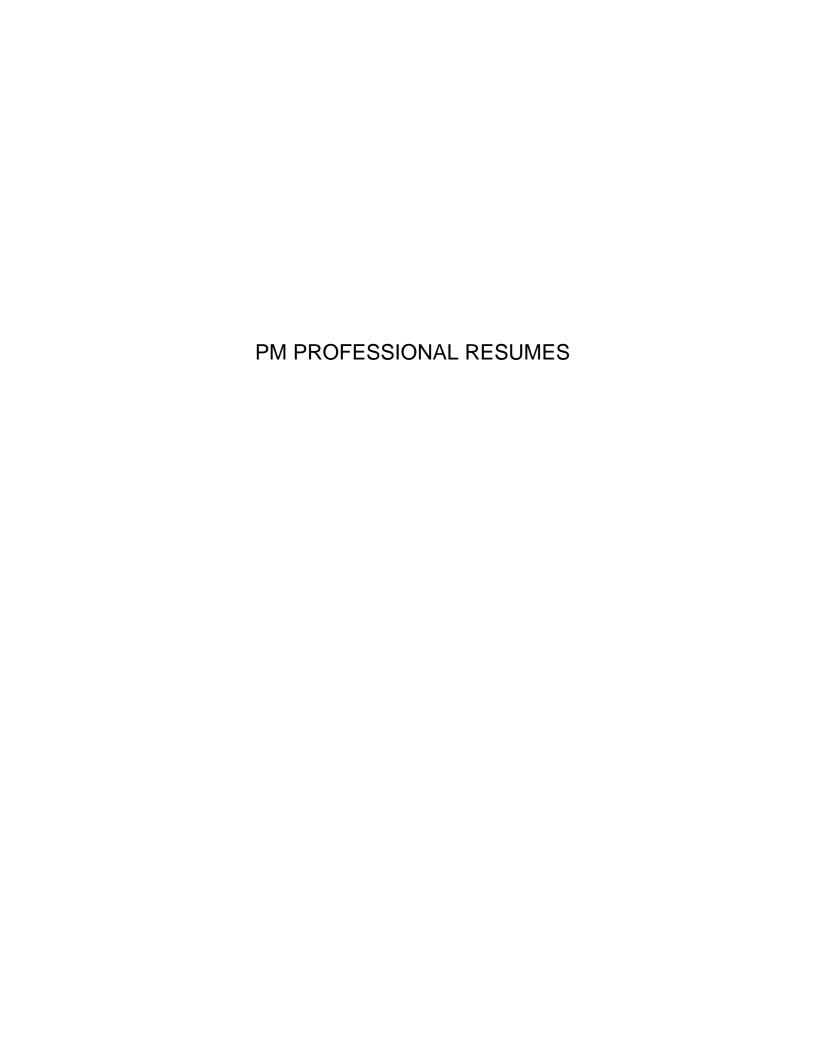
Location (date)	Sample Depth (feet bgs)	Analysis	Compounds Exceeding the Part 201 Cleanup Criteria and Screening Levels
SB-7A (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None
SB-8A (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None
SB-9 (11/2021)	Soil: 4.5-5.5	VOCs and PNAs	DC(R): benzo(a)pyrene, benzo(b)fluoranthene DC(NR): benzo(a)pyrene GSIP: naphthalene, fluoranthene
(11/2021)	Soil: 4.5-5.5	VOCs and PNAs	None
SB-10 (11/2021)	Soil: 3.5-4.5 and 4.5-5.5	VOCs and PNAs	None

R – Residential GSIP – Groundwater Surface Water Interface Protection

NR – Nonresidential DC – Direct Contact



Section 10.8: Qualifications of the Environmental Professio	nals



DEVON NAGENGASTSTAFF CONSULTANT

1.800.313.2966

www.pmenv.com

nagengast@pmenv.com

Devon Nagengast is a Staff Consultant at PM Environmental, Inc. She specializes in Environmental Due Diligence by managing Phase I Environmental Site Assessments throughout the Midwest.

AREAS OF EXPERTISE

- · Staff consultant for Phase I Environmental Site Assessments (ESAs)
- Assists with data collection and evaluation for Transaction Screen Assessments, Phase I ESAs and other due diligence reports
- · History of biological surveying strengthens site assessment skills
- Experience in implementation and completion of various site assessment standards and professional protocol and commercial lending requirements (ASTM E-1527)



EDUCATION

 Oakland University
 B.S. Environmental Science, concentration in Sustainability and Resource Management

CAREY S. KRATZ REGIONAL MANAGER—DUE DILIGENCE

1.800.313.2966

www.pmenv.com

kratz@pmenv.com

Carey Kratz is the Regional Manager of Due Diligence at PM Environmental, Inc. She has over 21 years of environmental experience and specializes in Environmental Due Diligence including Phase I Environmental Site Assessments and customized environmental assessments to support all forms of real estate transactions. She has managed a variety of environmental due diligence projects including environmental risk reviews and affordable housing including low income housing tax credit (LIHTC) and HUD lending clients.

AREAS OF EXPERTISE

- · Regional coordination and management of due diligence group
- Data collection, site investigation, and preparation of Phase I ESA and Transaction Screen projects
- Experience in implementation and completion of various site assessment standards and professional protocol and commercial lending requirements (ASTM E-1527, ASTM E-1528)
- Peer technical review of Phase I ESA projects using ASTM Standard 1527
- Experience in real estate portfolio analysis for evaluation of environmental risk associated with single and multi property transactions for the lending industry
- · Experience with local, state, and federal regulatory acts
- Experience with NEPA Part 50 and Part 58 projects



EDUCATION

 Lake Superior State University B.S. Environmental Science, minor in Chemistry

CERTIFICATIONS

- Certified Asbestos Inspector, Michigan #A27278
- Meets the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312
- OSHA 1910.120 40-hour Hazardous Waste Operations Training (HAZWOPER)
- · HAZWOPER Incident Commander
- HUD CFR24 Part 58 Environmental Review Process Training

PETER S. BOSANIC, P.E., EP, Q.C. FOUNDER

1.800.313.2966

www.pmenv.com

bosanic@pmenv.com

Peter Bosanic is the Co-founder of PM Environmental, Inc. He has over 30 years of relevant experience in environmental risk management, environmental & engineering due diligence, M&A, Brownfield redevelopment and economic development incentives, leaking UST management, remediation, environmental compliance, industrial hygiene projects and government contracts. PM regularly works with financial institutions, investors, developers, retail petroleum clients, municipalities, industries, business and government agencies and regulators.

AREAS OF EXPERTISE

- Environmental Due Diligence for financial institutions, investors, developers and government agencies including:
 - Phase I & II Environmental Site Assessments (ESAs)
 - · Vapor intrusion investigations
 - Baseline Environmental Assessments (BEAs)
 - Due Care Plans and Continuing Obligations Evaluations
 - Property Condition Assessments (PCAs)
- Leaking UST and industrial site investigations, feasibility studies and corrective action plans and remediation
- · Environmental compliance audits
- Brownfield redevelopment economic development consulting including grants and other incentives
- Industrial hygiene services experience including asbestos, lead based paint and other hazardous materials
- Government environmental contract project management on projects for state owned or funded projects
- Multifamily (privately owned and public housing agencies) environmental and engineering services including Phase I and II ESAs, NEPA Investigations, HUD environmental assessments and Capital Needs Assessments (CNAs)



EDUCATION

- Michigan State University B.S. Civil and Environmental Engineering
- Michigan State University Graduate Studies Environmental Engineering
- Various Continuing Education and Professional Development Classes
- ASTM Risk Based Corrective Action Training
- Zweig White Principals Academy

CERTIFICATIONS

- OSHA 40 Hours Hazwoper and 8-hour Supervisor Training
- Environmental Professional (EP) as defined in § 312.10 of 40 CFR 312
- ASTM PCA Training
- HUD MAP CNA Training
- Qualified UST Consultant (QC) in Michigan

PROFESSIONAL ACTIVITIES

- · National Brownfield Association
- Mortgage Bankers Association
- Environmental Bankers Association
- Michigan Association of Environmental Professional
- Michigan Petroleum Association
- Chi Epsilon Civil Engineering Honor Society
- · Michigan Housing Council

REGISTRATION

 Professional Engineer in the following States: Alabama, Kentucky, Michigan, Mississippi, Ohio, Illinois, Indiana and Tennessee

Section 10.9: MSHDA Phase I	Letter of Reliance	

Corporate Headquarters

Lansing, Michigan 3340 Ranger Road, Lansing, MI 48906 f: 877.884.6775 t: 517.321.3331

Michigan Locations

Bay City Berkley **Grand Rapids** Lansing Oak Park

2022 MSHDA PHASE I LETTER OF RELIANCE

PRIVILEGED AND CONFIDENTIAL

Mr. Dan Lince **Environmental Manager** Rental Development Division Michigan State Housing Development Authority 735 East Michigan Avenue Lansing, Michigan 48912

Re: Phase I Environmental Site Assessment of The Anchor at Mariners Inn Proposed Mariners Inn Condominium Unit Nos. 1 and 2 and **General Common Elements**

Located in the Eastern and Southern Portions of 445 Ledyard Street

Detroit, Michigan

PM Environmental Project No. 01-11288-1-0001

Dear Mr. Lince:

Please find enclosed the Phase I Environmental Site Assessment for the subject property dated May 20, 2022 to the Michigan State Housing Development Authority.

It is our understanding that the information contained in the Phase I Environmental Site Assessment will be used by the Authority in considering proposed financing of residential development of the property and, furthermore, that the Authority may rely upon the Phase I Environmental Site Assessment as if it were issued to the Authority.

We **represent** that the attached is a true, correct, and complete copy of the Phase I Environmental Site Assessment for the above captioned property and that the report represents our professional opinion of the site as of this date and that we meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. We also represent that the Phase I Environmental Site Assessment including the evaluation, recommendations, and conclusions as of this date has been performed in conformance with the scope and limitations of the ASTM Practice E1527-13, ASTM Practice E 2600-15, and MSHDA's Environmental Review Requirements for 2022.

Sincerely,

PM ENVIRONMENTAL

Carey Kratz, EP

Regional Manager - Due Diligence

Peter S. Bosanic, P.E., EP

Principal

Section 10.10: Copy of Environmental Professional Insurance Certificates



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 2/2/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Arthur J. Gallagher Risk Management Services, In 4000 Midlantic Drive Suite 200 Mount Laurel NJ 08054	t O-mi In		CONTACT NAME: Tim Fyock		
	ment Services, Inc.		PHONE (A/C, No, Ext): 888-273-8155	FAX (A/C, No): 856-273-3663	
			E-MAIL ADDRESS: Tim_Fyock@ajg.com		
			INSURER(S) AFFORDING COVERAGE		NAIC#
	License#: B	R-724491	INSURER A: Nautilus Insurance Company		17370
INSURED	PN	MENVIR-01	INSURER B: Great Northern Insurance Company		20303
P.M. Environmental, Inc. 3340 Ranger Road			INSURER c: Bankers Standard Insurance Compar	ıy	18279
Lansing, MI 48906			INSURER D:		
			INSURER E :		
			INSURER F:		
COVERACES	OFFICIOATE MUMPER: 4400	222000	DEVICION NU	MDED.	

COVERAGES CERTIFICATE NUMBER: 1430273800 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

TYPE OF INSURANCE		EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. R POLICY EFF POLICY EXP									
	INSD	WVD	POLICY NUMBER	(MM/DD/YYYY)		LIMIT	S				
CLAIMS-MADE X OCCUR			ECP2034012-11	2/1/2022	2/1/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 2,000,000 \$ 100,000				
FTOI. Liability						MED EXP (Any one person)	\$ 5,000				
Contractors Poll						PERSONAL & ADV INJURY	\$1,000,000				
GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$2,000,000				
POLICY X PRO-						PRODUCTS - COMP/OP AGG	\$ 2,000,000				
OTHER:						Contract Pollution	\$ 2,000,000				
AUTOMOBILE LIABILITY			73583024	2/1/2022	2/1/2023	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000				
<u></u>						BODILY INJURY (Per person)	\$				
						BODILY INJURY (Per accident)	\$				
						PROPERTY DAMAGE (Per accident)	\$				
						Comp/Coll Deductible	\$\$2,000				
UMBRELLA LIAB X OCCUR			FFX2034013-11	2/1/2022	2/1/2023	EACH OCCURRENCE	\$5,000,000				
X EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$5,000,000				
DED RETENTION\$							\$				
ND EMPLOYEDELLIA DILITY			71745612	2/1/2022	2/1/2023	X PER OTH- STATUTE ER					
NYPROPRIETOR/PARTNER/EXECUTIVE NYPROPRIETOR/PARTNER/EXECUTIVE	N/A					E.L. EACH ACCIDENT	\$1,000,000				
Mandatory in NH)						E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000				
yes, describe under ESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$1,000,000				
Errors & Omissions Claims Made			ECP2034012-11	2/1/2022	2/1/2023	Aggregate Limit SIR	\$2,000,000 \$25,000				
	X Contractors Poll GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRODUCT LOC OTHER: AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY X HIRED AUTOS ONLY X HIRED AUTOS ONLY X EXCESS LIAB DED RETENTION \$ VORKERS COMPENSATION IND EMPLOYERS' LIABILITY NYPROPRIETOR/PARTNER/EXECUTIVE VORKERS COMPENSATION VORKERS COM	X Contractors Poll GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PROJECT LOC OTHER: AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY AUTOS ONLY X HIRED AUTOS ONLY X HON-OWNED AUTOS ONLY X AUTOS ONLY X EXCESS LIAB DED RETENTION \$ VORKERS COMPENSATION ND EMPLOYERS' LIABILITY NYPROPRIETOR/PARTNER/EXECUTIVE FIFICER/MEMBER EXCLUDED? Mandatory in NH) yes, describe under EFFICES COMPISSIONS MORE AND AUTOS ONLY N/A N/A Mandatory in NH) yes, describe under EFFICES COMPISSIONS	X Contractors Poll GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRODUCY X JECT LOC OTHER: AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY X AUTOS ONLY X AUTOS ONLY X AUTOS ONLY X EXCESS LIAB DED RETENTION \$ VORKERS COMPENSATION NO EMPLOYERS' LIABILITY NYPROPRIETOR/PARTNER/EXECUTIVE FIFICER/MEMBER EXCLUDED? Mandatory in NH) yes, describe under DESCRIPTION OF OPERATIONS below Errors & Omissions	X Contractors Poll GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PROJECT LOC OTHER: AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY X HIRED AUTOS ONLY X AUTOS ONLY X AUTOS ONLY X EXCESS LIAB DED RETENTION \$ VORKERS COMPENSATION IND EMPLOYERS' LIABILITY NYPROPRIETOR/PARTNER/EXECUTIVE PEFICER/MEMBER EXCLUDED? Mandatory in NH) yes, describe under DESCRIPTION OF OPERATIONS below Errors & Omissions ECP2034012-11	X Contractors Poll GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PROJECT LOC OTHER: AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY X AUTOS ONLY X AUTOS ONLY X EXCESS LIAB DED RETENTION'S VORKERS COMPENSATION IND EMPLOYERS' LIABILITY NYPROPRIETOR/PARTNER/EXECUTIVE PEFICER/MEMBER EXCLUDED? Mandatory in NH) yes, describe under Effors & Omissions ECP2034012-11 2/1/2022	X Contractors Poll SEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO- OTHER: AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY X HIRED AUTOS ONLY X LY AUTOS ONLY X EXCESS LIAB DED RETENTION \$ VORKERS COMPENSATION IND EMPLOYERS' LIABILITY N/A WINTER COMPENSATION IND EMPLOYE	X Contractors Poll GENERAL AGGREGATE LIMIT APPLIES PER: POLICY X PRODUCTS - COMP/OP AGG CONTRACTOR POLICY X PRODUCTS - COMP/OP AGG CONTRACT PRODUCTS - COMP/OP AGG CO				

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

MSHDA is included as Additional Insured in accordance with the policy provisions of the General Liability policy. General Liability policy evidenced herein is Primary and Non-Contributory to other insurance available to an Additional Insured, but only in accordance with the policy's provisions.

CERTIFICATE HOLDER	CANCELLATION

MSHDA Attn: Daniel Lince 735 East Michigan Avenue Lansing MI 48909-7544 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

20 M20

Appendix C





Well No.: SB/TSG-1 Project Name: Marlner's Inn Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Facility ID#: Drilling Method: Direct Push

Date Drilled: 6/10/2021 Sampling Method: Grab Logged By: SE **Drilling Contractor:** PM

Description and Comments Description Details Description Description Details Description Description Details Description Details Description Description Details Description Description Description Details Description Descr			SUBSURFACE PROFILE	S	AMPL	E		
ASPHALT AND BRICK CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel 100 0.0 100 0.0 100 0.0 SB-1 40-5.0' 100 0.0	Depth (ft) Soil Type Graphic	Soil Type	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	Completion Details
CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel 100 0.0 100 0.0 100 0.0 100 0.0 SB-1 4.0-5.0' 100 0.0	0			Ground Surface				
SB-1 100 0.0 Up		=		ASPHALT AND BRICK		100	0.0	Joe
SB-1 100 0.0 Up 100 100 100 100 100 100 100 100 100 10				CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace		100	0.0	og antíe
SB-1 100 0.0 Up 100 100 100 100 100 100 100 100 100 10	2			sand and gravel		100	0.0	Seal Tubin
SB-1 100 0.0						100	0.0	oly]
100 0.0 100 0.0 100 0.0 100 0.0 100 0.0 100 0.0 100 0.0 100 0.0 100 0.0 100 0.0 100 0.0	4-					100	0.0	entol
100 0.0 SB-1 100 0.0 10						100	0.0	B, (4.5')
SB-1 100 0.0 100 100 100 100 100 100 100 10	6					100	0.0	oint (
100 0.0 100 100 100 100 100 100 100 100						100	0.0	ng Pu
100 0.0 100 100 100 100 100 100 100 100	8				7.0 0.0	100	0.0	ampli
100 0.0 100 100 100 100 100 100 100 100						100	0.0	Air S.
100 00	10					100	0.0	ary /
						100	0.0	Iodu
	12					100	0.0	o H
CL - (Medium Stiff) CLAY (moist)				CL - (Madium Stiff) CLAV (moist)	_	100	0.0	
CL- (Medium Stiff) CLAY (moist) Gray mottled, medium plasticity, trace sand and gravel	14			Gray mottled, medium plasticity, trace sand and gravel		100	0.0	
100 00				J		100	0.0	
16 - 100 0.0	16					100	0.0	
100 0.0						100	0.0	
18 - 100 0.0	18					100	0.0	
100 0.0						100	0.0	
	20							
Completion Notes: FOR @ 20.0' bas		<u> </u>						

Completion Notes: EOB @ 20.0' bgs.

Legend: EOB End of Boring Below Ground Surface bgs NR No Recovery NA Not Applicable Feet in Inches



Well No.: SB/TSG-2 Project Name: Marlner's Inn Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Facility ID#: Drilling Method: Direct Push

Date Drilled: 6/10/2021 Sampling Method: Grab Logged By: SE **Drilling Contractor:** PM

	S	UBSURFACE PROFILE	SAMPLE			
Depth (ft)	Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	Completion Details
0-		Ground Surface				
		ASPHALT		100	0.0	ace _
2		CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace		100	0.0	ite Seal
		sand and gravel		100	0.0	Seal
				100	0.0	nite (
4-			SB-2 4.0 - 5.0'	100	0.0	Bentonite Seal nd
				100	0.0	B Temporary Air Sampling Point (4.5') Sand 1/8
6-				100	0.0	oint
			SB-2 7.0 - 8.0'	100	0.0	ing P
8-				100	0.0	ampl
				100	0.0	Air S
10				100	0.0	rary
10				100	0.0	od Щ
12				100	0.0	Te
		CL- (Medium Stiff) CLAY (moist) Gray mottled, medium plasticity, trace sand		100	0.0	
14		and gravel		100	0.0	
10				100	0.0	
16-				100	0.0	
10				100	0.0	
18				100	0.0	
				100	0.0	
20						
F = _	<u> </u>	Vation Notes: FOR @ 20.0' has			1	edeuq.

Completion Notes: EOB @ 20.0' bgs.

Legend: EOB bgs NR NA in Inches

End of Boring Below Ground Surface No Recovery Not Applicable Feet



Project Name: Marlner's Inn Well No.: SB/TSG-3 Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Facility ID#: Drilling Method: Direct Push

Date Drilled: 6/10/2021 Sampling Method: Grab Logged By: SE **Drilling Contractor:** PM

	S	UBSURFACE PROFILE	S	AMPL	E	
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	Completion Details
0-		Ground Surface				
=		TOPSOIL		75	0.0	Ce-
2		CL- (Medium Stiff) CLAY (moist) Brown, low plasticity, some sand, trace	SB-3 1.0 - 2.0'	75	0.1	ite Seal
-=		building debris		75	0.0	seal nud nud
		CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel		75	0.0	Bentonite Seal 7
4-		sand and graver		75	0.0	Sento
			SB-3 5.0 - 6.0'	100	0.0	. (° (° (° (° (° (° (° (° (° (° (° (° (°
6-				100	0.0	nt (5.0'') Sand
				100	0.0	g Poi
8-				100	0.0	Temporary Air Sampling Point (5.0') Sand
10				100	0.0	r Sar
10-				100	0.0	ry A <u>i</u> i
12				100	0.0	pora
12				100	0.0	Tem
14-				100	0.0	
14 =				100	0.0	
16				100	0.0	
16				100	0.0	
18		CL- (Medium Stiff) CLAY (moist) Gray, medium plasticity, trace sand and		100	0.0	
		gravel		100	0.0	
20				100	0.0	
-	Comp	pletion Notes: EOB @ 20.0' bgs.			L	egend:

Completion Notes: EOB @ 20.0' bgs.

Legend: End of Boring Below Ground Surface bgs NR No Recovery NA Not Applicable Feet in Inches



Well No.: SB/TSG-4 Project Name: Marlner's Inn Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Facility ID#: Drilling Method: Direct Push

Date Drilled: 6/10/2021 Sampling Method: Grab Logged By: SE **Drilling Contractor:** PM

	S	UBSURFACE PROFILE	S	AMPL	.E	
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	Completion Details
0-		Ground Surface				•
		TOPSOIL		50	0.0	90
		CONCRETE AND BRICK DEBRIS		50	0.0	Surfa
2-		CL- (Medium Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace		50	0.0	Bentonite Seal 7
		gravel and building debris	SB-4	50	0.0	Ooly.
4-			3.5 - 4.5'	50	0.0	Bentonite Seal
				100	0.0	1/8 P
6-		CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace	SB-4 6.0 - 7.0'	100	0.0	Sand
		sand and gravel	0.0 7.0	100	0.0	Poir
8-				100	0.0	pling
				100	0.0	Temporary Air Sampling Point (5.0') Sand
10				100	0.0	y Air
				100	0.0	oorar
12				100	0.0	Temp.
				100	0.0	•
14				100	0.0	
				100	0.0	
16				100	0.0	
				100	0.0	
18		CL- (Medium Stiff) CLAY (moist) Gray, medium plasticity, trace gravel		100	0.0	
		S.a., modium placticity, trace graver		100	0.0	
20						
=	0	Nation Notes: EOR @ 20 0' has				eaeuq.

Completion Notes: EOB @ 20.0' bgs.

Legend: EOB End of Boring Below Ground Surface bgs NR No Recovery NA Not Applicable Feet in Inches



Boring Log Project No.: 01-11288-1-004

Project Name: Marlner's Inn **Boring No.:** SB-5 Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Sampling Method: Grab **Date Drilled:** 6/10/2021 **Drilling Contractor: PM** Logged By: SE

	S	UBSURFACE PROFILE	S	AMPL	.E	
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed
0-		Ground Surface				
-		TOPSOIL		75	0.0	
2		SW- (Medium Dense) SAND (moist) Brown, fine to medium, trace clay and brick		75	0.0	
		debris	SB-5	75	0.0	
4-				75	0.0	
		CL- (Stiff) CLAY (moist) Brown, medium plasticity, trace sand and gravel	3.5 - 4.5'	75	0.0	
6				100	0.0	
				100	0.0	
8-				100	0.0	
				100	0.0	
10-				100	0.0	
				100	0.0	
12		CL- (Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel		100	0.0	
				100	0.0	
14-		CL- (Medium Stiff) CLAY (moist) Gray, medium plasticity, trace gravel		100	0.0	
		Gray, medium piasudity, trace graver		100	0.0	
16-						
	Comp	letion Notes: FOB @ 15 0' bas		<u> </u>	1 6	egend:

Completion Notes: EOB @ 15.0' bgs.

Legend: EOB End of Boring Below Ground Surface No Recovery Not Applicable Feet Bgs. NR NA ft



Project No.: 01-11288-1-004

Project Name: Marlner's Inn **Boring No.:** SB-6 Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Boring Log

Sampling Method: Grab **Date Drilled:** 6/10/2021 Logged By: SE **Drilling Contractor: PM**

	S	UBSURFACE PROFILE	SAMPLE			
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed
		Ground Surface				
0-	900 200 200 200 200 200 200 200 200 200 200	COMPACTED GRAVEL AND TOPSOIL		75	0.0	
2	900 900 8	CL- (Medium Dense) SANDY CLAY		75	0.0	
		(moist) Brown, fine to medium, trace gravel and brick debris		75	0.0	
4-				75	0.0	
		CONCRETE		75	0.0	
6-		CL- (Very Stiff) CLAY (moist)	SB-6	100	0.0	
		Brown/Gray mottled, medium plasticity, trace gravel	5.5- 6.5'	100	0.0	
8-				100	0.0	
				100	0.0	
10-				100	0.0	
				100	0.0	
12-				100	0.0	
-				100	0.0	
14-				100	0.0	
			SB-6 14.0 - 15.0'	100	0.0	
16-						ogond:

Completion Notes: EOB @ 15.0' bgs.

Legend: EOB End of Boring Below Ground Surface No Recovery Not Applicable Feet Bgs. NR NA ft



Boring Log Project No.: 01-11288-1-004

Project Name: Marlner's Inn **Boring No.:** SB-7 Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Sampling Method: Grab **Date Drilled:** 6/10/2021 **Drilling Contractor: PM** Logged By: SE

	S	UBSURFACE PROFILE	S	AMPL	.E	
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed
0 - 5	1027027 000000 1027027	Ground Surface COMPACTED GRAVEL AND BRICK DEBRIS		100	0.0	
2		CL- (Medium Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel	SB-7	100	0.0	
-				100	0.0	
4-				100	0.0	
-				100	0.0	
6		CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel	SB-7 5.5- 6.5'	100	0.0	
				100	0.0	
8-				100	0.0	
10				100	0.0	
-				100	0.0	
12				100	0.0	
				100	0.0	
14		CL- (Medium Stiff) CLAY (moist) Brown, medium plasticity, trace sand and gravel		100	0.0	
16	Comp	letion Notes: FOB @ 15 0' bas				egend:

Completion Notes: EOB @ 15.0' bgs.

Legend: EOB End of Boring Below Ground Surface No Recovery Not Applicable Feet Bgs. NR NA ft



Boring Log Project No.: 01-11288-1-004

Project Name: Marlner's Inn **Boring No.:** SB-8 Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Sampling Method: Grab **Date Drilled:** 6/10/2021 Logged By: SE **Drilling Contractor: PM**

	S	UBSURFACE PROFILE	S	AMPL	E	
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed
0-		Ground Surface				
		ASPHALT Fill sand, fine to coarse		100	0.0	
2-		CL- (Very Stiff) CLAY (moist) Brown/Gray mottled, medium plasticity, trace sand and gravel	SB-8 1.0 - 2.0'	100	0.0	
-				100	0.0	
4-				100	0.0	
=======================================				100	0.0	
6-				100	0.0	
=======================================			00.0	100	0.0	
8-			SB-8 7.0 - 8.0'	100	0.0	
				100	0.0	
10-				100	0.0	
				100	0.0	
12				100	0.0	
				100	0.0	
14-				100	0.0	
- - - - -		CL- (Medium Stiff) CLAY (moist) Gray, medium plasticity, trace sand and gravel		100	0.0	
16						
	Comp	oletion Notes: EOB @ 15.0' bgs.			L	egend:

Completion Notes: EOB @ 15.0' bgs.

Legend: EOB End of Boring Below Ground Surface Bgs. NR NA ft No Recovery Not Applicable Feet



Project No.: 01-11288-1-004

Project Name: Marlner's Inn

Logged By: H. Iglewski

Address: 445 Ledyard St, Detroit, MI

Facility ID#:

Date Drilled: 11/24/2021

Well Log

Well No.: SB/TSG-5R

Drill Rig: 6712 DT

Drilling Method: Direct Push

Sampling Method: Grab

Drilling Contractor: PM

	S	UBSURFACE PROFILE	S	AMPL	.E	-
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	Completion Details
0-		Ground Surface				
_		TOPSOIL/GRAVEL				Φ
-		SW- (Dense) SAND (damp) Brown, fine to medium, trace gravel, some clay, brick debris	SB-5R	90	34.1	Surfac
- - -			0.5-1.5'	90	27.5	ubingGround Surface
2				90	3.2	Bentonite Seal 7
- - - 4-				90	1.2	Bentic 1/8"
		CL- (Medium Stiff) CLAY (moist) Brown, medium plasticity, trace gravel, some sand, brick	SB-5R	90	0.4	
- - - 6-		debris	4.5-5.5' SB-5R	100	0.0	
- - -			5.5-6.5'	100	0.0	
- - - 8-		SC- (Dense) CLAYEY SAND (moist)		100	0.0	Sand (7.0')-
- - - -		Brown, fine to medium, trace gravel CL- (Medium Stiff) CLAY (moist) Brown, medium plasticity, trace gravel		100	0.0	pling Poi
- - - 10-				100	0.0	/ Air Sarr
-						Temporary Air Sampling Point (7.0') Sand
	Comp	eletion Notes: EOB @ 10.0' bgs.			L	.egend: OB End of Boring

bgs NR NA

End of Boring Below Ground Surface No Recovery Not Applicable Feet Inches



Project No.: 01-11288-1-004 **Boring Log**

Project Name:Marlner's InnBoring No.:SB-6AAddress:445 Ledyard St, Detroit, MIDrill Rig:6712 DT

Facility ID#: Drilling Method: Direct Push

Date Drilled: 11/24/21Sampling Method: GrabLogged By: H. IglewskiDrilling Contractor: PM

	SUBSURFACE PROFILE SAMPLE									
		ODOURI'A	OL FIXOLILL			_				
Depth (ft)	Soil Type Graphic	Descri	ption and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed			
0-			Ground Surface							
- - - - -		SC- (Dense (damp)	e) CLAYEY SAND um, trace gravel, brick/concrete debris		90	0.0				
2-			um, trace gravel, brick/concrete debris E/BRICK/ASPHALT		90	0.0				
- - - -					90	0.0				
- - - - 4 -		CL- (Mediu Brown/Gray, low pla concrete/brick debr	m Stiff) CLAY (damp) asticity, trace gravel, trace sand, is	SB-6A	90	0.0				
- - -				3.5-4.5' SB-6A	90	0.0				
				4.5-5.5'	100	0.0				
6- - - -		CL- (Stiff) (Brown, low plasticit	CLAY (moist) y, trace gravel		100	0.0				
- - - 8-					100	0.0				
- - - -					100	0.0				
- - - 10-					100	0.0				
-										
	Comp	letion Notes	: EOB @ 10.0' bgs.			E	Legend: EOB End of Boring Bos Relow Ground Surface			

End of Boring Below Ground Surface No Recovery Not Applicable Feet

Sheet: 1 of 1

Bgs. NR NA ft



Project No.: 01-11288-1-004

Project Name: Marlner's Inn Boring No.: SB-7A Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Boring Log

Date Drilled: 11/24/21 Sampling Method: Grab Logged By: H. Iglewski **Drilling Contractor:** PM

	S	SUBSURFACE PROFILE	SAMPLE			
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed
0-		Ground Surface				
		TOP SOIL BRICK DEBRIS		80	0.0	
2-		SW- SAND (damp) Brown/Gray, fine to medium, trace gravel, some clay, brick/concrete/asphalt debris		80	0.0	
- - - -				80	0.0	
- - - 4-		CL- (Stiff) CLAY (damp) Brown/Gray, low plasticity, trace gravel, some sand, concrete/brick debris	SB_7A	80	0.0	
- - - -			3.5-4.5' SB-7A	80	0.0	
6-			4.5-5.5'	100	0.0	
- - - -				100	0.0	
8-				100	0.0	
- - - -				100	0.0	
10-				100	0.0	
-						
\vdash	Comm	Nation Notes: FOR @ 10 0' bas			1	eaend:

Completion Notes: EOB @ 10.0' bgs.

Legend: EOB End of Boring Below Ground Surface No Recovery Bgs. NR NA ft Not Applicable Feet



Boring Log Project No.: 01-11288-1-004

Project Name: Marlner's Inn Boring No.: SB-8A Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Date Drilled: 11/24/21 Sampling Method: Grab Logged By: H. Iglewski **Drilling Contractor:** PM

	S	UBSURFACE PROFILE	SAMPLE			
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	No Well Installed
0-		Ground Surface				
- - - -		TOP SOIL SC- (Medium Dense) CLAYEY SAND (damp) Dark Brown, fine to medium, trace gravel, concrete/brick		100	0.7	
- - - 2-		Dark Brown, fine to medium, trace gravel, concrete/brick debris		100	0.3	
- - - -		CL- (Soft) CLAY (damp) Dark Brown, low plasticity, trace gravel, some sand, concrete/brick debris		100	0.1	
4-		CL- (Soft) CLAY (damp) Brown, high plasticity, trace gravel	SB-8A	100	0.1	
- - - -			3.5-4.5' SB-8A	100	0.0	
- - - 6-		CL- (Stiff) CLAY (damp) Brown, low plasticity, trace gravel	4.5-5.5'	100	0.0	
- - - -				100	0.0	
- - - 8-				100	0.0	
- - - -				100	0.0	
10-				100	0.0	
- - - - -						
	Comp	Nation Notes: FOR @ 10 0' has	1	1	·	eaend:

Completion Notes: EOB @ 10.0' bgs.

Legend: EOB End of Boring Below Ground Surface No Recovery Bgs. NR NA ft Not Applicable Feet



Boring Log Project No.: 01-11288-1-004

Project Name: Marlner's Inn **Boring No.:** SB-9 Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Drilling Method: Direct Push Facility ID#:

Sampling Method: Grab **Date Drilled:** 11/24/21 **Drilling Contractor: PM** Logged By: H. Iglewski

		SUBSURFACE PROFILE	S	AMPL	E	
Depth (ft)	Soil Type Graphic	Description and Comments	Sample	% Recovery	PID (ppm)	No Well Installed
0-		Ground Surface				
		TOP SOIL/GRAVEL SW- (Dense) SAND (damp) Brown, fine to medium, trace gravel, some clay, brick/concrete/asphalt debris		80	0.0	
2-		blick/condete/asphalt debits		80	0.0	
				80	0.0	
4-			SB-9A	80	0.0	
		CL- (Medium Stiff) CLAY (damp) Brown/Gray, medium plasticity, trace gravel, some sand,	3.5-4.5' SB-9A	80	0.0	
6		brick debris,	4.5-5.5'	100	0.0	
- - - - -		CL- (Stiff) CLAY (damp) Brown, meidum plasticity, trace gravel, brick debris		100	0.0	
8-				100	0.0	
- - - -				100	0.0	
10-				100	0.0	
-						
1	Comp	oletion Notes: FOB @ 10.0' bas			L	egend:

Completion Notes: EOB @ 10.0' bgs.

Legend: EOB End of Boring Below Ground Surface No Recovery Not Applicable Feet Bgs. NR NA ft



Well No.: SB/TSG-10 Project Name: Marlner's Inn Address: 445 Ledyard St, Detroit, MI Drill Rig: 6712 DT

Facility ID#: Drilling Method: Direct Push

Date Drilled: 11/24/21 Sampling Method: Grab Logged By: H. Iglewski **Drilling Contractor:** PM

SUBSURFACE PROFILE			SAMPLE			
Depth (ft)	Soil Type Graphic	Description and Comments	Sample Interval	% Recovery	PID (ppm)	Completion Details
0-		Ground Surface				
=		TOPSOIL		75	0.5	8
=		CL- (Medium Stiff) CLAY (damp) Brown, low plasticity, trace gravel		75	0.1	in Table
2-		CONCRETE AND BRICK DEBRIS		75	0.1	ite Seal
		CL- (Soft) CLAY (damp) Brown, low plasticity, trace gravel, concrete/brick debris				e Se
4-		CONCRETE AND BRICK DEBRIS	SB-10	75	0.1	oniti
=		CL- (Soft) CLAY (damp) Brown, low plasticity, trace gravel, some sand concrete/brick	3.5 - 4.5' SB-10	75	0.1	Bentonite Seal
6-		CL- (Stiff) CLAY (moist)	4.5-5.5'	100	0.0	.0. br - (
		Brown, low plasticity, trace gravel, some sand concrete/brick debris		100	0.0	Sand
				100	0.0	Poi
8-				100	0.0	gnilg
				100	0.0	Sam
10-				100	0.0	y Air
				100	0.0	oorari
12-				100	0.0	Temporary Air Sampling Point (5.0') Sand
=				100	0.0	
14 =				100	0.0	
				100	0.0	
16				100	0.0	
				100	0.0	
18				100	0.0	
				100	0.0	
20 =				100	0.0	
	Completion Notes: EOB @ 20.0' bgs. EOB End of Boring bgs Below Ground Surface NR No Recovery					

bgs NR

NA

in

No Recovery

Not Applicable Feet

Sheet: 1 of 1

Inches

Appendix D





Report ID: S25191.01(01) Generated on 06/16/2021

Report to

Attention: Jana Beumel PM Environmental, Inc. 4080 W. Eleven Mile Berkley, MI 48072

Phone: O:248-336-9988 D:248-414-1859 FAX:

Email: Beumel@pmenv.com

Report produced by

Merit Laboratories, Inc. 2680 East Lansing Drive East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions: John Laverty (johnlaverty@meritlabs.com) Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S25191.01-S25191.16

Project: 01-11288-1-0004 Collected Date(s): 06/10/2021

Submitted Date/Time: 06/11/2021 11:10

Sampled by: Shawn Elswick P.O. #: 01-11288-1-0004

Table of Contents

Cover Page (Page 1)

General Report Notes (Page 2)

Report Narrative (Page 2)

Laboratory Certifications (Page 3)

Qualifier Descriptions (Page 3)

Glossary of Abbreviations (Page 3)

Method Summary (Page 4)

Sample Summary (Page 5)

Maya Murshak Technical Director

Naya Mushah



General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples

for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Report Narrative

There is no additional narrative for this analytical report



Laboratory Certifications

Authority	Certification ID	
Michigan DEQ	#9956	
DOD ELAP/ISO 17025	#69699	
WBENC	#2005110032	
Ohio VAP	#CL0002	
Indiana DOH	#C-MI-07	
New York NELAC	#11814	
North Carolina DENR	#680	
North Carolina DOH	#26702	
Alaska CSLAP	#17-001	
Pennsylvania DEP	#68-05884	

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
В	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
Н	Sample submitted and run outside of holding time
1	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
0	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
Т	No correction for total solids
X	Elevated reporting limit due to matrix interference
Υ	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
е	Reported value estimated due to interference
j	Analyte also found in associated method blank
р	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Method Summary

Method	Version
SM2540B	Standard Method 2540 B 2011
SW3050B	SW 846 Method 3050B Revision 2 December 1996
SW3546	SW 846 Method 3546 Revision 0 February 2007
SW3550C	SW 846 Method 3550C Revision 3 February 2007
SW5035A	SW 846 Method 5035A Revision 1 July 2002
SW5035A/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5035A Revision 1 July 2002
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8082A	SW 846 Method 8082A Revision 1 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Sample Summary (16 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S25191.01	SB-3 1-2'	Soil	06/10/21 09:25
S25191.02	SB-3 5-6'	Soil	06/10/21 09:30
S25191.03	SB-4 3.5-4.5'	Soil	06/10/21 10:10
S25191.04	SB-4 6-7'	Soil	06/10/21 10:15
S25191.05	SB-5 3.5-4.5'	Soil	06/10/21 10:55
S25191.06	SB-5 7-8'	Soil	06/10/21 11:00
S25191.07	SB-6 5.5-6.5'	Soil	06/10/21 11:25
S25191.08	SB-6 14-15'	Soil	06/10/21 11:30
S25191.09	SB-7 1-2'	Soil	06/10/21 12:10
S25191.10	SB-7 5.5-6.5'	Soil	06/10/21 12:15
S25191.11	SB-8 1-2'	Soil	06/10/21 12:45
S25191.12	SB-8 7-8'	Soil	06/10/21 12:50
S25191.13	SB-2 4-5'	Soil	06/10/21 13:35
S25191.14	SB-2 7-8'	Soil	06/10/21 13:40
S25191.15	SB-1 4-5'	Soil	06/10/21 14:05
S25191.16	SB-1 7-8'	Soil	06/10/21 14:10



Lab Sample ID: S25191.01

Sample Tag: SB-3 1-2'

Collected Date/Time: 06/10/2021 09:25

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	8.487/10	SW5035A	06/14/21 11:08	REC	

Inorganics

Method: SM2540B, Run Date: 06/12/21 09:10, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	85	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 21:41, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	400	300		ug/kg	10	205-99-2	р	
Benzo(k)fluoranthene	500	300		ug/kg	10	207-08-9	р	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	400	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	400	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 00:47, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	78.1	60-29-7	
Acetone	Not detected	2,000		ug/kg	78.1	67-64-1	
Methyl iodide	Not detected	200		ug/kg	78.1	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	78.1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	78.1	1634-04-4	
Acrylonitrile	Not detected	200		ug/kg	78.1	107-13-1	
2-Butanone (MEK)	Not detected	1,200		ug/kg	78.1	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	78.1	75-71-8	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Lab Sample ID: S25191.01 (continued)

Sample Tag: SB-3 1-2'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 00:47, Analyst: KAG (continued)								
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Chloromethane	Not detected	400		ug/kg	78.1	74-87-3		
Vinyl chloride	Not detected	80		ug/kg	78.1	75-01-4		
Bromomethane	Not detected	300		ug/kg	78.1	74-83-9		
Chloroethane	Not detected	400		ug/kg	78.1	75-00-3		
Trichlorofluoromethane	Not detected	200		ug/kg	78.1	75-69-4		
1,1-Dichloroethene	Not detected	80		ug/kg	78.1	75-35-4		
Methylene chloride	Not detected	200		ug/kg	78.1	75-09-2		
trans-1,2-Dichloroethene	Not detected	80		ug/kg	78.1	156-60-5		
1,1-Dichloroethane	Not detected	80		ug/kg	78.1	75-34-3		
cis-1,2-Dichloroethene	Not detected	80		ug/kg	78.1	156-59-2		
Tetrahydrofuran*	Not detected	2,000		ug/kg	78.1	109-99-9		
Chloroform	Not detected	80		ug/kg	78.1	67-66-3		
Bromochloromethane	Not detected	200		ug/kg	78.1	74-97-5		
1,1,1-Trichloroethane	Not detected	80		ug/kg	78.1	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	78.1	108-10-1		
2-Hexanone	Not detected	4,000		ug/kg	78.1	591-78-6		
Carbon tetrachloride	Not detected	80		ug/kg	78.1	56-23-5		
Benzene	Not detected	80		ug/kg	78.1	71-43-2		
1,2-Dichloroethane	Not detected	80		ug/kg	78.1	107-06-2		
Trichloroethene	Not detected	80		ug/kg	78.1	79-01-6		
1,2-Dichloropropane	Not detected	80		ug/kg	78.1	78-87-5		
Bromodichloromethane	Not detected	200		ug/kg	78.1	75-27-4		
Dibromomethane	Not detected	400		ug/kg	78.1	74-95-3		
cis-1,3-Dichloropropene	Not detected	80		ug/kg	78.1	10061-01-5		
Toluene	Not detected	80		ug/kg	78.1	108-88-3		
trans-1,3-Dichloropropene	Not detected	80		ug/kg	78.1	10061-02-6		
1,1,2-Trichloroethane	Not detected	80		ug/kg	78.1	79-00-5		
Tetrachloroethene	Not detected	80		ug/kg	78.1	127-18-4		
trans-1,4-Dichloro-2-butene	Not detected	80		ug/kg	78.1	110-57-6		
Dibromochloromethane	Not detected	200		ug/kg	78.1	124-48-1		
1,2-Dibromoethane	Not detected	30		ug/kg	78.1	106-93-4	M	
Chlorobenzene	Not detected	80		ug/kg	78.1	108-90-7		
1,1,1,2-Tetrachloroethane	Not detected	200		ug/kg	78.1	630-20-6		
Ethylbenzene	Not detected	80		ug/kg	78.1	100-41-4		
p,m-Xylene	Not detected	200		ug/kg	78.1	100 11 1		
o-Xylene	Not detected	80		ug/kg	78.1	95-47-6		
Styrene	Not detected	80		ug/kg	78.1	100-42-5		
Isopropylbenzene	Not detected	400		ug/kg	78.1	98-82-8		
Bromoform	Not detected	200		ug/kg ug/kg	78.1	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	80		ug/kg ug/kg	78.1	79-34-5		
1,2,3-Trichloropropane	Not detected	200		ug/kg	78.1	96-18-4		
n-Propylbenzene	Not detected	80		ug/kg ug/kg	78.1	103-65-1		
Bromobenzene	Not detected	200		ug/kg ug/kg	78.1	108-86-1		
1,3,5-Trimethylbenzene	Not detected	80			78.1 78.1	108-67-8		
•		80		ug/kg	76.1 78.1	98-06-6		
tert-Butylbenzene 1,2,4-Trimethylbenzene	Not detected Not detected	80		ug/kg	76.1 78.1	96-06-6 95-63-6		
•				ug/kg				
sec-Butylbenzene	Not detected	80 300		ug/kg	78.1	135-98-8		
p-Isopropyltoluene	Not detected	200		ug/kg	78.1	99-87-6		
1,3-Dichlorobenzene	Not detected	200		ug/kg	78.1	541-73-1		



Lab Sample ID: S25191.01 (continued)

Sample Tag: SB-3 1-2'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 00:47, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	200		ug/kg	78.1	106-46-7	
1,2-Dichlorobenzene	Not detected	200		ug/kg	78.1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	80		ug/kg	78.1	526-73-8	
n-Butylbenzene	Not detected	80		ug/kg	78.1	104-51-8	
Hexachloroethane	Not detected	500		ug/kg	78.1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	78.1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	520		ug/kg	78.1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	520		ug/kg	78.1	87-61-6	
Naphthalene	Not detected	400		ug/kg	78.1	91-20-3	
2-Methylnaphthalene	Not detected	200		ug/kg	78.1	91-57-6	



Lab Sample ID: S25191.02

Sample Tag: SB-3 5-6'

Collected Date/Time: 06/10/2021 09:30

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	11.466/11	SW5035A	06/14/21 11:08	REC	

Inorganics

Method: SM2540B, Run Date: 06/12/21 09:10, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 22:03, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:09, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	63.9	60-29-7	
Acetone	Not detected	1,000		ug/kg	63.9	67-64-1	
Methyl iodide	Not detected	100		ug/kg	63.9	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	63.9	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	63.9	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	63.9	107-13-1	
2-Butanone (MEK)	Not detected	960		ug/kg	63.9	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	63.9	75-71-8	
Chloromethane	Not detected	300		ug/kg	63.9	74-87-3	



Lab Sample ID: S25191.02 (continued)

Sample Tag: SB-3 5-6'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:09, Analyst: KAG (continued)											
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags				
Vinyl chloride	Not detected	60		ug/kg	63.9	75-01-4					
Bromomethane	Not detected	300		ug/kg	63.9	74-83-9					
Chloroethane	Not detected	300		ug/kg	63.9	75-00-3					
Trichlorofluoromethane	Not detected	100		ug/kg	63.9	75-69-4					
1,1-Dichloroethene	Not detected	60		ug/kg	63.9	75-35-4					
Methylene chloride	Not detected	100		ug/kg	63.9	75-09-2					
trans-1,2-Dichloroethene	Not detected	60		ug/kg	63.9	156-60-5					
1,1-Dichloroethane	Not detected	60		ug/kg	63.9	75-34-3					
cis-1,2-Dichloroethene	Not detected	60		ug/kg	63.9	156-59-2					
Tetrahydrofuran*	Not detected	1,000		ug/kg	63.9	109-99-9					
Chloroform	Not detected	60		ug/kg	63.9	67-66-3					
Bromochloromethane	Not detected	100		ug/kg	63.9	74-97-5					
1,1,1-Trichloroethane	Not detected	60		ug/kg	63.9	71-55-6					
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	63.9	108-10-1					
2-Hexanone	Not detected	3,000		ug/kg	63.9	591-78-6					
Carbon tetrachloride	Not detected	60		ug/kg	63.9	56-23-5					
Benzene	Not detected	60		ug/kg	63.9	71-43-2					
1,2-Dichloroethane	Not detected	60		ug/kg	63.9	107-06-2					
Trichloroethene	Not detected	60		ug/kg	63.9	79-01-6					
1,2-Dichloropropane	Not detected	60		ug/kg	63.9	78-87-5					
Bromodichloromethane	Not detected	100		ug/kg	63.9	75-27-4					
Dibromomethane	Not detected	300		ug/kg	63.9	74-95-3					
cis-1,3-Dichloropropene	Not detected	60		ug/kg	63.9	10061-01-5					
Toluene	Not detected	60		ug/kg	63.9	108-88-3					
trans-1,3-Dichloropropene	Not detected	60		ug/kg	63.9	10061-02-6					
1,1,2-Trichloroethane	Not detected	60		ug/kg	63.9	79-00-5					
Tetrachloroethene	Not detected	60		ug/kg	63.9	127-18-4					
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	63.9	110-57-6					
Dibromochloromethane	Not detected	100		ug/kg	63.9	124-48-1					
1,2-Dibromoethane	Not detected	30		ug/kg	63.9	106-93-4	М				
Chlorobenzene	Not detected	60		ug/kg	63.9	108-90-7					
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	63.9	630-20-6					
Ethylbenzene	Not detected	60		ug/kg ug/kg	63.9	100-41-4					
p,m-Xylene	Not detected	100		ug/kg	63.9	100 41 4					
o-Xylene	Not detected	60		ug/kg ug/kg	63.9	95-47-6					
Styrene	Not detected	60		ug/kg ug/kg	63.9	100-42-5					
Isopropylbenzene	Not detected	300		ug/kg ug/kg	63.9	98-82-8					
Bromoform	Not detected	100		ug/kg ug/kg	63.9	75-25-2					
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg ug/kg	63.9	79-34-5					
1,2,3-Trichloropropane	Not detected	100		ug/kg ug/kg	63.9	96-18-4					
	Not detected	60			63.9	103-65-1					
n-Propylbenzene Bromobenzene	Not detected	100		ug/kg	63.9	108-86-1					
1,3,5-Trimethylbenzene	Not detected			ug/kg	63.9	108-67-8					
•		60 60		ug/kg							
tert-Butylbenzene	Not detected	60 60		ug/kg	63.9	98-06-6					
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	63.9	95-63-6					
sec-Butylbenzene	Not detected	60		ug/kg	63.9	135-98-8					
p-Isopropyltoluene	Not detected	100		ug/kg	63.9	99-87-6					
1,3-Dichlorobenzene	Not detected	100		ug/kg	63.9	541-73-1					
1,4-Dichlorobenzene	Not detected	100		ug/kg	63.9	106-46-7					



Lab Sample ID: S25191.02 (continued)

Sample Tag: SB-3 5-6'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:09, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	63.9	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	63.9	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	63.9	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	63.9	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	63.9	96-12-8	
1,2,4-Trichlorobenzene	Not detected	420		ug/kg	63.9	120-82-1	
1,2,3-Trichlorobenzene	Not detected	420		ug/kg	63.9	87-61-6	
Naphthalene	Not detected	300		ug/kg	63.9	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	63.9	91-57-6	



Lab Sample ID: S25191.03

Sample Tag: SB-4 3.5-4.5'

Collected Date/Time: 06/10/2021 10:10

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	9.448/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 09:10, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	84	1		%	1		

Metals

Method: SW6020A, Run Date: 06/15/21 14:27, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	3.19	0.20		mg/kg	282	7440-38-2	
Barium	96.7	1.0		mg/kg	282	7440-39-3	
Cadmium	0.53	0.20		mg/kg	282	7440-43-9	
Chromium	6.13	0.50		mg/kg	282	7440-47-3	
Copper	19.7	0.50		mg/kg	282	7440-50-8	
Lead	92.6	0.30		mg/kg	282	7439-92-1	
Silver	0.29	0.20		mg/kg	282	7440-22-4	

Method: SW6020A, Run Date: 06/15/21 15:46, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	0.47	0.40		mg/kg	282	7782-49-2	_
Zinc	168	0.50		mg/kg	282	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:04, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.296	0.050		mg/kg	74	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 18:15, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.03 (continued)

Sample Tag: SB-4 3.5-4.5'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 22:25, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	_
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		_
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	300	300		ug/kg	10	207-08-9	р	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	400	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	300	300		ug/kg	10	85-01-8		
Pyrene	400	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:32, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	72.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	72.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	72.5	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	72.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	72.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	72.5	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	72.5	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	72.5	75-71-8	
Chloromethane	Not detected	400		ug/kg	72.5	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	72.5	75-01-4	
Bromomethane	Not detected	300		ug/kg	72.5	74-83-9	
Chloroethane	Not detected	400		ug/kg	72.5	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	72.5	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	72.5	75-35-4	
Methylene chloride	Not detected	100		ug/kg	72.5	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	72.5	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	72.5	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	72.5	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	72.5	109-99-9	
Chloroform	Not detected	70		ug/kg	72.5	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	72.5	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	72.5	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	72.5	108-10-1	
2-Hexanone	Not detected	4,000		ug/kg	72.5	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	72.5	56-23-5	
Benzene	Not detected	70		ug/kg	72.5	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	72.5	107-06-2	

 $p\hbox{-Benzo}(b) Fluoranthene \ and \ Benzo(k) Fluoranthene \ integrated \ as \ one \ peak.$



Lab Sample ID: S25191.03 (continued)

Sample Tag: SB-4 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:32, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	70		ug/kg	72.5	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	72.5	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	72.5	75-27-4	
Dibromomethane	Not detected	400		ug/kg	72.5	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	72.5	10061-01-5	
Toluene	Not detected	70		ug/kg	72.5	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	72.5	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	72.5	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	72.5	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	72.5	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	72.5	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	72.5	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	72.5	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	72.5	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	72.5	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	72.5		
o-Xylene	Not detected	70		ug/kg	72.5	95-47-6	
Styrene	Not detected	70		ug/kg	72.5	100-42-5	
Isopropylbenzene	Not detected	400		ug/kg	72.5	98-82-8	
Bromoform	Not detected	100		ug/kg	72.5	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	72.5	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	72.5	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	72.5	103-65-1	
Bromobenzene	Not detected	100		ug/kg	72.5	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	72.5	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	72.5	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	72.5	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	72.5	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	72.5	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	72.5	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	72.5	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	72.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	72.5	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	72.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	72.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	72.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	480		ug/kg	72.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	480		ug/kg	72.5	87-61-6	
Naphthalene	Not detected	400		ug/kg	72.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	72.5	91-57-6	



Lab Sample ID: S25191.04

Sample Tag: SB-4 6-7'

Collected Date/Time: 06/10/2021 10:15

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	9.829/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 09:10, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	87	1		%	1			

Metals

Method: SW6020A, Run Date: 06/15/21 14:29, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Arsenic	1.28	0.20		mg/kg	270	7440-38-2		
Barium	43.4	1.0		mg/kg	270	7440-39-3		
Cadmium	0.20	0.20		mg/kg	270	7440-43-9		
Chromium	6.02	0.50		mg/kg	270	7440-47-3		
Copper	4.95	0.50		mg/kg	270	7440-50-8		
Lead	4.99	0.30		mg/kg	270	7439-92-1		
Silver	Not detected	0.20		mg/kg	270	7440-22-4		

Method: SW6020A, Run Date: 06/15/21 15:47, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	270	7782-49-2	
Zinc	16.3	0.50		mg/kg	270	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:13, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	62	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 18:26, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.04 (continued)

Sample Tag: SB-4 6-7'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 22:47, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:54, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	65.9	60-29-7	
Acetone	Not detected	1,000		ug/kg	65.9	67-64-1	
Methyl iodide	Not detected	100		ug/kg	65.9	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	65.9	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	65.9	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	65.9	107-13-1	
2-Butanone (MEK)	Not detected	990		ug/kg	65.9	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	65.9	75-71-8	
Chloromethane	Not detected	300		ug/kg	65.9	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	65.9	75-01-4	
Bromomethane	Not detected	300		ug/kg	65.9	74-83-9	
Chloroethane	Not detected	300		ug/kg	65.9	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	65.9	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	65.9	75-35-4	
Methylene chloride	Not detected	100		ug/kg	65.9	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	65.9	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	65.9	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	65.9	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	65.9	109-99-9	
Chloroform	Not detected	70		ug/kg	65.9	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	65.9	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	65.9	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	65.9	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	65.9	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	65.9	56-23-5	
Benzene	Not detected	70		ug/kg	65.9	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	65.9	107-06-2	
Trichloroethene	Not detected	70		ug/kg	65.9	79-01-6	



Lab Sample ID: S25191.04 (continued)

Sample Tag: SB-4 6-7'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 01:54, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloropropane	Not detected	70		ug/kg	65.9	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	65.9	75-27-4	
Dibromomethane	Not detected	300		ug/kg	65.9	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	65.9	10061-01-5	
Toluene	Not detected	70		ug/kg	65.9	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	65.9	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	65.9	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	65.9	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	65.9	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	65.9	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	65.9	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	65.9	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	65.9	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	65.9	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	65.9		
o-Xylene	Not detected	70		ug/kg	65.9	95-47-6	
Styrene	Not detected	70		ug/kg	65.9	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	65.9	98-82-8	
Bromoform	Not detected	100		ug/kg	65.9	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	65.9	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	65.9	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	65.9	103-65-1	
Bromobenzene	Not detected	100		ug/kg	65.9	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	65.9	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	65.9	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	65.9	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	65.9	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	65.9	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	65.9	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	65.9	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	65.9	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	65.9	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	65.9	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	65.9	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	65.9	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	65.9	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	65.9	87-61-6	
Naphthalene	Not detected	300		ug/kg	65.9	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	65.9	91-57-6	
i							



Lab Sample ID: S25191.05

Sample Tag: SB-5 3.5-4.5'

Collected Date/Time: 06/10/2021 10:55

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	10.060/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 09:10, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	90	1		%	1	•		

Metals

Method: SW6020A, Run Date: 06/15/21 14:30, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	3.60	0.20		mg/kg	249	7440-38-2	
Barium	224	1.0		mg/kg	249	7440-39-3	
Cadmium	0.65	0.20		mg/kg	249	7440-43-9	
Chromium	8.22	0.50		mg/kg	249	7440-47-3	
Copper	7.73	0.50		mg/kg	249	7440-50-8	
Lead	231	0.30		mg/kg	249	7439-92-1	
Silver	Not detected	0.20		mg/kg	249	7440-22-4	

Method: SW6020A, Run Date: 06/15/21 15:48, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	249	7782-49-2	_
Zinc	219	0.50		mg/kg	249	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:14, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.898	0.050		mg/kg	62	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 18:39, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.05 (continued)

Sample Tag: SB-5 3.5-4.5'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/16/21 01:21, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	2,200	300		ug/kg	10	83-32-9	
Acenaphthylene	600	300		ug/kg	10	208-96-8	
Anthracene	7,800	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	14,600	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	12,600	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	22,500	300		ug/kg	10	205-99-2	р
Benzo(k)fluoranthene	26,200	300		ug/kg	10	207-08-9	р
Benzo(ghi)perylene	4,100	300		ug/kg	10	191-24-2	
Chrysene	14,600	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	30,100	300		ug/kg	10	206-44-0	
Fluorene	2,800	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	4,600	300		ug/kg	10	193-39-5	
Naphthalene	1,400	300		ug/kg	10	91-20-3	
Phenanthrene	27,400	300		ug/kg	10	85-01-8	
Pyrene	25,000	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	900	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 02:17, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Diethyl ether	Not detected	200		ug/kg	60.8	60-29-7		
Acetone	Not detected	1,000		ug/kg	60.8	67-64-1		
Methyl iodide	Not detected	100		ug/kg	60.8	74-88-4		
Carbon disulfide	Not detected	300		ug/kg	60.8	75-15-0		
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	60.8	1634-04-4		
Acrylonitrile	Not detected	100		ug/kg	60.8	107-13-1		
2-Butanone (MEK)	Not detected	910		ug/kg	60.8	78-93-3		
Dichlorodifluoromethane	Not detected	300		ug/kg	60.8	75-71-8		
Chloromethane	Not detected	300		ug/kg	60.8	74-87-3		
Vinyl chloride	Not detected	60		ug/kg	60.8	75-01-4		
Bromomethane	Not detected	200		ug/kg	60.8	74-83-9		
Chloroethane	Not detected	300		ug/kg	60.8	75-00-3		
Trichlorofluoromethane	Not detected	100		ug/kg	60.8	75-69-4		
1,1-Dichloroethene	Not detected	60		ug/kg	60.8	75-35-4		
Methylene chloride	Not detected	100		ug/kg	60.8	75-09-2		
trans-1,2-Dichloroethene	Not detected	60		ug/kg	60.8	156-60-5		
1,1-Dichloroethane	Not detected	60		ug/kg	60.8	75-34-3		
cis-1,2-Dichloroethene	Not detected	60		ug/kg	60.8	156-59-2		
Tetrahydrofuran*	Not detected	1,000		ug/kg	60.8	109-99-9		
Chloroform	Not detected	60		ug/kg	60.8	67-66-3		
Bromochloromethane	Not detected	100		ug/kg	60.8	74-97-5		
1,1,1-Trichloroethane	Not detected	60		ug/kg	60.8	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	60.8	108-10-1		
2-Hexanone	Not detected	3,000		ug/kg	60.8	591-78-6		
Carbon tetrachloride	Not detected	60		ug/kg	60.8	56-23-5		
Benzene	Not detected	60		ug/kg	60.8	71-43-2		
1,2-Dichloroethane	Not detected	60		ug/kg	60.8	107-06-2		

 $p\hbox{-Benzo}(b) Fluoranthene \ and \ Benzo(k) Fluoranthene \ integrated \ as \ one \ peak.$



Lab Sample ID: S25191.05 (continued)

Sample Tag: SB-5 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 02:17, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	60		ug/kg	60.8	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	60.8	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	60.8	75-27-4	
Dibromomethane	Not detected	300		ug/kg	60.8	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	60.8	10061-01-5	
Toluene	Not detected	60		ug/kg	60.8	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	60.8	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	60.8	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	60.8	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	60.8	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	60.8	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	60.8	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	60.8	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	60.8	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	60.8	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	60.8		
o-Xylene	Not detected	60		ug/kg	60.8	95-47-6	
Styrene	Not detected	60		ug/kg	60.8	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	60.8	98-82-8	
Bromoform	Not detected	100		ug/kg	60.8	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	60.8	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	60.8	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	60.8	103-65-1	
Bromobenzene	Not detected	100		ug/kg	60.8	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	60.8	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	60.8	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	60.8	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	60.8	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	60.8	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	60.8	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	60.8	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	60.8	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	60.8	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	60.8	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	60.8	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	60.8	96-12-8	
1,2,4-Trichlorobenzene	Not detected	400		ug/kg	60.8	120-82-1	
1,2,3-Trichlorobenzene	Not detected	400		ug/kg	60.8	87-61-6	
Naphthalene	600	300		ug/kg	60.8	91-20-3	
2-Methylnaphthalene	300	100		ug/kg	60.8	91-57-6	



Lab Sample ID: S25191.06

Sample Tag: SB-5 7-8'

Collected Date/Time: 06/10/2021 11:00

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	9.509/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Metals

Method: SW6020A, Run Date: 06/15/21 14:32, Analyst: JRH

motilod: Offoceon, Rail Bate: 00/10/E1 14:02, Analyst: Offi									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Arsenic	1.25	0.20		mg/kg	261	7440-38-2			
Barium	37.2	1.0		mg/kg	261	7440-39-3			
Cadmium	Not detected	0.20		mg/kg	261	7440-43-9			
Chromium	6.73	0.50		mg/kg	261	7440-47-3			
Copper	3.36	0.50		mg/kg	261	7440-50-8			
Lead	5.26	0.30		mg/kg	261	7439-92-1			
Silver	Not detected	0.20		mg/kg	261	7440-22-4			

Method: SW6020A, Run Date: 06/15/21 15:49, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	261	7782-49-2	
Zinc	15.9	0.50		mg/kg	261	7440-66-6	

Method: SW7471B. Run Date: 06/15/21 14:18. Analyst: JRH

modification in 12, italia pater contest in 10, failaly of oral										
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags			
Mercury	Not detected	0.050	•	ma/ka	67	7439-97-6	•			

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 18:50, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.06 (continued)

Sample Tag: SB-5 7-8'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 23:09, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 02:40, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	66.6	60-29-7	
Acetone	Not detected	1,000		ug/kg	66.6	67-64-1	
Methyl iodide	Not detected	100		ug/kg	66.6	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	66.6	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	66.6	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	66.6	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	66.6	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	66.6	75-71-8	
Chloromethane	Not detected	300		ug/kg	66.6	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	66.6	75-01-4	
Bromomethane	Not detected	300		ug/kg	66.6	74-83-9	
Chloroethane	Not detected	300		ug/kg	66.6	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	66.6	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	66.6	75-35-4	
Methylene chloride	Not detected	100		ug/kg	66.6	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	66.6	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	66.6	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	66.6	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	66.6	109-99-9	
Chloroform	Not detected	70		ug/kg	66.6	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	66.6	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	66.6	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	66.6	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	66.6	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	66.6	56-23-5	
Benzene	Not detected	70		ug/kg	66.6	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	66.6	107-06-2	
Trichloroethene	Not detected	70		ug/kg	66.6	79-01-6	



Lab Sample ID: S25191.06 (continued)

Sample Tag: SB-5 7-8'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 02:40, Analyst: KAG (continued)

Parameter	Result	RL M	DL Units	Dilution	CAS#	Flags
1,2-Dichloropropane	Not detected	70	ug/kg	66.6	78-87-5	
Bromodichloromethane	Not detected	100	ug/kg	66.6	75-27-4	
Dibromomethane	Not detected	300	ug/kg	66.6	74-95-3	
cis-1,3-Dichloropropene	Not detected	70	ug/kg	66.6	10061-01-5	
Toluene	Not detected	70	ug/kg	66.6	108-88-3	
trans-1,3-Dichloropropene	Not detected	70	ug/kg	66.6	10061-02-6	
1,1,2-Trichloroethane	Not detected	70	ug/kg	66.6	79-00-5	
Tetrachloroethene	Not detected	70	ug/kg	66.6	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70	ug/kg	66.6	110-57-6	
Dibromochloromethane	Not detected	100	ug/kg	66.6	124-48-1	
1,2-Dibromoethane	Not detected	30	ug/kg	66.6	106-93-4	M
Chlorobenzene	Not detected	70	ug/kg	66.6	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100	ug/kg	66.6	630-20-6	
Ethylbenzene	Not detected	70	ug/kg	66.6	100-41-4	
p,m-Xylene	Not detected	100	ug/kg	66.6		
o-Xylene	Not detected	70	ug/kg	66.6	95-47-6	
Styrene	Not detected	70	ug/kg	66.6	100-42-5	
Isopropylbenzene	Not detected	300	ug/kg	66.6	98-82-8	
Bromoform	Not detected	100	ug/kg	66.6	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70	ug/kg	66.6	79-34-5	
1,2,3-Trichloropropane	Not detected	100	ug/kg	66.6	96-18-4	
n-Propylbenzene	Not detected	70	ug/kg	66.6	103-65-1	
Bromobenzene	Not detected	100	ug/kg	66.6	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70	ug/kg	66.6	108-67-8	
tert-Butylbenzene	Not detected	70	ug/kg	66.6	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70	ug/kg	66.6	95-63-6	
sec-Butylbenzene	Not detected	70	ug/kg	66.6	135-98-8	
p-Isopropyltoluene	Not detected	100	ug/kg	66.6	99-87-6	
1,3-Dichlorobenzene	Not detected	100	ug/kg	66.6	541-73-1	
1,4-Dichlorobenzene	Not detected	100	ug/kg	66.6	106-46-7	
1,2-Dichlorobenzene	Not detected	100	ug/kg	66.6	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70	ug/kg	66.6	526-73-8	
n-Butylbenzene	Not detected	70	ug/kg	66.6	104-51-8	
Hexachloroethane	Not detected	400	ug/kg	66.6	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300	ug/kg	66.6	96-12-8	
1,2,4-Trichlorobenzene	Not detected	440	ug/kg	66.6	120-82-1	
1,2,3-Trichlorobenzene	Not detected	440	ug/kg	66.6	87-61-6	
Naphthalene	Not detected	300	ug/kg	66.6	91-20-3	
2-Methylnaphthalene	Not detected	100	ug/kg	66.6	91-57-6	
•						



Lab Sample ID: S25191.07

Sample Tag: SB-6 5.5-6.5'

Collected Date/Time: 06/10/2021 11:25

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/14/21 17:00	TTV	
Sample wt. (g) / Methanol (ml)*	8.861/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Metals

Method: SW6020A, Run Date: 06/15/21 14:33, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.32	0.20		mg/kg	247	7440-38-2	
Barium	45.4	1.0		mg/kg	247	7440-39-3	
Cadmium	0.30	0.20		mg/kg	247	7440-43-9	
Chromium	6.91	0.50		mg/kg	247	7440-47-3	
Copper	4.91	0.50		mg/kg	247	7440-50-8	
Lead	4.86	0.30		mg/kg	247	7439-92-1	
Silver	Not detected	0.20		mg/kg	247	7440-22-4	

Method: SW6020A, Run Date: 06/15/21 15:51, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	247	7782-49-2	_
Zinc	19.2	0.50		mg/kg	247	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:19, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	67	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 17:09, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.07 (continued)

Sample Tag: SB-6 5.5-6.5'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 23:31, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 03:03, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	72.3	60-29-7	
Acetone	Not detected	1,000		ug/kg	72.3	67-64-1	
Methyl iodide	Not detected	100		ug/kg	72.3	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	72.3	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	72.3	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	72.3	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	72.3	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	72.3	75-71-8	
Chloromethane	Not detected	400		ug/kg	72.3	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	72.3	75-01-4	
Bromomethane	Not detected	300		ug/kg	72.3	74-83-9	
Chloroethane	Not detected	400		ug/kg	72.3	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	72.3	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	72.3	75-35-4	
Methylene chloride	Not detected	100		ug/kg	72.3	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	72.3	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	72.3	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	72.3	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	72.3	109-99-9	
Chloroform	Not detected	70		ug/kg	72.3	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	72.3	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	72.3	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	72.3	108-10-1	
2-Hexanone	Not detected	4,000		ug/kg	72.3	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	72.3	56-23-5	
Benzene	Not detected	70		ug/kg	72.3	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	72.3	107-06-2	
Trichloroethene	Not detected	70		ug/kg	72.3	79-01-6	



Lab Sample ID: S25191.07 (continued)

Sample Tag: SB-6 5.5-6.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 03:03, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloropropane	Not detected	70		ug/kg	72.3	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	72.3	75-27-4	
Dibromomethane	Not detected	400		ug/kg	72.3	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	72.3	10061-01-5	
Toluene	Not detected	70		ug/kg	72.3	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	72.3	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	72.3	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	72.3	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	72.3	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	72.3	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	72.3	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	72.3	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	72.3	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	72.3	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	72.3		
o-Xylene	Not detected	70		ug/kg	72.3	95-47-6	
Styrene	Not detected	70		ug/kg	72.3	100-42-5	
Isopropylbenzene	Not detected	400		ug/kg	72.3	98-82-8	
Bromoform	Not detected	100		ug/kg	72.3	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	72.3	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	72.3	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	72.3	103-65-1	
Bromobenzene	Not detected	100		ug/kg	72.3	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	72.3	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	72.3	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	72.3	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	72.3	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	72.3	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	72.3	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	72.3	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	72.3	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	72.3	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	72.3	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	72.3	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	72.3	96-12-8	
1,2,4-Trichlorobenzene	Not detected	480		ug/kg	72.3	120-82-1	
1,2,3-Trichlorobenzene	Not detected	480		ug/kg	72.3	87-61-6	
Naphthalene	Not detected	400		ug/kg	72.3	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	72.3	91-57-6	
i							



Lab Sample ID: S25191.08

Sample Tag: SB-6 14-15'

Collected Date/Time: 06/10/2021 11:30

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	11.518/11	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	87	1		%	1			

Metals

Method: SW6020A, Run Date: 06/15/21 14:35, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Arsenic	3.95	0.20		mg/kg	250	7440-38-2		
Barium	49.7	1.0		mg/kg	250	7440-39-3		
Cadmium	Not detected	0.20		mg/kg	250	7440-43-9		
Chromium	8.89	0.50		mg/kg	250	7440-47-3		
Copper	11.2	0.50		mg/kg	250	7440-50-8		
Lead	6.63	0.30		mg/kg	250	7439-92-1		
Silver	Not detected	0.20		mg/kg	250	7440-22-4		

Method: SW6020A, Run Date: 06/15/21 15:52, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	250	7782-49-2	
Zinc	26.0	0.50		mg/kg	250	7440-66-6	

Method: SW7471B. Run Date: 06/15/21 14:21. Analyst: JRH

motification in 12, than batter out to 21 i in 21, than you or at										
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags			
Mercury	Not detected	0.050		ma/ka	68	7439-97-6				

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 17:20, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.08 (continued)

Sample Tag: SB-6 14-15'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 20:02, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 03:25, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	62.4	60-29-7	
Acetone	Not detected	1,000		ug/kg	62.4	67-64-1	
Methyl iodide	Not detected	100		ug/kg	62.4	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	62.4	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	62.4	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	62.4	107-13-1	
2-Butanone (MEK)	Not detected	940		ug/kg	62.4	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	62.4	75-71-8	
Chloromethane	Not detected	300		ug/kg	62.4	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	62.4	75-01-4	
Bromomethane	Not detected	200		ug/kg	62.4	74-83-9	
Chloroethane	Not detected	300		ug/kg	62.4	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	62.4	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	62.4	75-35-4	
Methylene chloride	Not detected	100		ug/kg	62.4	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	62.4	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	62.4	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	62.4	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	62.4	109-99-9	
Chloroform	Not detected	60		ug/kg	62.4	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	62.4	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	62.4	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	62.4	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	62.4	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	62.4	56-23-5	
Benzene	Not detected	60		ug/kg	62.4	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	62.4	107-06-2	
Trichloroethene	Not detected	60		ug/kg	62.4	79-01-6	



Lab Sample ID: S25191.08 (continued)

Sample Tag: SB-6 14-15'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 03:25, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloropropane	Not detected	60		ug/kg	62.4	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	62.4	75-27-4	
Dibromomethane	Not detected	300		ug/kg	62.4	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	62.4	10061-01-5	
Toluene	Not detected	60		ug/kg	62.4	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	62.4	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	62.4	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	62.4	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	62.4	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	62.4	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	62.4	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	62.4	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	62.4	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	62.4	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	62.4		
o-Xylene	Not detected	60		ug/kg	62.4	95-47-6	
Styrene	Not detected	60		ug/kg	62.4	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	62.4	98-82-8	
Bromoform	Not detected	100		ug/kg	62.4	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	62.4	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	62.4	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	62.4	103-65-1	
Bromobenzene	Not detected	100		ug/kg	62.4	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	62.4	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	62.4	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	62.4	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	62.4	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	62.4	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	62.4	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	62.4	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	62.4	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	62.4	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	62.4	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	62.4	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	62.4	96-12-8	
1,2,4-Trichlorobenzene	Not detected	410		ug/kg	62.4	120-82-1	
1,2,3-Trichlorobenzene	Not detected	410		ug/kg	62.4	87-61-6	
Naphthalene	Not detected	300		ug/kg	62.4	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	62.4	91-57-6	



Lab Sample ID: S25191.09

Sample Tag: SB-7 1-2'

Collected Date/Time: 06/10/2021 12:10

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction	Completed	SW3550C	06/15/21 18:30	PL	
Sample wt. (g) / Methanol (ml)*	11.213/11	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	85	1		%	1			

Metals

Method: SW6020A, Run Date: 06/15/21 14:36, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.59	0.20		mg/kg	277	7440-38-2	
Barium	64.1	1.0		mg/kg	277	7440-39-3	
Cadmium	0.36	0.20		mg/kg	277	7440-43-9	
Chromium	4.49	0.50		mg/kg	277	7440-47-3	
Copper	5.49	0.50		mg/kg	277	7440-50-8	
Lead	8.89	0.30		mg/kg	277	7439-92-1	
Silver	Not detected	0.20		ma/ka	277	7440-22-4	

Method: SW6020A, Run Date: 06/15/21 15:53, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	277	7782-49-2	_
Zinc	16.4	0.50		mg/kg	277	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:23, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	63	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 17:31, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.09 (continued)

Sample Tag: SB-7 1-2'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 20:22, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 03:48, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	66.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	66.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	66.5	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	66.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	66.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	66.5	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	66.5	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	66.5	75-71-8	
Chloromethane	Not detected	300		ug/kg	66.5	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	66.5	75-01-4	
Bromomethane	Not detected	300		ug/kg	66.5	74-83-9	
Chloroethane	Not detected	300		ug/kg	66.5	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	66.5	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	66.5	75-35-4	
Methylene chloride	Not detected	100		ug/kg	66.5	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	66.5	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	66.5	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	66.5	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	66.5	109-99-9	
Chloroform	Not detected	70		ug/kg	66.5	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	66.5	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	66.5	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	66.5	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	66.5	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	66.5	56-23-5	
Benzene	Not detected	70		ug/kg	66.5	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	66.5	107-06-2	
Trichloroethene	Not detected	70		ug/kg	66.5	79-01-6	



Lab Sample ID: S25191.09 (continued)

Sample Tag: SB-7 1-2'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 03:48, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloropropane	Not detected	70		ug/kg	66.5	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	66.5	75-27-4	
Dibromomethane	Not detected	300		ug/kg	66.5	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	66.5	10061-01-5	
Toluene	Not detected	70		ug/kg	66.5	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	66.5	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	66.5	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	66.5	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	66.5	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	66.5	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	66.5	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	66.5	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	66.5	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	66.5	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	66.5		
o-Xylene	Not detected	70		ug/kg	66.5	95-47-6	
Styrene	Not detected	70		ug/kg	66.5	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	66.5	98-82-8	
Bromoform	Not detected	100		ug/kg	66.5	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	66.5	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	66.5	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	66.5	103-65-1	
Bromobenzene	Not detected	100		ug/kg	66.5	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	66.5	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	66.5	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	66.5	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	66.5	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	66.5	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	66.5	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	66.5	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	66.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	66.5	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	66.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	66.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	66.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	440		ug/kg	66.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	440		ug/kg	66.5	87-61-6	
Naphthalene	Not detected	300		ug/kg	66.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	66.5	91-57-6	



Lab Sample ID: S25191.10

Sample Tag: SB-7 5.5-6.5'

Collected Date/Time: 06/10/2021 12:15

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	11.027/11	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	86	1		%	1			

Metals

Method: SW6020A, Run Date: 06/15/21 14:38, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Arsenic	1.09	0.20		mg/kg	255	7440-38-2	
Barium	32.8	1.0		mg/kg	255	7440-39-3	
Cadmium	Not detected	0.20		mg/kg	255	7440-43-9	
Chromium	6.74	0.50		mg/kg	255	7440-47-3	
Copper	6.09	0.50		mg/kg	255	7440-50-8	
Lead	4.43	0.30		mg/kg	255	7439-92-1	
Silver	Not detected	0.20		mg/kg	255	7440-22-4	

Method: SW6020A, Run Date: 06/15/21 15:55, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	255	7782-49-2	
Zinc	18.1	0.50		mg/kg	255	7440-66-6	

Method: SW7471B. Run Date: 06/15/21 14:25. Analyst: JRH

mothodi offi ii ib, itali batoi ooi io	and the of the order	01111						
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Mercury	Not detected	0.050		ma/ka	65	7439-97-6		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 17:42, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.10 (continued)

Sample Tag: SB-7 5.5-6.5'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 20:41, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 04:11, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	66.1	60-29-7	_
Acetone	Not detected	1,000		ug/kg	66.1	67-64-1	
Methyl iodide	Not detected	100		ug/kg	66.1	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	66.1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	66.1	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	66.1	107-13-1	
2-Butanone (MEK)	Not detected	990		ug/kg	66.1	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	66.1	75-71-8	
Chloromethane	Not detected	300		ug/kg	66.1	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	66.1	75-01-4	
Bromomethane	Not detected	300		ug/kg	66.1	74-83-9	
Chloroethane	Not detected	300		ug/kg	66.1	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	66.1	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	66.1	75-35-4	
Methylene chloride	Not detected	100		ug/kg	66.1	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	66.1	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	66.1	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	66.1	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	66.1	109-99-9	
Chloroform	Not detected	70		ug/kg	66.1	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	66.1	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	66.1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	66.1	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	66.1	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	66.1	56-23-5	
Benzene	Not detected	70		ug/kg	66.1	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	66.1	107-06-2	
Trichloroethene	Not detected	70		ug/kg	66.1	79-01-6	



Lab Sample ID: S25191.10 (continued)

Sample Tag: SB-7 5.5-6.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 04:11, Analyst: KAG (continued)

1,2-Dichloropropane Not detected 100 ug/kg 66.1 78.87-5 75.27-4	Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromomethane Not detected 300 ug/kg 66.1 74-95-3	1,2-Dichloropropane	Not detected	70		ug/kg	66.1	78-87-5	
cis-1,3-Dichloropropene Not detected 70 ug/kg 66.1 10061-15 Toluene Not detected 70 ug/kg 66.1 1008-8-3 Trans-1,3-Dichloropropene Not detected 70 ug/kg 66.1 10061-02-6 1,1,2-Trichloroethane Not detected 70 ug/kg 66.1 127-18-4 Tetrachloroethane Not detected 70 ug/kg 66.1 127-18-4 Taman-1,4-Dichloro-2-butene Not detected 70 ug/kg 66.1 105-76-8 Dibromochloromethane Not detected 30 ug/kg 66.1 106-93-4 M 1,2-Dibromoethane Not detected 70 ug/kg 66.1 106-93-4 M Chlorobenzene Not detected 70 ug/kg 66.1 100-41-4 M Litylenzene Not detected 70 ug/kg 66.1 100-41-4 M Slyrene Not detected 70 ug/kg 66.1 100-41-5 M	Bromodichloromethane	Not detected	100		ug/kg	66.1	75-27-4	
Toluene	Dibromomethane	Not detected	300		ug/kg	66.1	74-95-3	
trans-1,3-Dichloropropene Not detected 70 ug/kg 66.1 1006-102-6 1,1,2-Trichloroethane Not detected 70 ug/kg 66.1 79-00-5 Tetrachloroethane Not detected 70 ug/kg 66.1 1127-18-4 trans-1,4-Dichloro-2-butene Not detected 100 ug/kg 66.1 110-57-6 Dibromochloromethane Not detected 30 ug/kg 66.1 1124-48-1 1,2-Dibromoethane Not detected 70 ug/kg 66.1 108-90-7 Chlorobenzene Not detected 100 ug/kg 66.1 108-90-7 1,1,1,2-Tetrachloroethane Not detected 70 ug/kg 66.1 100-41-4 Ethylbenzene Not detected 70 ug/kg 66.1 100-41-4 p.m-Xylene Not detected 70 ug/kg 66.1 100-42-5 Styrene Not detected 70 ug/kg 66.1 95-47-6 Isopropylbenzene Not detected 70 ug/	cis-1,3-Dichloropropene	Not detected	70		ug/kg	66.1	10061-01-5	
1,1,2-Trichloroethane	Toluene	Not detected	70		ug/kg	66.1	108-88-3	
Tetrachloroethene	trans-1,3-Dichloropropene	Not detected	70		ug/kg	66.1	10061-02-6	
trans-1,4-Dichloro-2-butene Not detected 70 ug/kg 66.1 110-57-6 Dibromochloromethane Not detected 100 ug/kg 66.1 124-48-1 1,2-Dibromochlane Not detected 70 ug/kg 66.1 108-93-4 M Chlorobenzene Not detected 100 ug/kg 66.1 108-90-7 11,1,2-Tetrachloroethane Not detected 100 ug/kg 66.1 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 100-41-4 110-41-4 100-	1,1,2-Trichloroethane	Not detected	70		ug/kg	66.1	79-00-5	
Dibromochloromethane Not detected 100 ug/kg 66.1 124-48-1 120-10romoethane Not detected 30 ug/kg 66.1 106-93-4 M M M M M M M M M	Tetrachloroethene	Not detected	70		ug/kg	66.1	127-18-4	
1,2-Dibromoethane Not detected 70 ug/kg 66.1 106-93-4 M Chlorobenzene Not detected 70 ug/kg 66.1 108-90-7 1,1,1,2-Tetrachloroethane Not detected 100 ug/kg 66.1 100-41-4 Ethylbenzene Not detected 70 ug/kg 66.1 100-41-4 p,m-Xylene Not detected 70 ug/kg 66.1 95-47-6 Styrene Not detected 70 ug/kg 66.1 95-47-6 Styrene Not detected 70 ug/kg 66.1 96-82-8 Bromoform Not detected 70 ug/kg 66.1 75-25-2 Bromoform Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 <	trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	66.1	110-57-6	
Chlorobenzene Not detected 70 ug/kg 66.1 108-90-7 1,1,1,2-Tetrachloroethane Not detected 100 ug/kg 66.1 630-20-6 Ethylbenzene Not detected 70 ug/kg 66.1 100-41-4 p.m-Xylene Not detected 100 ug/kg 66.1 100-42-5 Styrene Not detected 70 ug/kg 66.1 100-42-5 Isopropylbenzene Not detected 300 ug/kg 66.1 100-42-5 Isopropylbenzene Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Triinblroropropane Not detected 70 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 70 ug/kg 66.1 108-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-66-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg	Dibromochloromethane	Not detected	100		ug/kg	66.1	124-48-1	
1,1,1,2-Tetrachloroethane Not detected 70 ug/kg 66.1 630-20-6 Ethylbenzene Not detected 70 ug/kg 66.1 100-41-4 p,m-Xylene Not detected 100 ug/kg 66.1 100-41-4 c-Xylene Not detected 70 ug/kg 66.1 95-47-6 Styrene Not detected 70 ug/kg 66.1 100-42-5 Isopropylbenzene Not detected 100 ug/kg 66.1 98-82-8 Bromoform Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 100 ug/kg 66.1 103-65-1 Bromobenzene Not detected 100 ug/kg 66.1 108-67-8 Hert-Butylbenzene Not detected 70 ug/kg 66.1	1,2-Dibromoethane	Not detected	30		ug/kg	66.1	106-93-4	М
Ethylbenzene Not detected 70 ug/kg 66.1 100-41-4 p.m-Xylene Not detected 100 ug/kg 66.1 95-47-6 Styrene Not detected 70 ug/kg 66.1 95-47-6 Styrene Not detected 300 ug/kg 66.1 98-82-8 Bromoform Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-86-1 1,3-5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1	Chlorobenzene	Not detected	70		ug/kg	66.1	108-90-7	
p,n-Xylene Not detected 100 ug/kg 66.1 o-Xylene Not detected 70 ug/kg 66.1 95-47-6 Styrene Not detected 70 ug/kg 66.1 100-42-5 Isopropylbenzene Not detected 300 ug/kg 66.1 98-82-8 Bromoform Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 103-65-1 1,2,3-Trimbloropropane Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-86-1 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2-A-Dichlorobenzene Not detected 100 ug/kg 66.1 98	1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	66.1	630-20-6	
o-Xylene Not detected 70 ug/kg 66.1 95-47-6 Styrene Not detected 70 ug/kg 66.1 100-42-5 Isopropylbenzene Not detected 300 ug/kg 66.1 98-82-8 Bromoform Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-86-1 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg <t< td=""><td>Ethylbenzene</td><td>Not detected</td><td>70</td><td></td><td>ug/kg</td><td>66.1</td><td>100-41-4</td><td></td></t<>	Ethylbenzene	Not detected	70		ug/kg	66.1	100-41-4	
Styrene Not detected 70 ug/kg 66.1 100-42-5 Isopropylbenzene Not detected 300 ug/kg 66.1 98-82-8 Bromoform Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg	p,m-Xylene	Not detected	100		ug/kg	66.1		
Isopropylbenzene	o-Xylene	Not detected	70		ug/kg	66.1	95-47-6	
Bromoform Not detected 100 ug/kg 66.1 75-25-2 1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 70 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 etert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/k	Styrene	Not detected	70		ug/kg	66.1	100-42-5	
1,1,2,2-Tetrachloroethane Not detected 70 ug/kg 66.1 79-34-5 1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 100 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2-4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 </td <td>Isopropylbenzene</td> <td>Not detected</td> <td>300</td> <td></td> <td>ug/kg</td> <td>66.1</td> <td>98-82-8</td> <td></td>	Isopropylbenzene	Not detected	300		ug/kg	66.1	98-82-8	
1,2,3-Trichloropropane Not detected 100 ug/kg 66.1 96-18-4 n-Propylbenzene Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 100 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 <t< td=""><td>Bromoform</td><td>Not detected</td><td>100</td><td></td><td>ug/kg</td><td>66.1</td><td>75-25-2</td><td></td></t<>	Bromoform	Not detected	100		ug/kg	66.1	75-25-2	
n-Propylbenzene Not detected 70 ug/kg 66.1 103-65-1 Bromobenzene Not detected 100 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 400	1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	66.1	79-34-5	
Bromobenzene Not detected 100 ug/kg 66.1 108-86-1 1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 400 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 300 <t< td=""><td>1,2,3-Trichloropropane</td><td>Not detected</td><td>100</td><td></td><td>ug/kg</td><td>66.1</td><td>96-18-4</td><td></td></t<>	1,2,3-Trichloropropane	Not detected	100		ug/kg	66.1	96-18-4	
1,3,5-Trimethylbenzene Not detected 70 ug/kg 66.1 108-67-8 tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2,4-Trichlorobenzene Not detected 400	n-Propylbenzene	Not detected	70		ug/kg	66.1	103-65-1	
tert-Butylbenzene Not detected 70 ug/kg 66.1 98-06-6 1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 <td>Bromobenzene</td> <td>Not detected</td> <td>100</td> <td></td> <td>ug/kg</td> <td>66.1</td> <td>108-86-1</td> <td></td>	Bromobenzene	Not detected	100		ug/kg	66.1	108-86-1	
1,2,4-Trimethylbenzene Not detected 70 ug/kg 66.1 95-63-6 sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	1,3,5-Trimethylbenzene	Not detected	70		ug/kg	66.1	108-67-8	
sec-Butylbenzene Not detected 70 ug/kg 66.1 135-98-8 p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	tert-Butylbenzene	Not detected	70		ug/kg	66.1	98-06-6	
p-Isopropyltoluene Not detected 100 ug/kg 66.1 99-87-6 1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	1,2,4-Trimethylbenzene	Not detected	70		ug/kg	66.1	95-63-6	
1,3-Dichlorobenzene Not detected 100 ug/kg 66.1 541-73-1 1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	sec-Butylbenzene	Not detected	70		ug/kg	66.1	135-98-8	
1,4-Dichlorobenzene Not detected 100 ug/kg 66.1 106-46-7 1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	p-Isopropyltoluene	Not detected	100		ug/kg	66.1	99-87-6	
1,2-Dichlorobenzene Not detected 100 ug/kg 66.1 95-50-1 1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	1,3-Dichlorobenzene	Not detected	100		ug/kg	66.1	541-73-1	
1,2,3-Trimethylbenzene Not detected 70 ug/kg 66.1 526-73-8 n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	1,4-Dichlorobenzene	Not detected	100		ug/kg	66.1	106-46-7	
n-Butylbenzene Not detected 70 ug/kg 66.1 104-51-8 Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	1,2-Dichlorobenzene	Not detected	100		ug/kg	66.1	95-50-1	
Hexachloroethane Not detected 400 ug/kg 66.1 67-72-1 1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	1,2,3-Trimethylbenzene	Not detected	70		ug/kg	66.1	526-73-8	
1,2-Dibromo-3-chloropropane Not detected 300 ug/kg 66.1 96-12-8 1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	n-Butylbenzene	Not detected	70		ug/kg	66.1	104-51-8	
1,2,4-Trichlorobenzene Not detected 440 ug/kg 66.1 120-82-1	Hexachloroethane	Not detected	400		ug/kg	66.1	67-72-1	
• •	1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	66.1	96-12-8	
1,2,3-Trichlorobenzene Not detected 440 ug/kg 66.1 87-61-6	1,2,4-Trichlorobenzene	Not detected	440		ug/kg	66.1	120-82-1	
	1,2,3-Trichlorobenzene	Not detected	440		ug/kg	66.1	87-61-6	
Naphthalene Not detected 300 ug/kg 66.1 91-20-3	Naphthalene	Not detected	300		ug/kg	66.1	91-20-3	
2-Methylnaphthalene Not detected 100 ug/kg 66.1 91-57-6	2-Methylnaphthalene	Not detected	100		ug/kg	66.1	91-57-6	



Lab Sample ID: S25191.11

Sample Tag: SB-8 1-2'

Collected Date/Time: 06/10/2021 12:45

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	10.085/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	86	1		%	1			

Metals

Method: SW6020A, Run Date: 06/15/21 14:39, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Arsenic	1.47	0.20		mg/kg	253	7440-38-2		
Barium	61.8	1.0		mg/kg	253	7440-39-3		
Cadmium	Not detected	0.20		mg/kg	253	7440-43-9		
Chromium	5.18	0.50		mg/kg	253	7440-47-3		
Copper	6.60	0.50		mg/kg	253	7440-50-8		
Lead	18.0	0.30		mg/kg	253	7439-92-1		
Silver	Not detected	0.20		mg/kg	253	7440-22-4		

Method: SW6020A, Run Date: 06/15/21 15:56, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	253	7782-49-2	_
Zinc	20.8	0.50		mg/kg	253	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:27, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	0.055	0.050		mg/kg	64	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 19:02, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.11 (continued)

Sample Tag: SB-8 1-2'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 21:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		_
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	300	300		ug/kg	10	207-08-9	р	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	500	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	400	300		ug/kg	10	85-01-8		
Pyrene	400	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 04:33, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Diethyl ether	Not detected	300		ug/kg	65.8	60-29-7		
Acetone	Not detected	1,000		ug/kg	65.8	67-64-1		
Methyl iodide	Not detected	100		ug/kg	65.8	74-88-4		
Carbon disulfide	Not detected	300		ug/kg	65.8	75-15-0		
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	65.8	1634-04-4		
Acrylonitrile	Not detected	100		ug/kg	65.8	107-13-1		
2-Butanone (MEK)	Not detected	990		ug/kg	65.8	78-93-3		
Dichlorodifluoromethane	Not detected	300		ug/kg	65.8	75-71-8		
Chloromethane	Not detected	300		ug/kg	65.8	74-87-3		
Vinyl chloride	Not detected	70		ug/kg	65.8	75-01-4		
Bromomethane	Not detected	300		ug/kg	65.8	74-83-9		
Chloroethane	Not detected	300		ug/kg	65.8	75-00-3		
Trichlorofluoromethane	Not detected	100		ug/kg	65.8	75-69-4		
1,1-Dichloroethene	Not detected	70		ug/kg	65.8	75-35-4		
Methylene chloride	Not detected	100		ug/kg	65.8	75-09-2		
trans-1,2-Dichloroethene	Not detected	70		ug/kg	65.8	156-60-5		
1,1-Dichloroethane	Not detected	70		ug/kg	65.8	75-34-3		
cis-1,2-Dichloroethene	Not detected	70		ug/kg	65.8	156-59-2		
Tetrahydrofuran*	Not detected	1,000		ug/kg	65.8	109-99-9		
Chloroform	Not detected	70		ug/kg	65.8	67-66-3		
Bromochloromethane	Not detected	100		ug/kg	65.8	74-97-5		
1,1,1-Trichloroethane	Not detected	70		ug/kg	65.8	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	65.8	108-10-1		
2-Hexanone	Not detected	3,000		ug/kg	65.8	591-78-6		
Carbon tetrachloride	Not detected	70		ug/kg	65.8	56-23-5		
Benzene	Not detected	70		ug/kg	65.8	71-43-2		
1,2-Dichloroethane	Not detected	70		ug/kg	65.8	107-06-2		

 $p\hbox{-Benzo}(b) Fluoranthene \ and \ Benzo(k) Fluoranthene \ integrated \ as \ one \ peak.$



Lab Sample ID: S25191.11 (continued)

Sample Tag: SB-8 1-2'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 04:33, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	70		ug/kg	65.8	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	65.8	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	65.8	75-27-4	
Dibromomethane	Not detected	300		ug/kg	65.8	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	65.8	10061-01-5	
Toluene	Not detected	70		ug/kg	65.8	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	65.8	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	65.8	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	65.8	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	65.8	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	65.8	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	65.8	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	65.8	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	65.8	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	65.8	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	65.8		
o-Xylene	Not detected	70		ug/kg	65.8	95-47-6	
Styrene	Not detected	70		ug/kg	65.8	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	65.8	98-82-8	
Bromoform	Not detected	100		ug/kg	65.8	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	65.8	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	65.8	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	65.8	103-65-1	
Bromobenzene	Not detected	100		ug/kg	65.8	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	65.8	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	65.8	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	65.8	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	65.8	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	65.8	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	65.8	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	65.8	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	65.8	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	65.8	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	65.8	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	65.8	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	65.8	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	65.8	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	65.8	87-61-6	
Naphthalene	Not detected	300		ug/kg	65.8	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	65.8	91-57-6	

M-Result reported to MDL not RDL



Lab Sample ID: S25191.12

Sample Tag: SB-8 7-8'

Collected Date/Time: 06/10/2021 12:50

Matrix: Soil

COC Reference: 137738

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3050B	06/15/21 13:15	JRH	
Extraction, PCB*	Completed	SW3546	06/15/21 17:00	JWR	
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	10.007/10	SW5035A	06/14/21 11:08	REC	
Mercury Digestion	Completed	SW7471B	06/15/21 11:15	JRH	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Total Solids*	87	1		%	1			

Metals

Method: SW6020A, Run Date: 06/15/21 14:41, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Arsenic	1.86	0.20		mg/kg	258	7440-38-2		
Barium	60.9	1.0		mg/kg	258	7440-39-3		
Cadmium	Not detected	0.20		mg/kg	258	7440-43-9		
Chromium	7.04	0.50		mg/kg	258	7440-47-3		
Copper	5.37	0.50		mg/kg	258	7440-50-8		
Lead	5.02	0.30		mg/kg	258	7439-92-1		
Silver	Not detected	0.20		mg/kg	258	7440-22-4		

Method: SW6020A, Run Date: 06/15/21 15:57, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium	Not detected	0.40		mg/kg	258	7782-49-2	
Zinc	18.0	0.50		mg/kg	258	7440-66-6	

Method: SW7471B, Run Date: 06/15/21 14:28, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury	Not detected	0.050		mg/kg	64	7439-97-6	

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/15/21 17:53, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	1	12674-11-2	
PCB-1242	Not detected	330		ug/kg	1	53469-21-9	
PCB-1221	Not detected	330		ug/kg	1	11104-28-2	
PCB-1232	Not detected	330		ug/kg	1	11141-16-5	
PCB-1248	Not detected	330		ug/kg	1	12672-29-6	
PCB-1254	Not detected	330		ug/kg	1	11097-69-1	
PCB-1260	Not detected	330		ug/kg	1	11096-82-5	



Lab Sample ID: S25191.12 (continued)

Sample Tag: SB-8 7-8'

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 21:21, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 04:56, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	64.9	60-29-7	
Acetone	Not detected	1,000		ug/kg	64.9	67-64-1	
Methyl iodide	Not detected	100		ug/kg	64.9	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	64.9	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	64.9	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	64.9	107-13-1	
2-Butanone (MEK)	Not detected	970		ug/kg	64.9	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	64.9	75-71-8	
Chloromethane	Not detected	300		ug/kg	64.9	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	64.9	75-01-4	
Bromomethane	Not detected	300		ug/kg	64.9	74-83-9	
Chloroethane	Not detected	300		ug/kg	64.9	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	64.9	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	64.9	75-35-4	
Methylene chloride	Not detected	100		ug/kg	64.9	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	64.9	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	64.9	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	64.9	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	64.9	109-99-9	
Chloroform	Not detected	60		ug/kg	64.9	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	64.9	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	64.9	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	64.9	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	64.9	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	64.9	56-23-5	
Benzene	Not detected	60		ug/kg	64.9	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	64.9	107-06-2	
Trichloroethene	Not detected	60		ug/kg	64.9	79-01-6	
1							



Lab Sample ID: S25191.12 (continued)

Sample Tag: SB-8 7-8'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 04:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichloropropane	Not detected	60		ug/kg	64.9	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	64.9	75-27-4	
Dibromomethane	Not detected	300		ug/kg	64.9	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	64.9	10061-01-5	
Toluene	Not detected	60		ug/kg	64.9	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	64.9	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	64.9	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	64.9	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	64.9	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	64.9	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	64.9	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	64.9	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	64.9	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	64.9	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	64.9		
o-Xylene	Not detected	60		ug/kg	64.9	95-47-6	
Styrene	Not detected	60		ug/kg	64.9	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	64.9	98-82-8	
Bromoform	Not detected	100		ug/kg	64.9	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	64.9	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	64.9	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	64.9	103-65-1	
Bromobenzene	Not detected	100		ug/kg	64.9	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	64.9	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	64.9	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	64.9	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	64.9	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	64.9	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	64.9	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	64.9	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	64.9	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	64.9	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	64.9	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	64.9	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	64.9	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	64.9	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	64.9	87-61-6	
Naphthalene	Not detected	300		ug/kg	64.9	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	64.9	91-57-6	
i							

M-Result reported to MDL not RDL



Lab Sample ID: S25191.13

Sample Tag: SB-2 4-5'

Collected Date/Time: 06/10/2021 13:35

Matrix: Soil

COC Reference: 137739

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	10.499/10	SW5035A	06/14/21 11:08	REC	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 21:41, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 05:18, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	59.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	59.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	59.7	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	59.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	59.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	59.7	107-13-1	
2-Butanone (MEK)	Not detected	900		ug/kg	59.7	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	59.7	75-71-8	
Chloromethane	Not detected	300		ug/kg	59.7	74-87-3	



Lab Sample ID: S25191.13 (continued)

Sample Tag: SB-2 4-5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 05:18, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Vinyl chloride	Not detected	60		ug/kg	59.7	75-01-4	_		
Bromomethane	Not detected	200		ug/kg	59.7	74-83-9			
Chloroethane	Not detected	300		ug/kg	59.7	75-00-3			
Trichlorofluoromethane	Not detected	100		ug/kg	59.7	75-69-4			
1,1-Dichloroethene	Not detected	60		ug/kg	59.7	75-35-4			
Methylene chloride	Not detected	100		ug/kg	59.7	75-09-2			
trans-1,2-Dichloroethene	Not detected	60		ug/kg	59.7	156-60-5			
1,1-Dichloroethane	Not detected	60		ug/kg	59.7	75-34-3			
cis-1,2-Dichloroethene	Not detected	60		ug/kg	59.7	156-59-2			
Tetrahydrofuran*	Not detected	1,000		ug/kg	59.7	109-99-9			
Chloroform	Not detected	60		ug/kg	59.7	67-66-3			
Bromochloromethane	Not detected	100		ug/kg	59.7	74-97-5			
1,1,1-Trichloroethane	Not detected	60		ug/kg	59.7	71-55-6			
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	59.7	108-10-1			
2-Hexanone	Not detected	3,000		ug/kg	59.7	591-78-6			
Carbon tetrachloride	Not detected	60		ug/kg	59.7	56-23-5			
Benzene	Not detected	60		ug/kg	59.7	71-43-2			
1,2-Dichloroethane	Not detected	60		ug/kg	59.7	107-06-2			
Trichloroethene	Not detected	60		ug/kg	59.7	79-01-6			
1,2-Dichloropropane	Not detected	60		ug/kg	59.7	78-87-5			
Bromodichloromethane	Not detected	100		ug/kg	59.7	75-27-4			
Dibromomethane	Not detected	300		ug/kg	59.7	74-95-3			
cis-1,3-Dichloropropene	Not detected	60		ug/kg	59.7	10061-01-5			
Toluene	Not detected	60		ug/kg	59.7	108-88-3			
trans-1,3-Dichloropropene	Not detected	60		ug/kg	59.7	10061-02-6			
1,1,2-Trichloroethane	Not detected	60		ug/kg	59.7	79-00-5			
Tetrachloroethene	Not detected	60		ug/kg	59.7	127-18-4			
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	59.7	110-57-6			
Dibromochloromethane	Not detected	100		ug/kg	59.7	124-48-1			
1,2-Dibromoethane	Not detected	20		ug/kg	59.7	106-93-4	М		
Chlorobenzene	Not detected	60		ug/kg	59.7	108-90-7	IVI		
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	59.7	630-20-6			
Ethylbenzene	Not detected	60		ug/kg ug/kg	59.7	100-41-4			
p,m-Xylene	Not detected	100		ug/kg ug/kg	59.7	100-41-4			
o-Xylene	Not detected	60		ug/kg ug/kg	59.7	95-47-6			
Styrene	Not detected	60		ug/kg ug/kg	59.7	100-42-5			
Isopropylbenzene	Not detected	300		ug/kg ug/kg	59.7	98-82-8			
Bromoform	Not detected	100		ug/kg ug/kg	59.7	75-25-2			
1,1,2,2-Tetrachloroethane	Not detected	60			59.7	79-34-5			
1,2,3-Trichloropropane		100		ug/kg	59.7 59.7	96-18-4			
n-Propylbenzene	Not detected Not detected	60		ug/kg ug/kg	59.7 59.7	103-65-1			
Bromobenzene		100			59.7 59.7	108-86-1			
1,3,5-Trimethylbenzene	Not detected			ug/kg	59.7 59.7	108-67-8			
•	Not detected	60 60		ug/kg		98-06-6			
tert-Butylbenzene	Not detected	60 60		ug/kg	59.7				
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	59.7	95-63-6			
sec-Butylbenzene	Not detected	60		ug/kg	59.7	135-98-8			
p-Isopropyltoluene	Not detected	100		ug/kg	59.7	99-87-6			
1,3-Dichlorobenzene	Not detected	100		ug/kg	59.7	541-73-1			
1,4-Dichlorobenzene	Not detected	100		ug/kg	59.7	106-46-7			

M-Result reported to MDL not RDL



Lab Sample ID: S25191.13 (continued)

Sample Tag: SB-2 4-5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 05:18, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	59.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	59.7	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	59.7	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	59.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	59.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	390		ug/kg	59.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	390		ug/kg	59.7	87-61-6	
Naphthalene	Not detected	300		ug/kg	59.7	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	59.7	91-57-6	



Lab Sample ID: S25191.14

Sample Tag: SB-2 7-8'

Collected Date/Time: 06/10/2021 13:40

Matrix: Soil

COC Reference: 137739

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.2	IR
1	4oz Glass	None	Yes	4.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	9.176/10	SW5035A	06/14/21 11:08	REC	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 22:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 05:41, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	68.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	68.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	68.7	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	68.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	68.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	68.7	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	68.7	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	68.7	75-71-8	
Chloromethane	Not detected	300		ug/kg	68.7	74-87-3	



Lab Sample ID: S25191.14 (continued)

Sample Tag: SB-2 7-8'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 05:41, Analyst: KAG (continued)								
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Vinyl chloride	Not detected	70		ug/kg	68.7	75-01-4		
Bromomethane	Not detected	300		ug/kg	68.7	74-83-9		
Chloroethane	Not detected	300		ug/kg	68.7	75-00-3		
Trichlorofluoromethane	Not detected	100		ug/kg	68.7	75-69-4		
1,1-Dichloroethene	Not detected	70		ug/kg	68.7	75-35-4		
Methylene chloride	Not detected	100		ug/kg	68.7	75-09-2		
trans-1,2-Dichloroethene	Not detected	70		ug/kg	68.7	156-60-5		
1,1-Dichloroethane	Not detected	70		ug/kg	68.7	75-34-3		
cis-1,2-Dichloroethene	Not detected	70		ug/kg	68.7	156-59-2		
Tetrahydrofuran*	Not detected	1,000		ug/kg	68.7	109-99-9		
Chloroform	Not detected	70		ug/kg	68.7	67-66-3		
Bromochloromethane	Not detected	100		ug/kg	68.7	74-97-5		
1,1,1-Trichloroethane	Not detected	70		ug/kg	68.7	71-55-6		
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	68.7	108-10-1		
2-Hexanone	Not detected	3,000		ug/kg	68.7	591-78-6		
Carbon tetrachloride	Not detected	70		ug/kg	68.7	56-23-5		
Benzene	Not detected	70		ug/kg	68.7	71-43-2		
1,2-Dichloroethane	Not detected	70		ug/kg	68.7	107-06-2		
Trichloroethene	Not detected	70		ug/kg	68.7	79-01-6		
1,2-Dichloropropane	Not detected	70		ug/kg	68.7	78-87-5		
Bromodichloromethane	Not detected	100		ug/kg	68.7	75-27-4		
Dibromomethane	Not detected	300		ug/kg	68.7	74-95-3		
cis-1,3-Dichloropropene	Not detected	70		ug/kg	68.7	10061-01-5		
Toluene	Not detected	70		ug/kg	68.7	108-88-3		
trans-1,3-Dichloropropene	Not detected	70		ug/kg	68.7	10061-02-6		
1,1,2-Trichloroethane	Not detected	70		ug/kg	68.7	79-00-5		
Tetrachloroethene	Not detected	70		ug/kg	68.7	127-18-4		
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	68.7	110-57-6		
Dibromochloromethane	Not detected	100		ug/kg	68.7	124-48-1		
1,2-Dibromoethane	Not detected	30		ug/kg	68.7	106-93-4	M	
Chlorobenzene	Not detected	70		ug/kg	68.7	108-90-7		
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	68.7	630-20-6		
Ethylbenzene	Not detected	70		ug/kg	68.7	100-41-4		
p,m-Xylene	Not detected	100		ug/kg	68.7			
o-Xylene	Not detected	70		ug/kg ug/kg	68.7	95-47-6		
Styrene	Not detected	70		ug/kg	68.7	100-42-5		
Isopropylbenzene	Not detected	300		ug/kg	68.7	98-82-8		
Bromoform	Not detected	100		ug/kg ug/kg	68.7	75-25-2		
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg ug/kg	68.7	79-34-5		
1,2,3-Trichloropropane	Not detected	100		ug/kg	68.7	96-18-4		
n-Propylbenzene	Not detected	70		ug/kg	68.7	103-65-1		
Bromobenzene	Not detected	100		ug/kg ug/kg	68.7	108-86-1		
1,3,5-Trimethylbenzene	Not detected	70		ug/kg ug/kg	68.7	108-67-8		
tert-Butylbenzene	Not detected	70		ug/kg ug/kg	68.7	98-06-6		
1,2,4-Trimethylbenzene	Not detected	70		ug/kg ug/kg	68.7	95-63-6		
sec-Butylbenzene	Not detected	70		ug/kg ug/kg	68.7	135-98-8		
p-Isopropyltoluene	Not detected	100		ug/kg ug/kg	68.7	99-87-6		
1,3-Dichlorobenzene	Not detected	100		ug/kg ug/kg	68.7	541-73-1		
1,4-Dichlorobenzene	Not detected					106-46-7		
1,4-DICHIOIODENZENE	not detected	100		ug/kg	68.7	100-40-7		

M-Result reported to MDL not RDL



Lab Sample ID: S25191.14 (continued)

Sample Tag: SB-2 7-8'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 05:41, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	68.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	68.7	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	68.7	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	68.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	68.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	450		ug/kg	68.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	450		ug/kg	68.7	87-61-6	
Naphthalene	Not detected	300		ug/kg	68.7	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	68.7	91-57-6	



Lab Sample ID: S25191.15

Sample Tag: SB-1 4-5'

Collected Date/Time: 06/10/2021 14:05

Matrix: Soil

COC Reference: 137739

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #	
1	40ml Glass	MeOH	Yes	4.2	IR	
1	4oz Glass	None	Yes	4.2	IR	

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	
Sample wt. (g) / Methanol (ml)*	8.760/10	SW5035A	06/14/21 11:08	REC	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 22:20, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 06:04, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	71.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	71.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	71.7	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	71.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	71.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	71.7	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	71.7	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	71.7	75-71-8	
Chloromethane	Not detected	400		ug/kg	71.7	74-87-3	



Lab Sample ID: S25191.15 (continued)

Sample Tag: SB-1 4-5'

Volatile Organics 5035, Method: S	W5035A/8260C, Rui	n Date: 06/1	5/21 06:04, A	nalyst: KAG (c	ontinued)		
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl chloride	Not detected	70		ug/kg	71.7	75-01-4	
Bromomethane	Not detected	300		ug/kg	71.7	74-83-9	
Chloroethane	Not detected	400		ug/kg	71.7	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	71.7	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	71.7	75-35-4	
Methylene chloride	Not detected	100		ug/kg	71.7	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	71.7	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	71.7	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	71.7	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	71.7	109-99-9	
Chloroform	Not detected	70		ug/kg	71.7	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	71.7	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	71.7	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	71.7	108-10-1	
2-Hexanone	Not detected	4,000		ug/kg	71.7	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	71.7	56-23-5	
Benzene	Not detected	70		ug/kg	71.7	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	71.7	107-06-2	
Trichloroethene	Not detected	70		ug/kg	71.7	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	71.7	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg ug/kg	71.7	75-27-4	
Dibromomethane	Not detected	400		ug/kg ug/kg	71.7	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg ug/kg	71.7	10061-01-5	
Toluene	Not detected	70		ug/kg ug/kg	71.7	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg ug/kg	71.7	100-00-3	
1,1,2-Trichloroethane		70 70			71.7	79-00-5	
Tetrachloroethene	Not detected	70 70		ug/kg	71.7	127-18-4	
	Not detected			ug/kg			
trans-1,4-Dichloro-2-butene	Not detected	70 100		ug/kg	71.7	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	71.7	124-48-1	N.4
1,2-Dibromoethane	Not detected	30		ug/kg	71.7	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	71.7	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	71.7	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	71.7	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	71.7	05.47.0	
o-Xylene	Not detected	70 70		ug/kg	71.7	95-47-6	
Styrene	Not detected	70		ug/kg	71.7	100-42-5	
Isopropylbenzene	Not detected	400		ug/kg 	71.7	98-82-8	
Bromoform	Not detected	100		ug/kg 	71.7	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	71.7	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	71.7	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg 	71.7	103-65-1	
Bromobenzene	Not detected	100		ug/kg	71.7	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	71.7	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	71.7	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	71.7	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	71.7	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	71.7	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	71.7	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	71.7	106-46-7	

M-Result reported to MDL not RDL



Lab Sample ID: S25191.15 (continued)

Sample Tag: SB-1 4-5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 06:04, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	71.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	71.7	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	71.7	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	71.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	71.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	470		ug/kg	71.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	470		ug/kg	71.7	87-61-6	
Naphthalene	Not detected	400		ug/kg	71.7	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	71.7	91-57-6	



Lab Sample ID: S25191.16

Sample Tag: SB-1 7-8'

Collected Date/Time: 06/10/2021 14:10

Matrix: Soil

COC Reference: 137739

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #	
1	40ml Glass	MeOH	Yes	4.2	IR	
1	4oz Glass	None	Yes	4.2	IR	

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	06/15/21 13:00	TTV	_
Sample wt. (g) / Methanol (ml)*	10.574/10	SW5035A	06/14/21 11:08	REC	

Inorganics

Method: SM2540B, Run Date: 06/12/21 16:30, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 06/15/21 22:40, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 06:26, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	60.6	60-29-7	
Acetone	Not detected	1,000		ug/kg	60.6	67-64-1	
Methyl iodide	Not detected	100		ug/kg	60.6	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	60.6	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	60.6	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	60.6	107-13-1	
2-Butanone (MEK)	Not detected	910		ug/kg	60.6	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	60.6	75-71-8	
Chloromethane	Not detected	300		ug/kg	60.6	74-87-3	



Lab Sample ID: S25191.16 (continued)

Sample Tag: SB-1 7-8'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 06:26, Analyst: KAG (continued)											
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags				
Vinyl chloride	Not detected	60		ug/kg	60.6	75-01-4					
Bromomethane	Not detected	200		ug/kg	60.6	74-83-9					
Chloroethane	Not detected	300		ug/kg	60.6	75-00-3					
Trichlorofluoromethane	Not detected	100		ug/kg	60.6	75-69-4					
1,1-Dichloroethene	Not detected	60		ug/kg	60.6	75-35-4					
Methylene chloride	Not detected	100		ug/kg	60.6	75-09-2					
trans-1,2-Dichloroethene	Not detected	60		ug/kg	60.6	156-60-5					
1,1-Dichloroethane	Not detected	60		ug/kg	60.6	75-34-3					
cis-1,2-Dichloroethene	Not detected	60		ug/kg	60.6	156-59-2					
Tetrahydrofuran*	Not detected	1,000		ug/kg	60.6	109-99-9					
Chloroform	Not detected	60		ug/kg	60.6	67-66-3					
Bromochloromethane	Not detected	100		ug/kg	60.6	74-97-5					
1,1,1-Trichloroethane	Not detected	60		ug/kg	60.6	71-55-6					
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	60.6	108-10-1					
2-Hexanone	Not detected	3,000		ug/kg	60.6	591-78-6					
Carbon tetrachloride	Not detected	60		ug/kg	60.6	56-23-5					
Benzene	Not detected	60		ug/kg	60.6	71-43-2					
1,2-Dichloroethane	Not detected	60		ug/kg	60.6	107-06-2					
Trichloroethene	Not detected	60		ug/kg	60.6	79-01-6					
1,2-Dichloropropane	Not detected	60		ug/kg	60.6	78-87-5					
Bromodichloromethane	Not detected	100		ug/kg	60.6	75-27-4					
Dibromomethane	Not detected	300		ug/kg	60.6	74-95-3					
cis-1,3-Dichloropropene	Not detected	60		ug/kg	60.6	10061-01-5					
Toluene	Not detected	60		ug/kg	60.6	108-88-3					
trans-1,3-Dichloropropene	Not detected	60		ug/kg	60.6	10061-02-6					
1,1,2-Trichloroethane	Not detected	60		ug/kg	60.6	79-00-5					
Tetrachloroethene	Not detected	60		ug/kg	60.6	127-18-4					
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	60.6	110-57-6					
Dibromochloromethane	Not detected	100		ug/kg	60.6	124-48-1					
1,2-Dibromoethane	Not detected	20		ug/kg	60.6	106-93-4	М				
Chlorobenzene	Not detected	60		ug/kg	60.6	108-90-7					
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	60.6	630-20-6					
Ethylbenzene	Not detected	60		ug/kg	60.6	100-41-4					
p,m-Xylene	Not detected	100		ug/kg	60.6						
o-Xylene	Not detected	60		ug/kg	60.6	95-47-6					
Styrene	Not detected	60		ug/kg	60.6	100-42-5					
Isopropylbenzene	Not detected	300		ug/kg	60.6	98-82-8					
Bromoform	Not detected	100		ug/kg	60.6	75-25-2					
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	60.6	79-34-5					
1,2,3-Trichloropropane	Not detected	100		ug/kg	60.6	96-18-4					
n-Propylbenzene	Not detected	60		ug/kg	60.6	103-65-1					
Bromobenzene	Not detected	100		ug/kg	60.6	108-86-1					
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	60.6	108-67-8					
tert-Butylbenzene	Not detected	60		ug/kg	60.6	98-06-6					
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	60.6	95-63-6					
sec-Butylbenzene	Not detected	60		ug/kg	60.6	135-98-8					
p-Isopropyltoluene	Not detected	100		ug/kg	60.6	99-87-6					
1,3-Dichlorobenzene	Not detected	100		ug/kg	60.6	541-73-1					
1,4-Dichlorobenzene	Not detected	100		ug/kg ug/kg	60.6	106-46-7					
1,7 DIGNOTODONZONO	Not detected	100		ug/kg	00.0	100-40-1					

M-Result reported to MDL not RDL



Lab Sample ID: S25191.16 (continued)

Sample Tag: SB-1 7-8'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 06/15/21 06:26, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	60.6	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	60.6	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	60.6	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	60.6	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	60.6	96-12-8	
1,2,4-Trichlorobenzene	Not detected	400		ug/kg	60.6	120-82-1	
1,2,3-Trichlorobenzene	Not detected	400		ug/kg	60.6	87-61-6	
Naphthalene	Not detected	300		ug/kg	60.6	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	60.6	91-57-6	

Merit Laboratories Login Checklist

Lab Set ID:S25191

Client: PME02 (PM Environmental, Inc. - Berkley)

Client Review By: _____ Date:_

Project: 01-11288-1-0004

Submitted: 06/11/2021 11:10 Login User: MMC

Attention: Jana Beumel Address: PM Environmental, Inc. 4080 W. Eleven Mile

Berkley, MI 48072

Phone: 0:248-336-9988 FAX: Email: Beumel@pmenv.com

Selec	tion			Description	Note
Sam	ole Receiv	ving			
01.	X Yes	No	N/A	Samples are received at 4C +/- 2C Thermometer #	IR 4.2
02.	X Yes	No	N/A	Received on ice/ cooling process begun	
03.	Yes	X No	N/A	Samples shipped	
04.	Yes	X No	N/A	Samples left in 24 hr. drop box	
05.	Yes	No	X N/A	Are there custody seals/tape or is the drop box locked	
Chair	n of Custo	ody			
06.	X Yes	No	N/A	COC adequately filled out	
07.	X Yes	No	N/A	COC signed and relinquished to the lab	
08.	X Yes	No	N/A	Sample tag on bottles match COC	
09.	Yes	X No	N/A	Subcontracting needed? Subcontacted to:	
Pres	ervation				
10.	X Yes	No	N/A	Do sample have correct chemical preservation	
11.	Yes	No	X N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	Yes	X No	N/A	Did any samples need to be preserved in the lab?	
Bottl	e Conditi	ons			
13.	X Yes	No	N/A	All bottles intact	
14.	X Yes	No	N/A	Appropriate analytical bottles are used	
15.	X Yes	No	N/A	Merit bottles used	
16.	X Yes	No	N/A	Sufficient sample volume received	
17.	Yes	X No	□ N/A	Samples require laboratory filtration	
18.	X Yes	No	□ N/A	Samples submitted within holding time	
19.	Yes	No	X N/A	Do water VOC or TOX bottles contain headspace	
Corre	ective acti	on for all	exceptions	s is to call the client and to notify the project manager.	



2680 East Lansing Dr., East Lansing, MI 48823 Phone (517) 332-0167 Fax (517) 332-4034 www.meritlabs.com

	1		2
C.O.C. PAGE # _	1	OF.	a

- 137738

REPOR	ТТО	. >	Labor	atories, Inc.	CH	IAIN C	OF C	U	ST	OD	YR	EC	OF	RD										. 11	VVC	ICE	TO
CONTACT NAME	Jana	Beume	1							CONTA	CT NAM	ΛE												SAME		r 2 05	111
			mental							COMP	ANY						y /			Carlo	,	,			1 1	7.81	-,
ADDRESS 402			leven 1	Mile Rd.					1	ADDRE	SS									Vic.			T-		9 111		
CITY Berkl					STATE	ZIP COD	E			CITY	200				11 11		11	-111		-			STAT	Ε	ZIP COI	DE	io (
PHONE NO.	7		FAX NO.		P.O. NO.				F	PHON	ENO.						E-N	IAIL AD	DRESS								
E-MAIL ADDRESS	Beumelo	2 pmen	. com		QUOTE NO.					1 3/2	Mus		> 10	Α	NAL	YSI	S (AT	TACH	LIST	TIF N	ORE	SPAC	E IS RE	QUIRE	D)	(44 M	Marie
PROJECT NO./NAM	51-11282	8-1-00	104		SAMPLER(S) - PL	EASE PRINT	T/SIGN	NAV	15	_;	5 ,	_	- /					100					Cert	ificatio	ins		
				2 DAYS □3 DA	,												Metals							HO VAF			g Water
DELIVERABLE	S REQUIR	ED ST	D □ LEVEL	II □ LEVEL III	□ LEVEL IV □	EDD [□ OTH	HER	R								M						□ Do			NPDES	. 1
1.5522.000.000.000	GW=GROUN SL=SLUDG		WW=WAST		IL L=LIQUID VP=WIPE A=A	SD=S	OLID	E	1		ntaine servat			57	As	SS	0-						Proje □ De	ect Loc etroit		s New Yo	rk
MERIT LAB NO.	YE DATE	AR TIME	IDE	SAMPLE T			MATRIX # OF	# OTTLES	NONE	HCI HCI	T	1	OTHER	2	PNAS	25	MI						□ Ot	her cial Ins	structi	ons	100
25 [9] .01		0925	5B-3	1-2'	,			2	1			1		X	χ			111	-	or	, 1		Оро	WIRL	truoti	1111111	1
.07	1	0930	5B-3	5.6'	v		1	1	1			1		X	X			1						1.		1	
.03		1010	SB-4	3.5-4.5	*							1		X	X	X	X	444		-	7/ /			- 179 7			
.04		1015	58-4	6-7'	,							1	П	X	X	X	X						10-11	. 3		1771	
.05		1055	58-5	3.5-4.5	•		П		П			1	П	Χ	X	X	X							a e			li de
.06		1100	5B-5	7-8'	•	Lugs.								X	X	X	X	7 1 12/			TIX				1000	e la r	0.3
.57		1125	SB-6	5,5-6.5	1 1	and the state of			П					X	X	X	X		1							0.1	(3)
.08		1130	58-6	14-15'										X	X	X	X	1-13			1	9		en o	Land I		400
.09		1210	SB-7	1-2'				İ					П	X	X	X	X							711	(1)	0.	
.10		1215	SB-7	5.5-6.5	1	31	4				4		П	X	X	X	X		4	-	9		1	1000		1.	JIL.
.11		1245	58-8	1-2	7	1 111					19		П	X	X	X	X								100		72-1
.12	1	1250	SB-8	7-8'	1		V	1	V			1		X	X	X	X		0	158	211			11,5	Pal	- NE	4
RELINQUISHED BY SIGNATURE/ORGA	Y:	92	2		Sampler	DATE	16	IE 10	11	0.	IQUISH		' :					V	1	1.	9/		6	111/	2 DATI	11)	TIME
RECEIVED BY: SIGNATURE/ORGA	-	PM	Cold S	torase	1	PATE		IE 10	1.1		IVED BY		NIZA	TION			1	11	n	M	Aco	Po		6/11	21 DATE	111	DIME
RELINQUISHED BY SIGNATURE/ORGA	Y:		-	0		DATE	TIN	1E		SEAL	NO.		а	S	EAL IN		NO		TIALS	7	NO	TES:	TE	MP. ON A	RRIVAL	4.2	2
RECEIVED BY: SIGNATURE/ORGA	ANIZATION		PLEA	SEMOTE SIGNIN	G ACKNOWLED	GES ADI	HERE	4	1	SEAL ME		SAN	1PLE		YES E		NO D		N RE	VERS	SE SID	E				0. 2	Rev. 5.18.12



2680 East Lansing Dr., East Lansing, MI 48823 Phone (517) 332-0167 Fax (517) 332-4034 www.meritlabs.com

c.o.c. page # 2 of 2 137739

REPOR	т то	3	Laboratori	es, Inc.	CH	HAIN (OF	CU	S	ГОГ	YC	RE	COI	RD									IN	VOI	CET	0
CONTACT NAME	Jana	Beun	el							CONT	ACT	NAME										[ª	SAME			
	PM E	oul con	mental			1000				COMF	PANY	7.			1											3
			Eleven 1	Tile R.	d,					ADDR	ESS					14.										10
CITY	kley				STATE	ZIP COI	DE			CITY						1						STATE		ZIP CODE		
PHONE NO.	-19		FAX NO.		P.O. NO.					PHON	IE NO						E-MAIL	ADDRES	SS							
E-MAIL ADDRESS	Beume	1 @ pm	env. com		QUOTE NO.					iisk	h	Day.	ie l	Α	NAL	YSIS (ATTA	CH LIS	STIF	MORE	SPAC	E IS REC	QUIRED)	t their	
PROJECT NO./NAM	01-11	288-1-	0004		SAMPLER(S) - PL				ME	_	4	_							ч		-		fication		Line	
TURNAROUND	TIME REC	QUIRED	□1 DAY □2 □	DAYS 3 DA	YS STAND	ARD 🗆	OTH	IER .	_				_									□ Dol		□ NP	nking Wa	iter
DELIVERABLE	S REQUIRI	ED ST	D LEVEL	□ LEVEL III	□ LEVEL IV □	EDD	0	THEF	- 1				_							-	4		ct Loca		DLG	
The state of the s	GW=GROUN SL=SLUDG		WW=WASTEW DRINKING WATER		IL L=LIQUID VP=WIPE A=A	SD=S		40.74	0.5			iners ative		200	As							□ Det			w York	
MERIT LAB NO. FOR LAB USE ONLY	DATE	AR TIME	IDENT	SAMPLE T	AG SCRIPTION		MATRIX	# OF BOTTLES	NONE	HCI	H SO	NaOH	МеОН	2	PWAs							□ Oth		ructions		-
25191 .13		1335	58-2	4-5'	1		5	2	1		T	П	1	X	X					OX.	7		12.123		11.0	\neg
.14	1	1340	58-2	7-8'	6		1	1	1		T	П	1	X	X										7.72	
.15		1405	SB-1	4-5'	,			T	1		\dagger	П	Ш	V	X						1	1-1-7-				
.16	V	1410	SB-1	7-8'			V	V	ý		İ		1	X	X					F V			373	V171 -		
											+											1		-15	, Unic	
10000							No.										1					4	Ala.	Will.	no st	
started set you		116	107	(L		SE		1			4						1	18, 10	1711	1112	
													-						(44.1)		4	100				
Lagrand					11 - 1			- 1			1					-	-		0 1			L 1		1	- 2	
er er er er er	1 - 1			6 //	2	7.0		-				-			-	-	1			-		1 - 1		-	vist "T	
											+	П				-		-					_	_		
il agricult	A TOTAL							1					1	- 1		100	1	1			14		4 116	All		>
RELINQUISHED BY SIGNATURE/ORGA		92	2	/PM =	Sampler	6/10/21	1	ME				SHED I	BY: GANIZA	TION			A	1/		-	6	0/11	12	DATE /	/ THE	
RECEIVED BY: SIGNATURE/ORGA	ANIZATION	PM C	iold Stop	145c	6	10/21	T	ME		RECE			GANIZA	TION		/	1	1	n	ail	col	2	10	DATE 11/21	UINT	5
RELINQUISHED BY SIGNATURE/ORGA			51	XA		DATE	T	ME		SEAL	NO.	equi			SEAL INT			INITIAL	S	NO	OTES:	TEM	IP. ON AR		10	
RECEIVED BY: SIGNATURE/ORGA	ANIZATION		X	9/	61	COZ	(59	2	SEAL	NO.			S	YES	ACT		INITIAL	S						1.2	



Report ID: S25193.01(01) Generated on 06/17/2021

Report to

Attention: Jana Beumel PM Environmental, Inc. 4080 W. Eleven Mile Berkley, MI 48072

Phone: O:248-336-9988 D:248-414-1859 FAX:

Email: Beumel@pmenv.com

Report produced by

Merit Laboratories, Inc. 2680 East Lansing Drive East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions: John Laverty (johnlaverty@meritlabs.com) Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S25193.01-S25193.04

Project: 01-11288-1-0004 Collected Date(s): 06/10/2021

Submitted Date/Time: 06/11/2021 11:10

Sampled by: Shawn Elswick P.O. #: 01-11288-1-0004

Table of Contents

Cover Page (Page 1)

General Report Notes (Page 2)

Report Narrative (Page 2)

Laboratory Certifications (Page 3)

Qualifier Descriptions (Page 3)

Glossary of Abbreviations (Page 3)

Method Summary (Page 4)

Sample Summary (Page 5)

Maya Murshak Technical Director

Naya Mushah



General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples

for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Report Narrative

There is no additional narrative for this analytical report



Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
В	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
Н	Sample submitted and run outside of holding time
1	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
0	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
Т	No correction for total solids
X	Elevated reporting limit due to matrix interference
Υ	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
е	Reported value estimated due to interference
j	Analyte also found in associated method blank
р	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Method Summary

 Method
 Version

 N/A
 Not Applicable

 TO-15
 EPA TO-15 Second Edition January 1999



Sample Summary (4 samples)

	- 1 1 1		
Sample ID	Sample Tag	Matrix	Collected Date/Time
S25193.01	TSG-4	Air	06/10/21 13:00 - 06/10/21 13:05
S25193.02	TSG-3	Air	06/10/21 12:53 - 06/10/21 12:58
S25193.03	TSG-2	Air	06/10/21 13:42 - 06/10/21 13:50
S25193.04	TSG-1	Air	06/10/21 14:10 - 06/10/21 14:15



Lab Sample ID: S25193.01

Sample Tag: TSG-4

Collected Date/Time: 06/10/2021 13:00 - 06/10/2021 13:05

Matrix: Air

COC Reference: A4218

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-8	N/A	06/14/21 15:30	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 06/15/21 17:24, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	60	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	10		ppbv	10	106-99-0	
Benzene	4	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	7	5		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	2		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	4	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Lab Sample ID: S25193.01 (continued)

Sample Tag: TSG-4

TO-15, Method: TO-15, Run Date: 06/15/21 17:24, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	3	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	5	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	231		ppbv	10	115-07-1	Χ
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	10		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	3	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	2		ppbv	10	108-05-4	
p,m-Xylene	4	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 06/15/21 17:24, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	140	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	22		ug/m3	10	106-99-0	
Benzene	13	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	22	16		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	10	107-05-1	



Lab Sample ID: S25193.01 (continued)

Sample Tag: TSG-4

TO-15, Method: TO-15, Run Date: 06/15/21 17:24, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8			
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5			
Cyclohexane	14	6.9		ug/m3	10	110-82-7			
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3			
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4			
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4			
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2			
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5			
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1			
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8			
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1			
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5			
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2			
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5			
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1			
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1			
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7			
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6			
Ethanol*	Not detected	47		ug/m3	10	64-17-5			
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4			
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6			
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8			
Freon 113	Not detected	15		ug/m3	10	76-13-1			
Freon 114	Not detected	14		ug/m3	10	76-14-2			
Heptane	12	8.2		ug/m3	10	142-82-5			
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3			
Hexane	18	7.0		ug/m3	10	110-54-3			
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6			
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0			
Methylene chloride	Not detected	17		ug/m3	10	75-09-2			
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3			
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1			
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4			
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6			
Naphthalene	Not detected	10		ug/m3	10	91-20-3			
Propylene*	Not detected	398		ug/m3	10	115-07-1	X		
Styrene	Not detected	8.5		ug/m3	10	100-42-5			
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6			
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5			
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5			
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1			
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6			
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8			
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1			
Tert-butyl Alcohol	Not detected	30		ug/m3	10	75-65-0			
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4			
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9			
Toluene	11	7.5		ug/m3	10	108-88-3			
Trichloroethene	Not detected	11		ug/m3	10	79-01-6			



Lab Sample ID: S25193.01 (continued)

Sample Tag: TSG-4

TO-15, Method: TO-15, Run Date: 06/15/21 17:24, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	10	108-05-4	
p,m-Xylene	17	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xvlenes	Not detected	26		ua/m3	10	1330-20-7	



Lab Sample ID: S25193.02

Sample Tag: TSG-3

Collected Date/Time: 06/10/2021 12:53 - 06/10/2021 12:58

Matrix: Air

COC Reference: A4218

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-8	N/A	06/14/21 15:30	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 06/15/21 17:56, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	20	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	10		ppbv	10	106-99-0	
Benzene	13	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	11	5		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	2		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	2	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	3	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Lab Sample ID: S25193.02 (continued)

Sample Tag: TSG-3

TO-15, Method: TO-15, Run Date: 06/15/21 17:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	4	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	8	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	6	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	201		ppbv	10	115-07-1	X
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	10		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	8	2		ppbv	10	108-88-3	
Trichloroethene	3	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	3		ppbv	10	75-01-4	Χ
Vinyl acetate	Not detected	2		ppbv	10	108-05-4	
p,m-Xylene	12	4		ppbv	10		
o-Xylene	4	2		ppbv	10	95-47-6	
Total Xylenes	16	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 06/15/21 17:56, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	48	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	22		ug/m3	10	106-99-0	
Benzene	42	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
inyl bromide/	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	34	16		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
hloromethane	Not detected	41		ug/m3	10	74-87-3	
-Chloropropene	Not detected	6.3		ug/m3	10	107-05-1	



Lab Sample ID: S25193.02 (continued)

Sample Tag: TSG-3

TO-15, Method: TO-15, Run Date: 06	/15/21 17:56, Ana	yst: KAG	(continued)				
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	6.9	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	13	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	16	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	28	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	25	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	346		ug/m3	10	115-07-1	X
Styrene	Not detected	8.5		ug/m3	10	100-42-5	^
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.8		ug/m3	10	540-84-1	
· · · · · · · · · · · · · · · · · · ·		9.3 30		-		75-65-0	
Tert-butyl Alcohol Tetrachloroethene	Not detected Not detected			ug/m3	10 10	75-65-0 127-18-4	
		14 5.0		ug/m3	10 10		
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Tricklereethans	30	7.5		ug/m3	10	108-88-3	
Trichloroethene	16	11		ug/m3	10	79-01-6	



Lab Sample ID: S25193.02 (continued)

Sample Tag: TSG-3

TO-15, Method: TO-15, Run Date: 06/15/21 17:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	7.7		ug/m3	10	75-01-4	Χ
Vinyl acetate	Not detected	7.0		ug/m3	10	108-05-4	
p,m-Xylene	52	17		ug/m3	10		
o-Xylene	17	8.7		ug/m3	10	95-47-6	
Total Xylenes	69	26		ug/m3	10	1330-20-7	



Lab Sample ID: S25193.03

Sample Tag: TSG-2

Collected Date/Time: 06/10/2021 13:42 - 06/10/2021 13:50

Matrix: Air

COC Reference: A4218

Sample Containers

Type Preservative(s) Refrigerated? Arrival Temp. (C) Thermometer #
Air Canister None No RT IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-8.5	N/A	06/14/21 15:30	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 06/15/21 18:27, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	300	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	10		ppbv	10	106-99-0	
Benzene	4	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	29	5		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	7		ppbv	10	107-05-1	Χ
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	59		ppbv	10	64-17-5	Χ
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
•	Not detected	20		ppbv	10	141-78-6	
Ethyl Acetate*	Not detected	20		ppbv	10	171700	



Lab Sample ID: S25193.03 (continued)

Sample Tag: TSG-2

TO-15, Method: TO-15, Run Date: 06/15/21 18:27, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 113	Not detected	2		ppbv	10	76-13-1	
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	7	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	8	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	30	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	27	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	201		ppbv	10	115-07-1	Χ
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	3		ppbv	10	95-63-6	Χ
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	20	10		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	12	2		ppbv	10	109-99-9	
Toluene	9	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	2		ppbv	10	108-05-4	
p,m-Xylene	5	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 06/15/21 18:27, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	710	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	22		ug/m3	10	106-99-0	
Benzene	13	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	90	16		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	



Lab Sample ID: S25193.03 (continued)

Sample Tag: TSG-2

TO-15, Method: TO-15, Run Date: 06/1	TO-15, Method: TO-15, Run Date: 06/15/21 18:27, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags			
3-Chloropropene	Not detected	22		ug/m3	10	107-05-1	X			
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8				
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5				
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7				
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3				
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4				
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4				
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2				
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5				
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1				
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8				
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1				
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5				
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2				
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5				
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1				
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1				
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7				
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6				
Ethanol*	Not detected	110		ug/m3	10	64-17-5	Χ			
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4				
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6				
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8				
Freon 113	Not detected	15		ug/m3	10	76-13-1				
Freon 114	Not detected	14		ug/m3	10	76-14-2				
Heptane	29	8.2		ug/m3	10	142-82-5				
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3				
Hexane	28	7.0		ug/m3	10	110-54-3				
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6				
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0				
Methylene chloride	Not detected	17		ug/m3	10	75-09-2				
2-Butanone (MEK)	88	59		ug/m3	10	78-93-3				
4-Methyl-2-pentanone (MIBK)	110	20		ug/m3	10	108-10-1				
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4				
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6				
Naphthalene	Not detected	10		ug/m3	10	91-20-3				
Propylene*	Not detected	346		ug/m3	10	115-07-1	Χ			
Styrene	Not detected	8.5		ug/m3	10	100-42-5				
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6				
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5				
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5				
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1				
1,2,4-Trimethylbenzene	Not detected	15		ug/m3	10	95-63-6	Χ			
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8				
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1				
Tert-butyl Alcohol	61	30		ug/m3	10	75-65-0				
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4				
Tetrahydrofuran*	35	5.9		ug/m3	10	109-99-9				
Toluene	34	7.5		ug/m3	10	108-88-3				



Lab Sample ID: S25193.03 (continued)

Sample Tag: TSG-2

TO-15, Method: TO-15, Run Date: 06/15/21 18:27, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	10	108-05-4	
p,m-Xylene	22	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ug/m3	10	1330-20-7	



Lab Sample ID: S25193.04

Sample Tag: TSG-1

Collected Date/Time: 06/10/2021 14:10 - 06/10/2021 14:15

Matrix: Air

COC Reference: A4218

Sample Containers

Type Preservative(s) Refrigerated? Arrival Temp. (C) Thermometer #
Air Canister None No RT IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-6.5	N/A	06/14/21 15:30	KAG	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 06/15/21 18:59, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	230	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	10		ppbv	10	106-99-0	
Benzene	4	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	29	5		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	2		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	84	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	



Lab Sample ID: S25193.04 (continued)

Sample Tag: TSG-1

TO-15, Method: TO-15, Run Date: 06/15/21 18:59, Analyst: KAG (continued)

Parameter	Result	RL M	DL Units	Dilution	CAS#	Flags
Freon 114	Not detected	2	ppbv	10	76-14-2	
Heptane	6	2	ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2	ppbv	10	87-68-3	
Hexane	7	2	ppbv	10	110-54-3	
2-Hexanone*	Not detected	5	ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20	ppbv	10	67-63-0	
Methylene chloride	Not detected	5	ppbv	10	75-09-2	
2-Butanone (MEK)	50	20	ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	23	5	ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2	ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2	ppbv	10	80-62-6	
Naphthalene	Not detected	2	ppbv	10	91-20-3	
Propylene*	Not detected	127	ppbv	10	115-07-1	Χ
Styrene	Not detected	2	ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2	ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2	ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2	ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5	ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	3	ppbv	10	95-63-6	Χ
1,3,5-Trimethylbenzene	Not detected	2	ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2	ppbv	10	540-84-1	
Tert-butyl Alcohol	20	10	ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2	ppbv	10	127-18-4	
Tetrahydrofuran*	20	2	ppbv	10	109-99-9	
Toluene	9	2	ppbv	10	108-88-3	
Trichloroethene	Not detected	2	ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2	ppbv	10	75-69-4	
Vinyl chloride	Not detected	2	ppbv	10	75-01-4	
Vinyl acetate	Not detected	2	ppbv	10	108-05-4	
p,m-Xylene	5	4	ppbv	10		
o-Xylene	Not detected	2	ppbv	10	95-47-6	
Total Xylenes	Not detected	6	ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 06/15/21 18:59, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	550	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	22		ug/m3	10	106-99-0	
Benzene	13	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	90	16		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	6.3		ug/m3	10	107-05-1	

X-Elevated reporting limit due to matrix interference



Lab Sample ID: S25193.04 (continued)

Sample Tag: TSG-1

TO-15, Method: TO-15, Run Date: 06/15/21 18:59, Analyst: KAG (continued)

TO-15, Method: TO-15, Run Date: 0	6/15/21 18:59, Anal	yst: KAG	(continued)				
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	Not detected	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	160	47		ug/m3	10	64-17-5	
Ethylbenzene	Not detected	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	25	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	25	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	150	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	94	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	219		ug/m3	10	115-07-1	Χ
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	15		ug/m3	10	95-63-6	Χ
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	61	30		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	59	5.9		ug/m3	10	109-99-9	
Toluene	34	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
					-	· · -	

X-Elevated reporting limit due to matrix interference



Lab Sample ID: S25193.04 (continued)

Sample Tag: TSG-1

TO-15, Method: TO-15, Run Date: 06/15/21 18:59, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	
Vinyl acetate	Not detected	7.0		ug/m3	10	108-05-4	
p,m-Xylene	22	17		ug/m3	10		
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6	
Total Xylenes	Not detected	26		ua/m3	10	1330-20-7	

Merit Laboratories Login Checklist

Lab Set ID:S25193

Client: PME02 (PM Environmental, Inc. - Berkley)

Project: 01-11288-1-0004

Submitted: 06/11/2021 11:10 Login User: MMC

Client Review By:

Attention: Jana Beumel Address: PM Environmental, Inc. 4080 W. Eleven Mile

Berkley, MI 48072

Phone: O:248-336-9988 FAX: Email: Beumel@pmenv.com

Selection	on			Description	Note			
Sample	Receiv	/ing						
01.	Yes	X No	N/A	Samples are received at 4C +/- 2C Thermometer #	RT			
02.	Yes	X No	N/A	Received on ice/ cooling process begun				
03.	Yes	X No	N/A	Samples shipped				
04.	Yes	X No	N/A	Samples left in 24 hr. drop box				
05.	Yes	No	X N/A	Are there custody seals/tape or is the drop box locked				
Chain o	of Custo	ody						
06. X	X Yes	No	N/A	COC adequately filled out				
07. X	X Yes	No	N/A	COC signed and relinquished to the lab				
08.	X Yes	No	N/A	Sample tag on bottles match COC				
09.	Yes	X No	□ N/A	Subcontracting needed? Subcontacted to:				
Preserv	vation							
10.	X Yes	No	N/A	Do sample have correct chemical preservation				
11.	Yes	No	X N/A	Completed pH checks on preserved samples? (no VOAs)				
12.	Yes	X No	□ N/A	Did any samples need to be preserved in the lab?				
Bottle C	Conditio	ons						
13.	X Yes	No	N/A	All bottles intact				
14.	X Yes	No	□ N/A	Appropriate analytical bottles are used				
15.	X Yes	No	N/A	Merit bottles used				
16. X	X Yes	No	N/A	Sufficient sample volume received				
17.	Yes	X No	□ N/A	Samples require laboratory filtration				
18.	X Yes	No	□ N/A	Samples submitted within holding time				
19.	Yes	No	X N/A	Do water VOC or TOX bottles contain headspace				
Correcti	Corrective action for all exceptions is to call the client and to notify the project manager.							

Date:



2680 East Lansing Dr., East Lansing, MI 48823 Phone (517) 332-0167 Fax (517) 332-4034 www.meritlabs.com

C.O.C. PAGE #	OF \	
0.0.0		

A 4218

REPOR	ТТО	Labora	atories, inc.	AIR/GA	SSAME	PLES CH	HAIN OF	CUSTO	DY RE	CORD				. ,		101	CET	0
	Jana Beun	v1					CONTACT NAME SAME											
		mental					COMPANY											
	080 West	Fleven	Mile Rd.			1	ADDRESS											
Berk		Dioceri	7710	STATE	ZIP CODE		CITY						STA	TE	ZIP CODE			
PHONE NO.	109	FAX NO.		P.O. NO.		1	PHONE NO.			EMAIL ADDRES	S							
EMAIL ADDRESS	Beumel@pme	nv. com		QUOTE NO.			t master	А	NALYSIS	S (ATTACH LIS	ST IF MORE	SPACE	EISR	EQUI	RED)		Matter	
PROJECT NO./NAME 01 - 11388-1-0004 SAMPLER(S) - PLEASE PRINT/SIG						/SIGN NAME			ertifications				Sam	ple Typ	ре		Analyses	
TURNAROUÑ	D TIME REQUIRED	D □1 DAY □	2 DAYS □3 DAY	S STAN	DARD 🗆 C	OTHER			DoD	□ NELAP □ NPDES						(8)	(\$6	
DELIVERABLE	ES REQUIRED	LEVEL II □ LE	VEL III LEVEL	IV □EDD	OTHER				DOD	LI WI DEG		Air	t Air		Gas	in note	in notes)	
MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG			Date	Time	Date	Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller	Canister ID	Indoor	Ambient Air	Soil Gas	Landfill	Other (specify	Other (specify	
PARTIE STATE OF THE PARTIES OF THE P	TSG-1			6/10/21	1300	6/10/21	1305	29	5	138	23699			X)	X	
25193.01 .02				6/10/21	1253	6/10/21		30	5	46	33644			X)	<	
.03				6/10/21	1342	6/10/2		30	5	26	23673			X		,	K	
OH	TS6-1			6/10/21	1410	6/10/21		30	5	163	12446			X		X	٤	
												31						
- Sundana	na in i			71														
						5.	E								`			
- stillown			- (by to come	- mio	1111	11-1-7		-			17				-	_		_
Red IV	10-1-1				- 11/4													
	VZ ,9900	61	104		1977			lu I			4	Note						_
	Tempo	erature (Fahrenhe			Inter	Lineard		Ambient	hes of Hg)	Notes		Note	S					
Int	terior	Ambient	Notes			Interi	or			Notes		-						
Start	83 Start				art		29.9			1								
Stop	- 10000	83				ор		29.9	8	1	11			371		/ PATE	TIK	5
RELINQUISHED SIGNATURE/OR		_2	119	Sampler	6/10/1	IGIO	RELINQUISHED SIGNATURE/OR			,	1//		~~	6	611	DATE	1110)
RECEIVED BY: SIGNATURE/OR	GANIZATION PA	1. Storag	e	0.00	6/10/2	IND	RECEIVED BY: SIGNATURE/OR	GANIZATION		-	10/2	nc	lal	col	DI	6/11/	21 111	D
RELINQUISHED SIGNATURE/OR	BY:	15	1	en dh	DATE	TIME	SEAL NO.		SEAL INTACT YES SEAL INTACT	NO 🗆	1			TEMP.	ON ARE		RT	
RECEIVED BY: SIGNATURE/OR	GANIZATION	A	14	6/1	(15) 0	9 2X	SEAL NO.		YES	NO								



Report ID: S30741.01(01) Generated on 12/03/2021

Report to

Attention: Jana Beumel PM Environmental, Inc. 4080 W. Eleven Mile Berkley, MI 48072

Phone: O:248-336-9988 D:248-414-1859 FAX:

Email: Beumel@pmenv.com

Report produced by

Merit Laboratories, Inc. 2680 East Lansing Drive East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions: John Laverty (johnlaverty@meritlabs.com) Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S30741.01-S30741.18 Project: 01-11288-1-0004 / Mariner's Inn

Collected Date(s): 11/24/2021

Submitted Date/Time: 11/29/2021 14:30

Sampled by: Hailey Iglewski P.O. #: 01-11288-1-0004

Table of Contents

Cover Page (Page 1)

General Report Notes (Page 2)

Report Narrative (Page 2)

Laboratory Certifications (Page 3)

Qualifier Descriptions (Page 3)

Glossary of Abbreviations (Page 3)

Method Summary (Page 4)

Sample Summary (Page 5)

Maya Murshak Technical Director

Naya Mushah



General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples

for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report



Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
В	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
Н	Sample submitted and run outside of holding time
1	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
0	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
Т	No correction for total solids
X	Elevated reporting limit due to matrix interference
Υ	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
е	Reported value estimated due to interference
j	Analyte also found in associated method blank
р	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
х	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Method Summary

Method	Version
SM2540B	Standard Method 2540 B 2011
SW3546	SW 846 Method 3546 Revision 0 February 2007
SW5035A	SW 846 Method 5035A Revision 1 July 2002
SW5035A/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5035A Revision 1 July 2002
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Sample Summary (18 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S30741.01	SB-5R 0.5-1.5'	Soil	11/24/21 10:00
S30741.02	SB-5R 4.5-5.5'	Soil	11/24/21 09:35
S30741.03	SB-5R 5.5-6.5'	Soil	11/24/21 09:40
S30741.04	SB-6 3.5-4.5'	Soil	11/24/21 11:55
S30741.05	SB-6 4.5-5.5'	Soil	11/24/21 12:00
S30741.06	SB-6 7-8'	Soil	11/24/21 12:05
S30741.07	SB-7 3.5-4.5'	Soil	11/24/21 12:20
S30741.08	SB-7 4.5-5.5'	Soil	11/24/21 12:25
S30741.09	SB-7 7-8'	Soil	11/24/21 12:30
S30741.10	SB-8 3.5-4.5'	Soil	11/24/21 11:25
S30741.11	SB-8 4.5-5.5'	Soil	11/24/21 11:30
S30741.12	SB-8 7-8'	Soil	11/24/21 11:35
S30741.13	SB-9 3.5-4.5'	Soil	11/24/21 11:00
S30741.14	SB-9 4.5-5.5'	Soil	11/24/21 11:05
S30741.15	SB-9 7-8'	Soil	11/24/21 11:10
S30741.16	SB-10 3.5-4.5'	Soil	11/24/21 10:40
S30741.17	SB-10 4.5-5.5'	Soil	11/24/21 10:35
S30741.18	SB-10 7-8'	Soil	11/24/21 10:30



Lab Sample ID: S30741.01

Sample Tag: SB-5R 0.5-1.5'

Collected Date/Time: 11/24/2021 10:00

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.743/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/02/21 03:16, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	400	300		ug/kg	10	208-96-8		
Anthracene	900	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	2,900	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	2,900	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	6,100	300		ug/kg	10	205-99-2	р	
Benzo(k)fluoranthene	6,800	300		ug/kg	10	207-08-9	р	
Benzo(ghi)perylene	800	300		ug/kg	10	191-24-2		
Chrysene	3,000	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	6,200	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	800	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	3,200	300		ug/kg	10	85-01-8		
Pyrene	6,300	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 00:45, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	65.1	60-29-7	
Acetone	Not detected	1,000		ug/kg	65.1	67-64-1	
Methyl iodide	Not detected	100		ug/kg	65.1	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	65.1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	65.1	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	65.1	107-13-1	
2-Butanone (MEK)	Not detected	980		ug/kg	65.1	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	65.1	75-71-8	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Lab Sample ID: S30741.01 (continued)

Sample Tag: SB-5R 0.5-1.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 00:45, Analyst: KAG (continued)							
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	65.1	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	65.1	75-01-4	
Bromomethane	Not detected	300		ug/kg	65.1	74-83-9	
Chloroethane	Not detected	300		ug/kg	65.1	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	65.1	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	65.1	75-35-4	
Methylene chloride	Not detected	100		ug/kg	65.1	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	65.1	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	65.1	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	65.1	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	65.1	109-99-9	
Chloroform	Not detected	70		ug/kg	65.1	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	65.1	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	65.1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	65.1	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	65.1	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	65.1	56-23-5	
Benzene	Not detected	70		ug/kg	65.1	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	65.1	107-06-2	
Trichloroethene	Not detected	70		ug/kg	65.1	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	65.1	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	65.1	75-27-4	
Dibromomethane	Not detected	300		ug/kg	65.1	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	65.1	10061-01-5	
Toluene	110	70		ug/kg	65.1	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	65.1	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	65.1	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	65.1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	65.1	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	65.1	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	65.1	106-93-4	М
Chlorobenzene	Not detected	70		ug/kg	65.1	108-90-7	•••
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	65.1	630-20-6	
Ethylbenzene	70	70		ug/kg	65.1	100-41-4	
p,m-Xylene	300	100		ug/kg	65.1		
o-Xylene	120	70		ug/kg	65.1	95-47-6	
Styrene	Not detected	70		ug/kg	65.1	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	65.1	98-82-8	
Bromoform	Not detected	100		ug/kg	65.1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	65.1	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	65.1	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	65.1	103-65-1	
Bromobenzene	Not detected	100		ug/kg ug/kg	65.1	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg ug/kg	65.1	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg ug/kg	65.1	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg ug/kg	65.1	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg ug/kg	65.1	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg ug/kg	65.1	99-87-6	
1,3-Dichlorobenzene	Not detected	100			65.1	541-73-1	
1,0-1/01/10/10/00/01/26/16	mot detected	100		ug/kg	03.1	J4 1-7 J-1	

M-Result reported to MDL not RDL



Lab Sample ID: S30741.01 (continued)

Sample Tag: SB-5R 0.5-1.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 00:45, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	65.1	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	65.1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	65.1	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	65.1	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	65.1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	65.1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	65.1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	65.1	87-61-6	
Naphthalene	Not detected	300		ug/kg	65.1	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	65.1	91-57-6	



Lab Sample ID: S30741.02

Sample Tag: SB-5R 4.5-5.5'

Collected Date/Time: 11/24/2021 09:35

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.638/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 21:00, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:08, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	68.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	68.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	68.5	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	68.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	68.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	68.5	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	68.5	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	68.5	75-71-8	
Chloromethane	Not detected	300		ug/kg	68.5	74-87-3	



Lab Sample ID: S30741.02 (continued)

Sample Tag: SB-5R 4.5-5.5'

Volatile Organics 5035, Method: S Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl chloride	Not detected	70		ug/kg	68.5	75-01-4	<u> </u>
Bromomethane	Not detected	300		ug/kg	68.5	74-83-9	
Chloroethane	Not detected	300		ug/kg	68.5	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	68.5	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	68.5	75-35-4	
Methylene chloride	Not detected	100		ug/kg	68.5	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	68.5	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	68.5	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	68.5	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	68.5	109-99-9	
Chloroform	Not detected	70		ug/kg	68.5	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	68.5	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	68.5	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	68.5	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg ug/kg	68.5	591-78-6	
Carbon tetrachloride	Not detected	3,000 70		ug/kg ug/kg	68.5	56-23-5	
Benzene		70 70			68.5	71-43-2	
1,2-Dichloroethane	Not detected Not detected	70 70		ug/kg ug/kg	68.5	7 1-43-2 107-06-2	
,							
Trichloroethene	Not detected	70 70		ug/kg	68.5	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	68.5	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	68.5	75-27-4	
Dibromomethane	Not detected	300		ug/kg	68.5	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	68.5	10061-01-5	
Toluene	Not detected	70		ug/kg	68.5	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	68.5	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	68.5	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	68.5	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	68.5	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	68.5	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	68.5	106-93-4	М
Chlorobenzene	Not detected	70		ug/kg	68.5	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	68.5	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	68.5	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	68.5		
o-Xylene	Not detected	70		ug/kg	68.5	95-47-6	
Styrene	Not detected	70		ug/kg	68.5	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	68.5	98-82-8	
Bromoform	Not detected	100		ug/kg	68.5	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	68.5	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	68.5	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	68.5	103-65-1	
Bromobenzene	Not detected	100		ug/kg	68.5	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	68.5	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	68.5	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	68.5	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	68.5	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	68.5	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	68.5	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	68.5	106-46-7	

M-Result reported to MDL not RDL



Lab Sample ID: S30741.02 (continued)

Sample Tag: SB-5R 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:08, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	68.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	68.5	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	68.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	68.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	68.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	450		ug/kg	68.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	450		ug/kg	68.5	87-61-6	
Naphthalene	Not detected	300		ug/kg	68.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	68.5	91-57-6	



Lab Sample ID: S30741.03

Sample Tag: SB-5R 5.5-6.5'

Collected Date/Time: 11/24/2021 09:40

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.396/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 21:22, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:30, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	68.6	60-29-7	
Acetone	Not detected	1,000		ug/kg	68.6	67-64-1	
Methyl iodide	Not detected	100		ug/kg	68.6	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	68.6	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	68.6	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	68.6	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	68.6	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	68.6	75-71-8	
Chloromethane	Not detected	300		ug/kg	68.6	74-87-3	



Lab Sample ID: S30741.03 (continued)

Sample Tag: SB-5R 5.5-6.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:30, Analyst: KAG (continued)										
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags			
Vinyl chloride	Not detected	70		ug/kg	68.6	75-01-4				
Bromomethane	Not detected	300		ug/kg	68.6	74-83-9				
Chloroethane	Not detected	300		ug/kg	68.6	75-00-3				
Trichlorofluoromethane	Not detected	100		ug/kg	68.6	75-69-4				
1,1-Dichloroethene	Not detected	70		ug/kg	68.6	75-35-4				
Methylene chloride	Not detected	100		ug/kg	68.6	75-09-2				
trans-1,2-Dichloroethene	Not detected	70		ug/kg	68.6	156-60-5				
1,1-Dichloroethane	Not detected	70		ug/kg	68.6	75-34-3				
cis-1,2-Dichloroethene	Not detected	70		ug/kg	68.6	156-59-2				
Tetrahydrofuran*	Not detected	1,000		ug/kg	68.6	109-99-9				
Chloroform	Not detected	70		ug/kg	68.6	67-66-3				
Bromochloromethane	Not detected	100		ug/kg	68.6	74-97-5				
1,1,1-Trichloroethane	Not detected	70		ug/kg	68.6	71-55-6				
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	68.6	108-10-1				
2-Hexanone	Not detected	3,000		ug/kg	68.6	591-78-6				
Carbon tetrachloride	Not detected	70		ug/kg	68.6	56-23-5				
Benzene	Not detected	70		ug/kg	68.6	71-43-2				
1,2-Dichloroethane	Not detected	70		ug/kg	68.6	107-06-2				
Trichloroethene	Not detected	70		ug/kg	68.6	79-01-6				
1,2-Dichloropropane	Not detected	70		ug/kg	68.6	78-87-5				
Bromodichloromethane	Not detected	100		ug/kg	68.6	75-27-4				
Dibromomethane	Not detected	300		ug/kg	68.6	74-95-3				
cis-1,3-Dichloropropene	Not detected	70		ug/kg	68.6	10061-01-5				
Toluene	Not detected	70		ug/kg	68.6	108-88-3				
trans-1,3-Dichloropropene	Not detected	70		ug/kg	68.6	10061-02-6				
1,1,2-Trichloroethane	Not detected	70		ug/kg	68.6	79-00-5				
Tetrachloroethene	Not detected	70		ug/kg	68.6	127-18-4				
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	68.6	110-57-6				
Dibromochloromethane	Not detected	100		ug/kg	68.6	124-48-1				
1,2-Dibromoethane	Not detected	30		ug/kg	68.6	106-93-4	M			
Chlorobenzene	Not detected	70		ug/kg	68.6	108-90-7				
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	68.6	630-20-6				
Ethylbenzene	Not detected	70		ug/kg	68.6	100-41-4				
p,m-Xylene	Not detected	100		ug/kg	68.6					
o-Xylene	Not detected	70		ug/kg	68.6	95-47-6				
Styrene	Not detected	70		ug/kg	68.6	100-42-5				
Isopropylbenzene	Not detected	300		ug/kg	68.6	98-82-8				
Bromoform	Not detected	100		ug/kg	68.6	75-25-2				
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	68.6	79-34-5				
1,2,3-Trichloropropane	Not detected	100		ug/kg	68.6	96-18-4				
n-Propylbenzene	Not detected	70		ug/kg	68.6	103-65-1				
Bromobenzene	Not detected	100		ug/kg	68.6	108-86-1				
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	68.6	108-67-8				
tert-Butylbenzene	Not detected	70		ug/kg	68.6	98-06-6				
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	68.6	95-63-6				
sec-Butylbenzene	Not detected	70		ug/kg	68.6	135-98-8				
p-Isopropyltoluene	Not detected	100		ug/kg	68.6	99-87-6				
1,3-Dichlorobenzene	Not detected	100		ug/kg	68.6	541-73-1				
1,4-Dichlorobenzene	Not detected	100		ug/kg	68.6	106-46-7				
1, 1 51011010501120110	140t dottottou	100		ug/Ng	00.0	100 -10-1				

M-Result reported to MDL not RDL



Lab Sample ID: S30741.03 (continued)

Sample Tag: SB-5R 5.5-6.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:30, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	68.6	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	68.6	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	68.6	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	68.6	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	68.6	96-12-8	
1,2,4-Trichlorobenzene	Not detected	450		ug/kg	68.6	120-82-1	
1,2,3-Trichlorobenzene	Not detected	450		ug/kg	68.6	87-61-6	
Naphthalene	Not detected	300		ug/kg	68.6	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	68.6	91-57-6	



Lab Sample ID: S30741.04

Sample Tag: SB-6 3.5-4.5'

Collected Date/Time: 11/24/2021 11:55

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.261/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	85	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 21:44, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:52, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	72.3	60-29-7	
Acetone	Not detected	1,000		ug/kg	72.3	67-64-1	
Methyl iodide	Not detected	100		ug/kg	72.3	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	72.3	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	72.3	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	72.3	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	72.3	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	72.3	75-71-8	
Chloromethane	Not detected	400		ug/kg	72.3	74-87-3	



Lab Sample ID: S30741.04 (continued)

Sample Tag: SB-6 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:52, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Vinyl chloride	Not detected	70		ug/kg	72.3	75-01-4			
Bromomethane	Not detected	300		ug/kg	72.3	74-83-9			
Chloroethane	Not detected	400		ug/kg	72.3	75-00-3			
Trichlorofluoromethane	Not detected	100		ug/kg	72.3	75-69-4			
1,1-Dichloroethene	Not detected	70		ug/kg	72.3	75-35-4			
Methylene chloride	Not detected	100		ug/kg	72.3	75-09-2			
trans-1,2-Dichloroethene	Not detected	70		ug/kg	72.3	156-60-5			
1,1-Dichloroethane	Not detected	70		ug/kg	72.3	75-34-3			
cis-1,2-Dichloroethene	Not detected	70		ug/kg	72.3	156-59-2			
Tetrahydrofuran*	Not detected	1,000		ug/kg	72.3	109-99-9			
Chloroform	Not detected	70		ug/kg	72.3	67-66-3			
Bromochloromethane	Not detected	100		ug/kg	72.3	74-97-5			
1,1,1-Trichloroethane	Not detected	70		ug/kg	72.3	71-55-6			
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	72.3	108-10-1			
2-Hexanone	Not detected	4,000		ug/kg	72.3	591-78-6			
Carbon tetrachloride	Not detected	70		ug/kg	72.3	56-23-5			
Benzene	Not detected	70		ug/kg	72.3	71-43-2			
1,2-Dichloroethane	Not detected	70		ug/kg	72.3	107-06-2			
Trichloroethene	Not detected	70		ug/kg	72.3	79-01-6			
1,2-Dichloropropane	Not detected	70		ug/kg	72.3	78-87-5			
Bromodichloromethane	Not detected	100		ug/kg	72.3	75-27-4			
Dibromomethane	Not detected	400		ug/kg	72.3	74-95-3			
cis-1,3-Dichloropropene	Not detected	70		ug/kg	72.3	10061-01-5			
Toluene	Not detected	70		ug/kg	72.3	108-88-3			
trans-1,3-Dichloropropene	Not detected	70		ug/kg	72.3	10061-02-6			
1,1,2-Trichloroethane	Not detected	70		ug/kg	72.3	79-00-5			
Tetrachloroethene	Not detected	70		ug/kg	72.3	127-18-4			
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	72.3	110-57-6			
Dibromochloromethane	Not detected	100		ug/kg	72.3	124-48-1			
1,2-Dibromoethane	Not detected	30		ug/kg	72.3	106-93-4	M		
Chlorobenzene	Not detected	70		ug/kg	72.3	108-90-7			
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	72.3	630-20-6			
Ethylbenzene	Not detected	70		ug/kg	72.3	100-41-4			
p,m-Xylene	Not detected	100		ug/kg	72.3				
o-Xylene	Not detected	70		ug/kg	72.3	95-47-6			
Styrene	Not detected	70		ug/kg	72.3	100-42-5			
Isopropylbenzene	Not detected	400		ug/kg	72.3	98-82-8			
Bromoform	Not detected	100		ug/kg	72.3	75-25-2			
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	72.3	79-34-5			
1,2,3-Trichloropropane	Not detected	100		ug/kg	72.3	96-18-4			
n-Propylbenzene	Not detected	70		ug/kg	72.3	103-65-1			
Bromobenzene	Not detected	100		ug/kg	72.3	108-86-1			
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	72.3	108-67-8			
tert-Butylbenzene	Not detected	70		ug/kg	72.3	98-06-6			
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	72.3	95-63-6			
sec-Butylbenzene	Not detected	70		ug/kg	72.3	135-98-8			
p-Isopropyltoluene	Not detected	100		ug/kg	72.3	99-87-6			
1,3-Dichlorobenzene	Not detected	100		ug/kg	72.3	541-73-1			
1,4-Dichlorobenzene	Not detected	100		ug/kg	72.3	106-46-7			
				-					

M-Result reported to MDL not RDL



Lab Sample ID: S30741.04 (continued)

Sample Tag: SB-6 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 01:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100	_	ug/kg	72.3	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	72.3	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	72.3	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	72.3	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	72.3	96-12-8	
1,2,4-Trichlorobenzene	Not detected	480		ug/kg	72.3	120-82-1	
1,2,3-Trichlorobenzene	Not detected	480		ug/kg	72.3	87-61-6	
Naphthalene	Not detected	400		ug/kg	72.3	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	72.3	91-57-6	



Lab Sample ID: S30741.05

Sample Tag: SB-6 4.5-5.5'

Collected Date/Time: 11/24/2021 12:00

Matrix: Soil

COC Reference: 146347

Sample Containers

#	ŧ	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1		40ml Glass	MeOH	Yes	3.2	IR
1		4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.569/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 22:06, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 02:15, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	67.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	67.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	67.5	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	67.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	67.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	67.5	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	67.5	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	67.5	75-71-8	
Chloromethane	Not detected	300		ug/kg	67.5	74-87-3	



Lab Sample ID: S30741.05 (continued)

Sample Tag: SB-6 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 02:15, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Vinyl chloride	Not detected	70		ug/kg	67.5	75-01-4			
Bromomethane	Not detected	300		ug/kg	67.5	74-83-9			
Chloroethane	Not detected	300		ug/kg	67.5	75-00-3			
Trichlorofluoromethane	Not detected	100		ug/kg	67.5	75-69-4			
1,1-Dichloroethene	Not detected	70		ug/kg	67.5	75-35-4			
Methylene chloride	Not detected	100		ug/kg	67.5	75-09-2			
trans-1,2-Dichloroethene	Not detected	70		ug/kg	67.5	156-60-5			
1,1-Dichloroethane	Not detected	70		ug/kg	67.5	75-34-3			
cis-1,2-Dichloroethene	Not detected	70		ug/kg	67.5	156-59-2			
Tetrahydrofuran*	Not detected	1,000		ug/kg	67.5	109-99-9			
Chloroform	Not detected	70		ug/kg	67.5	67-66-3			
Bromochloromethane	Not detected	100		ug/kg	67.5	74-97-5			
1,1,1-Trichloroethane	Not detected	70		ug/kg	67.5	71-55-6			
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	67.5	108-10-1			
2-Hexanone	Not detected	3,000		ug/kg	67.5	591-78-6			
Carbon tetrachloride	Not detected	70		ug/kg	67.5	56-23-5			
Benzene	Not detected	70		ug/kg	67.5	71-43-2			
1,2-Dichloroethane	Not detected	70		ug/kg	67.5	107-06-2			
Trichloroethene	Not detected	70		ug/kg	67.5	79-01-6			
1,2-Dichloropropane	Not detected	70		ug/kg	67.5	78-87-5			
Bromodichloromethane	Not detected	100		ug/kg	67.5	75-27-4			
Dibromomethane	Not detected	300		ug/kg	67.5	74-95-3			
cis-1,3-Dichloropropene	Not detected	70		ug/kg	67.5	10061-01-5			
Toluene	Not detected	70		ug/kg	67.5	108-88-3			
trans-1,3-Dichloropropene	Not detected	70		ug/kg	67.5	10061-02-6			
1,1,2-Trichloroethane	Not detected	70		ug/kg	67.5	79-00-5			
Tetrachloroethene	Not detected	70		ug/kg	67.5	127-18-4			
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	67.5	110-57-6			
Dibromochloromethane	Not detected	100		ug/kg	67.5	124-48-1			
1,2-Dibromoethane	Not detected	30		ug/kg	67.5	106-93-4	M		
Chlorobenzene	Not detected	70		ug/kg	67.5	108-90-7	•••		
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	67.5	630-20-6			
Ethylbenzene	Not detected	70		ug/kg	67.5	100-41-4			
p,m-Xylene	Not detected	100		ug/kg	67.5				
o-Xylene	Not detected	70		ug/kg	67.5	95-47-6			
Styrene	Not detected	70		ug/kg	67.5	100-42-5			
Isopropylbenzene	Not detected	300		ug/kg	67.5	98-82-8			
Bromoform	Not detected	100		ug/kg	67.5	75-25-2			
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	67.5	79-34-5			
1,2,3-Trichloropropane	Not detected	100		ug/kg	67.5	96-18-4			
n-Propylbenzene	Not detected	70		ug/kg	67.5	103-65-1			
Bromobenzene	Not detected	100		ug/kg	67.5	108-86-1			
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	67.5	108-67-8			
tert-Butylbenzene	Not detected	70		ug/kg ug/kg	67.5	98-06-6			
1,2,4-Trimethylbenzene	Not detected	70		ug/kg ug/kg	67.5	95-63-6			
sec-Butylbenzene	Not detected	70		ug/kg ug/kg	67.5	135-98-8			
p-Isopropyltoluene	Not detected	100		ug/kg ug/kg	67.5	99-87-6			
1,3-Dichlorobenzene	Not detected	100		ug/kg ug/kg	67.5	541-73-1			
1,4-Dichlorobenzene	Not detected	100			67.5	106-46-7			
1,T-DIGHOLODGHZGHG	INOL GELECIEU	100		ug/kg	01.5	100-40-7			

M-Result reported to MDL not RDL



Lab Sample ID: S30741.05 (continued)

Sample Tag: SB-6 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 02:15, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	67.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	67.5	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	67.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	67.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	67.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	450		ug/kg	67.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	450		ug/kg	67.5	87-61-6	
Naphthalene	Not detected	300		ug/kg	67.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	67.5	91-57-6	



Lab Sample ID: S30741.06

Sample Tag: SB-6 7-8'

Collected Date/Time: 11/24/2021 12:05

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Other / Misc.

Method:, Run Date: 11/30/21 09:00, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Lab Sample ID: S30741.07

Sample Tag: SB-7 3.5-4.5'

Collected Date/Time: 11/24/2021 12:20

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.803/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	84	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 22:28, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 02:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	70.2	60-29-7	
Acetone	Not detected	1,000		ug/kg	70.2	67-64-1	
Methyl iodide	Not detected	100		ug/kg	70.2	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	70.2	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	70.2	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	70.2	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	70.2	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	70.2	75-71-8	
Chloromethane	Not detected	400		ug/kg	70.2	74-87-3	



Lab Sample ID: S30741.07 (continued)

Sample Tag: SB-7 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 02:37, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Vinyl chloride	Not detected	70		ug/kg	70.2	75-01-4			
Bromomethane	Not detected	300		ug/kg	70.2	74-83-9			
Chloroethane	Not detected	400		ug/kg	70.2	75-00-3			
Trichlorofluoromethane	Not detected	100		ug/kg	70.2	75-69-4			
1,1-Dichloroethene	Not detected	70		ug/kg	70.2	75-35-4			
Methylene chloride	Not detected	100		ug/kg	70.2	75-09-2			
trans-1,2-Dichloroethene	Not detected	70		ug/kg	70.2	156-60-5			
1,1-Dichloroethane	Not detected	70		ug/kg	70.2	75-34-3			
cis-1,2-Dichloroethene	Not detected	70		ug/kg	70.2	156-59-2			
Tetrahydrofuran*	Not detected	1,000		ug/kg	70.2	109-99-9			
Chloroform	Not detected	70		ug/kg	70.2	67-66-3			
Bromochloromethane	Not detected	100		ug/kg	70.2	74-97-5			
1,1,1-Trichloroethane	Not detected	70		ug/kg	70.2	71-55-6			
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	70.2	108-10-1			
2-Hexanone	Not detected	4,000		ug/kg	70.2	591-78-6			
Carbon tetrachloride	Not detected	70		ug/kg	70.2	56-23-5			
Benzene	Not detected	70		ug/kg	70.2	71-43-2			
1,2-Dichloroethane	Not detected	70		ug/kg	70.2	107-06-2			
Trichloroethene	Not detected	70		ug/kg	70.2	79-01-6			
1,2-Dichloropropane	Not detected	70		ug/kg	70.2	78-87-5			
Bromodichloromethane	Not detected	100		ug/kg	70.2	75-27-4			
Dibromomethane	Not detected	400		ug/kg	70.2	74-95-3			
cis-1,3-Dichloropropene	Not detected	70		ug/kg	70.2	10061-01-5			
Toluene	Not detected	70		ug/kg	70.2	108-88-3			
trans-1,3-Dichloropropene	Not detected	70		ug/kg	70.2	10061-02-6			
1,1,2-Trichloroethane	Not detected	70		ug/kg	70.2	79-00-5			
Tetrachloroethene	Not detected	70		ug/kg	70.2	127-18-4			
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	70.2	110-57-6			
Dibromochloromethane	Not detected	100		ug/kg	70.2	124-48-1			
1,2-Dibromoethane	Not detected	30		ug/kg	70.2	106-93-4	M		
Chlorobenzene	Not detected	70		ug/kg	70.2	108-90-7			
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	70.2	630-20-6			
Ethylbenzene	Not detected	70		ug/kg	70.2	100-41-4			
p,m-Xylene	Not detected	100		ug/kg	70.2				
o-Xylene	Not detected	70		ug/kg	70.2	95-47-6			
Styrene	Not detected	70		ug/kg	70.2	100-42-5			
Isopropylbenzene	Not detected	400		ug/kg	70.2	98-82-8			
Bromoform	Not detected	100		ug/kg	70.2	75-25-2			
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	70.2	79-34-5			
1,2,3-Trichloropropane	Not detected	100		ug/kg	70.2	96-18-4			
n-Propylbenzene	Not detected	70		ug/kg	70.2	103-65-1			
Bromobenzene	Not detected	100		ug/kg	70.2	108-86-1			
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	70.2	108-67-8			
tert-Butylbenzene	Not detected	70		ug/kg ug/kg	70.2	98-06-6			
1,2,4-Trimethylbenzene	Not detected	70		ug/kg ug/kg	70.2	95-63-6			
sec-Butylbenzene	Not detected	70		ug/kg ug/kg	70.2	135-98-8			
p-Isopropyltoluene	Not detected	100		ug/kg ug/kg	70.2	99-87-6			
1,3-Dichlorobenzene	Not detected	100		ug/kg ug/kg	70.2	541-73-1			
1,4-Dichlorobenzene	Not detected	100			70.2	106-46-7			
1,4-010111010061126116	mot detected	100		ug/kg	10.2	100-40-1			

M-Result reported to MDL not RDL



Lab Sample ID: S30741.07 (continued)

Sample Tag: SB-7 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 02:37, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	70.2	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	70.2	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	70.2	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	70.2	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	70.2	96-12-8	
1,2,4-Trichlorobenzene	Not detected	460		ug/kg	70.2	120-82-1	
1,2,3-Trichlorobenzene	Not detected	460		ug/kg	70.2	87-61-6	
Naphthalene	Not detected	400		ug/kg	70.2	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	70.2	91-57-6	



Lab Sample ID: S30741.08

Sample Tag: SB-7 4.5-5.5'

Collected Date/Time: 11/24/2021 12:25

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.470/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 22:51, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:00, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	69.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	69.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	69.5	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	69.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	69.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	69.5	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	69.5	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	69.5	75-71-8	
Chloromethane	Not detected	300		ug/kg	69.5	74-87-3	



Lab Sample ID: S30741.08 (continued)

Sample Tag: SB-7 4.5-5.5'

Volatile Organics 5035, Method: S	Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:00, Analyst: KAG (continued)										
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags				
Vinyl chloride	Not detected	70		ug/kg	69.5	75-01-4					
Bromomethane	Not detected	300		ug/kg	69.5	74-83-9					
Chloroethane	Not detected	300		ug/kg	69.5	75-00-3					
Trichlorofluoromethane	Not detected	100		ug/kg	69.5	75-69-4					
1,1-Dichloroethene	Not detected	70		ug/kg	69.5	75-35-4					
Methylene chloride	Not detected	100		ug/kg	69.5	75-09-2					
trans-1,2-Dichloroethene	Not detected	70		ug/kg	69.5	156-60-5					
1,1-Dichloroethane	Not detected	70		ug/kg	69.5	75-34-3					
cis-1,2-Dichloroethene	Not detected	70		ug/kg	69.5	156-59-2					
Tetrahydrofuran*	Not detected	1,000		ug/kg	69.5	109-99-9					
Chloroform	Not detected	70		ug/kg	69.5	67-66-3					
Bromochloromethane	Not detected	100		ug/kg	69.5	74-97-5					
1,1,1-Trichloroethane	Not detected	70		ug/kg	69.5	71-55-6					
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	69.5	108-10-1					
2-Hexanone	Not detected	3,000		ug/kg	69.5	591-78-6					
Carbon tetrachloride	Not detected	70		ug/kg	69.5	56-23-5					
Benzene	Not detected	70		ug/kg	69.5	71-43-2					
1,2-Dichloroethane	Not detected	70		ug/kg	69.5	107-06-2					
Trichloroethene	Not detected	70		ug/kg	69.5	79-01-6					
1,2-Dichloropropane	Not detected	70		ug/kg	69.5	78-87-5					
Bromodichloromethane	Not detected	100		ug/kg	69.5	75-27-4					
Dibromomethane	Not detected	300		ug/kg	69.5	74-95-3					
cis-1,3-Dichloropropene	Not detected	70		ug/kg	69.5	10061-01-5					
Toluene	Not detected	70		ug/kg	69.5	108-88-3					
trans-1,3-Dichloropropene	Not detected	70		ug/kg	69.5	10061-02-6					
1,1,2-Trichloroethane	Not detected	70		ug/kg	69.5	79-00-5					
Tetrachloroethene	Not detected	70		ug/kg	69.5	127-18-4					
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	69.5	110-57-6					
Dibromochloromethane	Not detected	100		ug/kg	69.5	124-48-1					
1,2-Dibromoethane	Not detected	30		ug/kg	69.5	106-93-4	М				
Chlorobenzene	Not detected	70		ug/kg	69.5	108-90-7					
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	69.5	630-20-6					
Ethylbenzene	Not detected	70		ug/kg ug/kg	69.5	100-41-4					
p,m-Xylene	Not detected	100		ug/kg ug/kg	69.5	100 41 4					
o-Xylene	Not detected	70		ug/kg ug/kg	69.5	95-47-6					
Styrene	Not detected	70		ug/kg	69.5	100-42-5					
Isopropylbenzene	Not detected	300		ug/kg ug/kg	69.5	98-82-8					
Bromoform	Not detected	100		ug/kg ug/kg	69.5	75-25-2					
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg ug/kg	69.5	79-34-5					
1,2,3-Trichloropropane	Not detected	100		ug/kg ug/kg	69.5	96-18-4					
n-Propylbenzene	Not detected	70		ug/kg ug/kg	69.5	103-65-1					
Bromobenzene	Not detected	100		ug/kg ug/kg	69.5	108-86-1					
1,3,5-Trimethylbenzene	Not detected	70		ug/kg ug/kg	69.5	108-67-8					
tert-Butylbenzene	Not detected	70 70		ug/kg ug/kg	69.5	98-06-6					
1,2,4-Trimethylbenzene	Not detected	70 70				96-06-6 95-63-6					
•				ug/kg	69.5	95-63-6 135-98-8					
sec-Butylbenzene	Not detected	70 100		ug/kg	69.5						
p-Isopropyltoluene	Not detected	100		ug/kg	69.5	99-87-6					
1,3-Dichlorobenzene	Not detected	100		ug/kg	69.5	541-73-1					
1,4-Dichlorobenzene	Not detected	100		ug/kg	69.5	106-46-7					

M-Result reported to MDL not RDL



Lab Sample ID: S30741.08 (continued)

Sample Tag: SB-7 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:00, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	69.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	69.5	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	69.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	69.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	69.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	460		ug/kg	69.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	460		ug/kg	69.5	87-61-6	
Naphthalene	Not detected	300		ug/kg	69.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	69.5	91-57-6	



Lab Sample ID: S30741.09

Sample Tag: SB-7 7-8'

Collected Date/Time: 11/24/2021 12:30

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Other / Misc.

Method:, Run Date: 11/30/21 09:00, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Lab Sample ID: S30741.10

Sample Tag: SB-8 3.5-4.5'

Collected Date/Time: 11/24/2021 11:25

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	10.090/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:45, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 23:13, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:23, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	64.4	60-29-7	
Acetone	Not detected	1,000		ug/kg	64.4	67-64-1	
Methyl iodide	Not detected	100		ug/kg	64.4	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	64.4	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	64.4	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	64.4	107-13-1	
2-Butanone (MEK)	Not detected	970		ug/kg	64.4	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	64.4	75-71-8	
Chloromethane	Not detected	300		ug/kg	64.4	74-87-3	



Lab Sample ID: S30741.10 (continued)

Sample Tag: SB-8 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:23, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Vinyl chloride	Not detected	60		ug/kg	64.4	75-01-4			
Bromomethane	Not detected	300		ug/kg	64.4	74-83-9			
Chloroethane	Not detected	300		ug/kg	64.4	75-00-3			
Trichlorofluoromethane	Not detected	100		ug/kg	64.4	75-69-4			
1,1-Dichloroethene	Not detected	60		ug/kg	64.4	75-35-4			
Methylene chloride	Not detected	100		ug/kg	64.4	75-09-2			
trans-1,2-Dichloroethene	Not detected	60		ug/kg	64.4	156-60-5			
1,1-Dichloroethane	Not detected	60		ug/kg	64.4	75-34-3			
cis-1,2-Dichloroethene	Not detected	60		ug/kg	64.4	156-59-2			
Tetrahydrofuran*	Not detected	1,000		ug/kg	64.4	109-99-9			
Chloroform	Not detected	60		ug/kg	64.4	67-66-3			
Bromochloromethane	Not detected	100		ug/kg	64.4	74-97-5			
1,1,1-Trichloroethane	Not detected	60		ug/kg	64.4	71-55-6			
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	64.4	108-10-1			
2-Hexanone	Not detected	3,000		ug/kg	64.4	591-78-6			
Carbon tetrachloride	Not detected	60		ug/kg	64.4	56-23-5			
Benzene	Not detected	60		ug/kg	64.4	71-43-2			
1,2-Dichloroethane	Not detected	60		ug/kg	64.4	107-06-2			
Trichloroethene	Not detected	60		ug/kg	64.4	79-01-6			
1,2-Dichloropropane	Not detected	60		ug/kg	64.4	78-87-5			
Bromodichloromethane	Not detected	100		ug/kg	64.4	75-27-4			
Dibromomethane	Not detected	300		ug/kg	64.4	74-95-3			
cis-1,3-Dichloropropene	Not detected	60		ug/kg	64.4	10061-01-5			
Toluene	Not detected	60		ug/kg	64.4	108-88-3			
trans-1,3-Dichloropropene	Not detected	60		ug/kg	64.4	10061-02-6			
1,1,2-Trichloroethane	Not detected	60		ug/kg	64.4	79-00-5			
Tetrachloroethene	Not detected	60		ug/kg	64.4	127-18-4			
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	64.4	110-57-6			
Dibromochloromethane	Not detected	100		ug/kg	64.4	124-48-1			
1,2-Dibromoethane	Not detected	30		ug/kg	64.4	106-93-4	М		
Chlorobenzene	Not detected	60		ug/kg	64.4	108-90-7			
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	64.4	630-20-6			
Ethylbenzene	Not detected	60		ug/kg	64.4	100-41-4			
p,m-Xylene	Not detected	100		ug/kg	64.4				
o-Xylene	Not detected	60		ug/kg	64.4	95-47-6			
Styrene	Not detected	60		ug/kg	64.4	100-42-5			
Isopropylbenzene	Not detected	300		ug/kg	64.4	98-82-8			
Bromoform	Not detected	100		ug/kg	64.4	75-25-2			
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	64.4	79-34-5			
1,2,3-Trichloropropane	Not detected	100		ug/kg	64.4	96-18-4			
n-Propylbenzene	Not detected	60		ug/kg	64.4	103-65-1			
Bromobenzene	Not detected	100		ug/kg	64.4	108-86-1			
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	64.4	108-67-8			
tert-Butylbenzene	Not detected	60		ug/kg	64.4	98-06-6			
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	64.4	95-63-6			
sec-Butylbenzene	Not detected	60		ug/kg	64.4	135-98-8			
p-Isopropyltoluene	Not detected	100		ug/kg ug/kg	64.4	99-87-6			
1,3-Dichlorobenzene	Not detected	100		ug/kg ug/kg	64.4	541-73-1			
1,4-Dichlorobenzene	Not detected	100		ug/kg ug/kg	64.4	106-46-7			
1,7 DIGNOTODONZONO	Not detected	100		ug/kg	UT. T	100-40-1			

M-Result reported to MDL not RDL



Lab Sample ID: S30741.10 (continued)

Sample Tag: SB-8 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:23, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	64.4	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	64.4	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	64.4	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	64.4	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	64.4	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	64.4	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	64.4	87-61-6	
Naphthalene	Not detected	300		ug/kg	64.4	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	64.4	91-57-6	



Lab Sample ID: S30741.11

Sample Tag: SB-8 4.5-5.5'

Collected Date/Time: 11/24/2021 11:30

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	10.827/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:50, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/01/21 23:35, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:45, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	59.3	60-29-7	
Acetone	Not detected	1,000		ug/kg	59.3	67-64-1	
Methyl iodide	Not detected	100		ug/kg	59.3	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	59.3	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	59.3	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	59.3	107-13-1	
2-Butanone (MEK)	Not detected	890		ug/kg	59.3	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	59.3	75-71-8	
Chloromethane	Not detected	300		ug/kg	59.3	74-87-3	



Lab Sample ID: S30741.11 (continued)

Sample Tag: SB-8 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:45, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl chloride	Not detected	60		ug/kg	59.3	75-01-4	
Bromomethane	Not detected	200		ug/kg	59.3	74-83-9	
Chloroethane	Not detected	300		ug/kg	59.3	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	59.3	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	59.3	75-35-4	
Methylene chloride	Not detected	100		ug/kg	59.3	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	59.3	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	59.3	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	59.3	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	59.3	109-99-9	
Chloroform	Not detected	60		ug/kg	59.3	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	59.3	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	59.3	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	59.3	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	59.3	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	59.3	56-23-5	
Benzene	Not detected	60		ug/kg	59.3	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	59.3	107-06-2	
Trichloroethene	Not detected	60		ug/kg	59.3	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	59.3	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	59.3	75-27-4	
Dibromomethane	Not detected	300		ug/kg	59.3	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	59.3	10061-01-5	
Toluene	Not detected	60		ug/kg	59.3	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	59.3	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	59.3	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	59.3	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	59.3	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	59.3	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	59.3	106-93-4	М
Chlorobenzene	Not detected	60		ug/kg	59.3	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	59.3	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	59.3	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	59.3		
o-Xylene	Not detected	60		ug/kg	59.3	95-47-6	
Styrene	Not detected	60		ug/kg	59.3	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	59.3	98-82-8	
Bromoform	Not detected	100		ug/kg	59.3	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	59.3	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	59.3	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	59.3	103-65-1	
Bromobenzene	Not detected	100		ug/kg	59.3	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	59.3	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	59.3	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	59.3	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg ug/kg	59.3	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg ug/kg	59.3	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg ug/kg	59.3	541-73-1	
1,4-Dichlorobenzene	Not detected	100			59.3	106-46-7	
1, 1 -DIGHOLODEHZEHE	Not detected	100		ug/kg	Ja.3	100-40-7	

M-Result reported to MDL not RDL



Lab Sample ID: S30741.11 (continued)

Sample Tag: SB-8 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 03:45, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	59.3	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	59.3	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	59.3	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	59.3	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	59.3	96-12-8	
1,2,4-Trichlorobenzene	Not detected	390		ug/kg	59.3	120-82-1	
1,2,3-Trichlorobenzene	Not detected	390		ug/kg	59.3	87-61-6	
Naphthalene	Not detected	300		ug/kg	59.3	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	59.3	91-57-6	



Lab Sample ID: S30741.12

Sample Tag: SB-8 7-8'

Collected Date/Time: 11/24/2021 11:35

Matrix: Soil

COC Reference: 146347

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Other / Misc.

Method:, Run Date: 11/30/21 09:00, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Lab Sample ID: S30741.13

Sample Tag: SB-9 3.5-4.5'

Collected Date/Time: 11/24/2021 11:00

Matrix: Soil

COC Reference: 146351

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	11/30/21 14:30	JW	
Sample wt. (g) / Methanol (ml)*	9.700/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:50, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/02/21 02:54, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	8,400	600		ug/kg	20	83-32-9	Υ	
Acenaphthylene	1,200	600		ug/kg	20	208-96-8	Υ	
Anthracene	22,400	600		ug/kg	20	120-12-7	Υ	
Benzo(a)anthracene	40,500	600		ug/kg	20	56-55-3	Υ	
Benzo(a)pyrene	34,800	600		ug/kg	20	50-32-8	Υ	
Benzo(b)fluoranthene	72,500	600		ug/kg	20	205-99-2	Yp	
Benzo(k)fluoranthene	80,300	600		ug/kg	20	207-08-9	Yp	
Benzo(ghi)perylene	8,300	600		ug/kg	20	191-24-2	Υ	
Chrysene	38,900	600		ug/kg	20	218-01-9	Υ	
Dibenzo(ah)anthracene	900	600		ug/kg	20	53-70-3	Υ	
Fluoranthene	85,800	600		ug/kg	20	206-44-0	Υ	
Fluorene	9,400	600		ug/kg	20	86-73-7	Υ	
Indeno(1,2,3-cd)pyrene	9,300	600		ug/kg	20	193-39-5	Υ	
Naphthalene	7,700	600		ug/kg	20	91-20-3	Υ	
Phenanthrene	77,700	600		ug/kg	20	85-01-8	Υ	
Pyrene	81,000	600		ug/kg	20	129-00-0	Υ	
2-Methylnaphthalene	3,600	600		ug/kg	20	91-57-6	Υ	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 14:25, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	66.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	66.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	66.7	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	66.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	66.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	66.7	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	66.7	78-93-3	

Y-Elevated reporting limit due to high target concentration

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Lab Sample ID: S30741.13 (continued)

Sample Tag: SB-9 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 14:25, Analyst: KAG (continued)										
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags			
Dichlorodifluoromethane	Not detected	300		ug/kg	66.7	75-71-8				
Chloromethane	Not detected	300		ug/kg	66.7	74-87-3				
Vinyl chloride	Not detected	70		ug/kg	66.7	75-01-4				
Bromomethane	Not detected	300		ug/kg	66.7	74-83-9				
Chloroethane	Not detected	300		ug/kg	66.7	75-00-3				
Trichlorofluoromethane	Not detected	100		ug/kg	66.7	75-69-4				
1,1-Dichloroethene	Not detected	70		ug/kg	66.7	75-35-4				
Methylene chloride	Not detected	100		ug/kg	66.7	75-09-2				
trans-1,2-Dichloroethene	Not detected	70		ug/kg	66.7	156-60-5				
1,1-Dichloroethane	Not detected	70		ug/kg	66.7	75-34-3				
cis-1,2-Dichloroethene	Not detected	70		ug/kg	66.7	156-59-2				
Tetrahydrofuran*	Not detected	1,000		ug/kg	66.7	109-99-9				
Chloroform	Not detected	70		ug/kg	66.7	67-66-3				
Bromochloromethane	Not detected	100		ug/kg	66.7	74-97-5				
1,1,1-Trichloroethane	Not detected	70		ug/kg	66.7	71-55-6				
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	66.7	108-10-1				
2-Hexanone	Not detected	3,000		ug/kg	66.7	591-78-6				
Carbon tetrachloride	Not detected	70		ug/kg	66.7	56-23-5				
Benzene	Not detected	70		ug/kg	66.7	71-43-2				
1,2-Dichloroethane	Not detected	70		ug/kg	66.7	107-06-2				
Trichloroethene	Not detected	70		ug/kg	66.7	79-01-6				
1,2-Dichloropropane	Not detected	70		ug/kg	66.7	78-87-5				
Bromodichloromethane	Not detected	100		ug/kg	66.7	75-27-4				
Dibromomethane	Not detected	300		ug/kg	66.7	74-95-3				
cis-1,3-Dichloropropene	Not detected	70		ug/kg	66.7	10061-01-5				
Toluene	Not detected	70		ug/kg	66.7	108-88-3				
trans-1,3-Dichloropropene	Not detected	70		ug/kg	66.7	10061-02-6				
1,1,2-Trichloroethane	Not detected	70		ug/kg	66.7	79-00-5				
Tetrachloroethene	Not detected	70		ug/kg	66.7	127-18-4				
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	66.7	110-57-6				
Dibromochloromethane	Not detected	100		ug/kg	66.7	124-48-1				
1,2-Dibromoethane	Not detected	30		ug/kg	66.7	106-93-4	M			
Chlorobenzene	Not detected	70		ug/kg	66.7	108-90-7				
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	66.7	630-20-6				
Ethylbenzene	Not detected	70		ug/kg	66.7	100-41-4				
p,m-Xylene	Not detected	100		ug/kg	66.7					
o-Xylene	Not detected	70		ug/kg	66.7	95-47-6				
Styrene	Not detected	70		ug/kg	66.7	100-42-5				
Isopropylbenzene	Not detected	300		ug/kg	66.7	98-82-8				
Bromoform	Not detected	100		ug/kg	66.7	75-25-2				
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	66.7	79-34-5				
1,2,3-Trichloropropane	Not detected	100		ug/kg	66.7	96-18-4				
n-Propylbenzene	Not detected	70		ug/kg	66.7	103-65-1				
Bromobenzene	Not detected	100		ug/kg	66.7	108-86-1				
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	66.7	108-67-8				
tert-Butylbenzene	Not detected	70		ug/kg	66.7	98-06-6				
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	66.7	95-63-6				
sec-Butylbenzene	Not detected	70		ug/kg	66.7	135-98-8				
p-lsopropyltoluene	Not detected	100		ug/kg	66.7	99-87-6				

M-Result reported to MDL not RDL



Lab Sample ID: S30741.13 (continued)

Sample Tag: SB-9 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 14:25, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,3-Dichlorobenzene	Not detected	100		ug/kg	66.7	541-73-1	_
1,4-Dichlorobenzene	Not detected	100		ug/kg	66.7	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	66.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	66.7	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	66.7	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	66.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	66.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	440		ug/kg	66.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	440		ug/kg	66.7	87-61-6	
Naphthalene	4,900	300		ug/kg	66.7	91-20-3	
2-Methylnaphthalene	1,900	100		ug/kg	66.7	91-57-6	



Lab Sample ID: S30741.14

Sample Tag: SB-9 4.5-5.5'

Collected Date/Time: 11/24/2021 11:05

Matrix: Soil

COC Reference: 146351

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	12/01/21 15:00	DMP	
Sample wt. (g) / Methanol (ml)*	9.502/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:50, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	82	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/02/21 16:50, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	600	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	400	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	700	300		ug/kg	10	205-99-2	р	
Benzo(k)fluoranthene	800	300		ug/kg	10	207-08-9	р	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	500	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	1,200	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	900	300		ug/kg	10	85-01-8		
Pyrene	1,100	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 04:31, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	75.1	60-29-7	
Acetone	Not detected	2,000		ug/kg	75.1	67-64-1	
Methyl iodide	Not detected	200		ug/kg	75.1	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	75.1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	75.1	1634-04-4	
Acrylonitrile	Not detected	200		ug/kg	75.1	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	75.1	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	75.1	75-71-8	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Lab Sample ID: S30741.14 (continued)

Sample Tag: SB-9 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 04:31, Analyst: KAG (continued)										
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags			
Chloromethane	Not detected	400		ug/kg	75.1	74-87-3				
Vinyl chloride	Not detected	80		ug/kg	75.1	75-01-4				
Bromomethane	Not detected	300		ug/kg	75.1	74-83-9				
Chloroethane	Not detected	400		ug/kg	75.1	75-00-3				
Trichlorofluoromethane	Not detected	200		ug/kg	75.1	75-69-4				
1,1-Dichloroethene	Not detected	80		ug/kg	75.1	75-35-4				
Methylene chloride	Not detected	200		ug/kg	75.1	75-09-2				
trans-1,2-Dichloroethene	Not detected	80		ug/kg	75.1	156-60-5				
1,1-Dichloroethane	Not detected	80		ug/kg	75.1	75-34-3				
cis-1,2-Dichloroethene	Not detected	80		ug/kg	75.1	156-59-2				
Tetrahydrofuran*	Not detected	2,000		ug/kg	75.1	109-99-9				
Chloroform	Not detected	80		ug/kg	75.1	67-66-3				
Bromochloromethane	Not detected	200		ug/kg	75.1	74-97-5				
1,1,1-Trichloroethane	Not detected	80		ug/kg	75.1	71-55-6				
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	75.1	108-10-1				
2-Hexanone	Not detected	4,000		ug/kg	75.1	591-78-6				
Carbon tetrachloride	Not detected	80		ug/kg	75.1	56-23-5				
Benzene	Not detected	80		ug/kg	75.1	71-43-2				
1,2-Dichloroethane	Not detected	80		ug/kg	75.1	107-06-2				
Trichloroethene	Not detected	80		ug/kg	75.1	79-01-6				
1,2-Dichloropropane	Not detected	80		ug/kg	75.1	78-87-5				
Bromodichloromethane	Not detected	200		ug/kg	75.1	75-27-4				
Dibromomethane	Not detected	400		ug/kg	75.1	74-95-3				
cis-1,3-Dichloropropene	Not detected	80		ug/kg	75.1	10061-01-5				
Toluene	Not detected	80		ug/kg	75.1	108-88-3				
trans-1,3-Dichloropropene	Not detected	80		ug/kg	75.1	10061-02-6				
1,1,2-Trichloroethane	Not detected	80		ug/kg	75.1	79-00-5				
Tetrachloroethene	Not detected	80		ug/kg	75.1	127-18-4				
trans-1,4-Dichloro-2-butene	Not detected	80		ug/kg	75.1	110-57-6				
Dibromochloromethane	Not detected	200		ug/kg	75.1	124-48-1				
1,2-Dibromoethane	Not detected	30		ug/kg	75.1	106-93-4	M			
Chlorobenzene	Not detected	80		ug/kg	75.1	108-90-7				
1,1,1,2-Tetrachloroethane	Not detected	200		ug/kg	75.1	630-20-6				
Ethylbenzene	Not detected	80		ug/kg	75.1	100-41-4				
p,m-Xylene	Not detected	200		ug/kg	75.1					
o-Xylene	Not detected	80		ug/kg	75.1	95-47-6				
Styrene	Not detected	80		ug/kg	75.1	100-42-5				
Isopropylbenzene	Not detected	400		ug/kg	75.1	98-82-8				
Bromoform	Not detected	200		ug/kg	75.1	75-25-2				
1,1,2,2-Tetrachloroethane	Not detected	80		ug/kg	75.1	79-34-5				
1,2,3-Trichloropropane	Not detected	200		ug/kg	75.1	96-18-4				
n-Propylbenzene	Not detected	80		ug/kg	75.1	103-65-1				
Bromobenzene	Not detected	200		ug/kg	75.1	108-86-1				
1,3,5-Trimethylbenzene	Not detected	80		ug/kg	75.1	108-67-8				
tert-Butylbenzene	Not detected	80		ug/kg	75.1	98-06-6				
1,2,4-Trimethylbenzene	Not detected	80		ug/kg	75.1	95-63-6				
sec-Butylbenzene	Not detected	80		ug/kg	75.1	135-98-8				
p-Isopropyltoluene	Not detected	200		ug/kg	75.1	99-87-6				
1,3-Dichlorobenzene	Not detected	200		ug/kg	75.1	541-73-1				
				-						

M-Result reported to MDL not RDL



Lab Sample ID: S30741.14 (continued)

Sample Tag: SB-9 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 04:31, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	200		ug/kg	75.1	106-46-7	
1,2-Dichlorobenzene	Not detected	200		ug/kg	75.1	95-50-1	
1,2,3-Trimethylbenzene	Not detected	80		ug/kg	75.1	526-73-8	
n-Butylbenzene	Not detected	80		ug/kg	75.1	104-51-8	
Hexachloroethane	Not detected	500		ug/kg	75.1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	75.1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	500		ug/kg	75.1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	500		ug/kg	75.1	87-61-6	
Naphthalene	Not detected	400		ug/kg	75.1	91-20-3	
2-Methylnaphthalene	Not detected	200		ug/kg	75.1	91-57-6	



Lab Sample ID: S30741.15

Sample Tag: SB-9 7-8'

Collected Date/Time: 11/24/2021 11:10

Matrix: Soil

COC Reference: 146351

Sample Containers

#	ŧ	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1		40ml Glass	MeOH	Yes	3.2	IR
1		4oz Glass	None	Yes	3.2	IR

Other / Misc.

Method:, Run Date: 11/30/21 09:00, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		



Lab Sample ID: S30741.16

Sample Tag: SB-10 3.5-4.5'

Collected Date/Time: 11/24/2021 10:40

Matrix: Soil

COC Reference: 146351

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	12/01/21 15:00	DMP	
Sample wt. (g) / Methanol (ml)*	9.418/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:50, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/02/21 22:15, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	600	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	1,400	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	1,200	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	2,200	300		ug/kg	10	205-99-2	р	
Benzo(k)fluoranthene	2,500	300		ug/kg	10	207-08-9	р	
Benzo(ghi)perylene	500	300		ug/kg	10	191-24-2		
Chrysene	1,400	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	2,900	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	500	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	2,800	300		ug/kg	10	85-01-8		
Pyrene	2,800	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 04:54, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	68.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	68.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	68.5	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	68.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	68.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	68.5	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	68.5	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	68.5	75-71-8	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Lab Sample ID: S30741.16 (continued)

Sample Tag: SB-10 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 04:54, Analyst: KAG (continued)									
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Chloromethane	Not detected	300		ug/kg	68.5	74-87-3			
Vinyl chloride	Not detected	70		ug/kg	68.5	75-01-4			
Bromomethane	Not detected	300		ug/kg	68.5	74-83-9			
Chloroethane	Not detected	300		ug/kg	68.5	75-00-3			
Trichlorofluoromethane	Not detected	100		ug/kg	68.5	75-69-4			
1,1-Dichloroethene	Not detected	70		ug/kg	68.5	75-35-4			
Methylene chloride	Not detected	100		ug/kg	68.5	75-09-2			
trans-1,2-Dichloroethene	Not detected	70		ug/kg	68.5	156-60-5			
1,1-Dichloroethane	Not detected	70		ug/kg	68.5	75-34-3			
cis-1,2-Dichloroethene	Not detected	70		ug/kg	68.5	156-59-2			
Tetrahydrofuran*	Not detected	1,000		ug/kg	68.5	109-99-9			
Chloroform	Not detected	70		ug/kg	68.5	67-66-3			
Bromochloromethane	Not detected	100		ug/kg	68.5	74-97-5			
1,1,1-Trichloroethane	Not detected	70		ug/kg	68.5	71-55-6			
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	68.5	108-10-1			
2-Hexanone	Not detected	3,000		ug/kg	68.5	591-78-6			
Carbon tetrachloride	Not detected	70		ug/kg	68.5	56-23-5			
Benzene	Not detected	70		ug/kg	68.5	71-43-2			
1,2-Dichloroethane	Not detected	70		ug/kg	68.5	107-06-2			
Trichloroethene	Not detected	70		ug/kg	68.5	79-01-6			
1,2-Dichloropropane	Not detected	70		ug/kg	68.5	78-87-5			
Bromodichloromethane	Not detected	100		ug/kg	68.5	75-27-4			
Dibromomethane	Not detected	300		ug/kg	68.5	74-95-3			
cis-1,3-Dichloropropene	Not detected	70		ug/kg	68.5	10061-01-5			
Toluene	Not detected	70		ug/kg	68.5	108-88-3			
trans-1,3-Dichloropropene	Not detected	70		ug/kg	68.5	10061-02-6			
1,1,2-Trichloroethane	Not detected	70		ug/kg	68.5	79-00-5			
Tetrachloroethene	Not detected	70		ug/kg	68.5	127-18-4			
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	68.5	110-57-6			
Dibromochloromethane	Not detected	100		ug/kg	68.5	124-48-1			
1,2-Dibromoethane	Not detected	30		ug/kg	68.5	106-93-4	M		
Chlorobenzene	Not detected	70		ug/kg	68.5	108-90-7			
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	68.5	630-20-6			
Ethylbenzene	Not detected	70		ug/kg	68.5	100-41-4			
p,m-Xylene	Not detected	100		ug/kg	68.5				
o-Xylene	Not detected	70		ug/kg	68.5	95-47-6			
Styrene	Not detected	70		ug/kg	68.5	100-42-5			
Isopropylbenzene	Not detected	300		ug/kg	68.5	98-82-8			
Bromoform	Not detected	100		ug/kg	68.5	75-25-2			
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	68.5	79-34-5			
1,2,3-Trichloropropane	Not detected	100		ug/kg	68.5	96-18-4			
n-Propylbenzene	Not detected	70		ug/kg	68.5	103-65-1			
Bromobenzene	Not detected	100		ug/kg	68.5	108-86-1			
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	68.5	108-67-8			
tert-Butylbenzene	Not detected	70		ug/kg	68.5	98-06-6			
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	68.5	95-63-6			
sec-Butylbenzene	Not detected	70		ug/kg	68.5	135-98-8			
p-Isopropyltoluene	Not detected	100		ug/kg	68.5	99-87-6			
1,3-Dichlorobenzene	Not detected	100		ug/kg	68.5	541-73-1			
,				55	· -				

M-Result reported to MDL not RDL



Lab Sample ID: S30741.16 (continued)

Sample Tag: SB-10 3.5-4.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 04:54, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	68.5	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	68.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	68.5	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	68.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	68.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	68.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	450		ug/kg	68.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	450		ug/kg	68.5	87-61-6	
Naphthalene	Not detected	300		ug/kg	68.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	68.5	91-57-6	



Lab Sample ID: S30741.17

Sample Tag: SB-10 4.5-5.5'

Collected Date/Time: 11/24/2021 10:35

Matrix: Soil

COC Reference: 146351

Sample Containers

#	Туре	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	12/01/21 15:00	DMP	
Sample wt. (g) / Methanol (ml)*	10.380/10	SW5035A	11/30/21 11:16	WAT	

Inorganics

Method: SM2540B, Run Date: 11/30/21 16:50, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 12/02/21 17:07, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags	
Acenaphthene	Not detected	300		ug/kg	10	83-32-9		
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8		
Anthracene	Not detected	300		ug/kg	10	120-12-7		
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3		
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8		
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2		
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9		
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2		
Chrysene	Not detected	300		ug/kg	10	218-01-9		
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3		
Fluoranthene	Not detected	300		ug/kg	10	206-44-0		
Fluorene	Not detected	300		ug/kg	10	86-73-7		
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5		
Naphthalene	Not detected	300		ug/kg	10	91-20-3		
Phenanthrene	Not detected	300		ug/kg	10	85-01-8		
Pyrene	Not detected	300		ug/kg	10	129-00-0		
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6		

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 05:16, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	62.8	60-29-7	
Acetone	Not detected	1,000		ug/kg	62.8	67-64-1	
Methyl iodide	Not detected	100		ug/kg	62.8	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	62.8	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	62.8	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	62.8	107-13-1	
2-Butanone (MEK)	Not detected	940		ug/kg	62.8	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	62.8	75-71-8	
Chloromethane	Not detected	300		ug/kg	62.8	74-87-3	



Lab Sample ID: S30741.17 (continued)

Sample Tag: SB-10 4.5-5.5'

Volatile Organics 5035, Method: S Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Vinyl chloride	Not detected	60		ug/kg	62.8	75-01-4	<u> </u>
Bromomethane	Not detected	300		ug/kg	62.8	74-83-9	
Chloroethane	Not detected	300		ug/kg	62.8	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	62.8	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	62.8	75-35-4	
Methylene chloride	Not detected	100		ug/kg	62.8	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	62.8	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	62.8	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	62.8	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	62.8	109-99-9	
Chloroform	Not detected	60		ug/kg	62.8	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	62.8	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	62.8	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	62.8	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg ug/kg	62.8	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg ug/kg	62.8	56-23-5	
Benzene	Not detected	60		ug/kg ug/kg	62.8	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg ug/kg	62.8	107-06-2	
Trichloroethene		60				79-01-6	
	Not detected			ug/kg	62.8		
1,2-Dichloropropane Bromodichloromethane	Not detected	60		ug/kg	62.8	78-87-5	
	Not detected	100		ug/kg	62.8	75-27-4	
Dibromomethane	Not detected	300		ug/kg	62.8	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	62.8	10061-01-5	
Toluene	Not detected	60		ug/kg	62.8	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	62.8	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg "	62.8	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	62.8	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg "	62.8	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	62.8	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg 	62.8	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	62.8	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	62.8	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	62.8	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	62.8		
o-Xylene	Not detected	60		ug/kg	62.8	95-47-6	
Styrene	Not detected	60		ug/kg	62.8	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	62.8	98-82-8	
Bromoform	Not detected	100		ug/kg	62.8	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	62.8	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	62.8	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	62.8	103-65-1	
Bromobenzene	Not detected	100		ug/kg	62.8	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	62.8	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	62.8	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	62.8	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	62.8	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	62.8	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	62.8	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	62.8	106-46-7	

M-Result reported to MDL not RDL



Lab Sample ID: S30741.17 (continued)

Sample Tag: SB-10 4.5-5.5'

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 12/01/21 05:16, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dichlorobenzene	Not detected	100		ug/kg	62.8	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	62.8	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	62.8	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	62.8	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	62.8	96-12-8	
1,2,4-Trichlorobenzene	Not detected	410		ug/kg	62.8	120-82-1	
1,2,3-Trichlorobenzene	Not detected	410		ug/kg	62.8	87-61-6	
Naphthalene	Not detected	300		ug/kg	62.8	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	62.8	91-57-6	



Lab Sample ID: S30741.18

Sample Tag: SB-10 7-8'

Collected Date/Time: 11/24/2021 10:30

Matrix: Soil

COC Reference: 146351

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	3.2	IR
1	4oz Glass	None	Yes	3.2	IR

Other / Misc.

Method:, Run Date: 11/30/21 09:00, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hold until notified*	Completed				1		

Merit Laboratories Login Checklist

Lab Set ID:S30741

Client: PME02 (PM Environmental, Inc. - Berkley)

Project: 01-11288-1-0004 / Mariner's Inn Submitted: 11/29/2021 14:30 Login User: MMC Attention: Jana Beumel Address: PM Environmental, Inc. 4080 W. Eleven Mile Berkley, MI 48072

Phone: 0:248-336-9988 FAX: Email: Beumel@pmenv.com

Selection	Description	Note
Sample Receiving		
01. X Yes No N/A	Samples are received at 4C +/- 2C Thermometer #	IR 3.2
02. X Yes No N/A	Received on ice/ cooling process begun	
03. Yes X No N/A	Samples shipped	
04. Yes X No N/A	Samples left in 24 hr. drop box	
05. Yes No X N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody		
06. X Yes No N/A	COC adequately filled out	
07. X Yes No N/A	COC signed and relinquished to the lab	
08. X Yes No N/A	Sample tag on bottles match COC	
09. Yes X No N/A	Subcontracting needed? Subcontacted to:	
Preservation		
10. X Yes No N/A	Do sample have correct chemical preservation	
11. Yes No X N/A	Completed pH checks on preserved samples? (no VOAs)	
12. Yes X No N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions		
13. X Yes No N/A	All bottles intact	
14. X Yes No N/A	Appropriate analytical bottles are used	
15. X Yes No N/A	Merit bottles used	
16. X Yes No N/A	Sufficient sample volume received	
17. Yes X No N/A	Samples require laboratory filtration	
18. X Yes No N/A	Samples submitted within holding time	
19 ☐ Yes ☐ No 🕱 N/A	Do water VOC or TOX bottles contain headspace	

Corrective action fo	r all exceptions is	to call the client	and to notify t	he project manaç	ger.
Client Review By: _			Date:_		_



2680 East Lansing Dr., East Lansing, MI 48823 Phone (517) 332-0167 Fax (517) 332-4034 www.meritlabs.com

c.o.c.	PAGE	#	_ 1	OF	2	

146347

REPOR	ТТО		Laboratories, Inc.	CHAIN	OF	CU	JS	TOI	DY I	RE	co	RD							1	NVO	CE 1	0
CONTACT NAME	Jana B	eumel						CONT	TACT N	AME									SAM			
COMPANY	PM Env		tal					СОМ	PANY		1										-	
ADDRESS			Mile Rd	garage and a large				ADDF	RESS	- 11						100			()			
CITY	Berkley		in in	STATE MI ZIP CO	DE 4	8078	2	CITY		T.		1 1					14.7		STATE	ZIP CODE		
PHONE NO.			FAX NO.	P.O. NO.				PHON	NE NO.					E-M	IAIL ADD	RESS						
E-MAIL ADDRESS	Beumele	pmen	. Com	QUOTE NO.				D. J.	of all	di	10	A	NALY	SIS (AT	TACH	LIST IF	MORES	SPACE	IS REQUIR	ED)	ACTE.	
PROJECT NO./NAM	^{ME} 01-11288	-1-0004	Mariner's Inn	SAMPLER(S) - PLEASE PRI	NT/SIG	GN NAI	ME Le	,4:/	de	w.	1	-			lo-				Certificat	ons	111.3.	
TURNAROUNI	D TIME REC	QUIRED	□1 DAY □2 DAYS □3 DAY	S STANDARD	OTI	HER	_		"	_									□ OHIO VA		inking Wa	ater
DELIVERABLE	S REQUIR	ED 🗆 ST	D DLEVELII DLEVELIII	LEVEL IV DEDD		THE	R _									1		100	□ DoD	□NF	PDES	
MATRIX CODE:	GW=GROUN SL=SLUDG		WW=WASTEWATER S=SOIL DRINKING WATER O=OIL WI		SOLI =WAS	Wilson on V			ontair eserva			Ī							Project Lo ☐ Detroit		w York	
MERIT LAB NO. FOR LAB USE ONLY	DATE	AR TIME	SAMPLE TA IDENTIFICATION-DES		MATRIX	# OF 3OTTLES	NONE	HCI	HNO ₃	NaOH	МеОН	VOC	PMA						☐ Other _ Special In	struction	ıs	-
30741.01	11/24/21	1000	SB-5R 0.5-1.5'		5	2	1				1	*	*	1					1	11.	mark 1	
.02	11/24/21	0935	SB-5R 4.5-5.5"		S	2	1				1	X	*									
.03	11/24/21	0940	SB-5R 5.5-6.5'		S	2	1				1	×	×								- T	
.64	11/24/21	1155	58-6 3.5-4.5'	- I -www.harbi	S	2	1				1	×	×						130. 5		19	
.05	11/24/21	1200	SB-6 4.5-5.5'		5	2	1				1	*	×					1	1.7		IÉ	
06	11/24/21	1205	58-6 7-8'	0 - 5:1.4	S	2	1				ı	*	×			-			Hold	1	6	
.07	11/24/21	1220	53-7 3.5-4.5'	to the limit	S	2	1				1	×	×		201							
.08	11/24/21	1225	58-7 4.5-5.5'	1 1 1	S	2	1				ı	×	*	14 4.8								-
	11/24/21		56-7 7-8	rate and the second	S	2	ı				1	*	×						Hold		1 1	
10	11/24/21	1125	SB-8 3.5-4.5'	was a d	S	2	1			4	1	×	×					12		- 1117	Wir att	
	11/24/21		58-8 4.5-5.5'	0.00	S	2	1				1	×	*			1 2						
.12	11/24/21	1135	58-8 7-8'	ty and langu	S	a	1	0.4	1	ny.	١	×	*	or or by	1100		111	100	Hold	1 11	1500	
RELINQUISHED B' SIGNATURE/ORGA RECEIVED BY: SIGNATURE/ORGA RELINQUISHED B' SIGNATURE/ORGA	ANIZATION ANIZATION Y:	//-	Cold Storage	DATE LIJON DATE LIJON DATE DATE	21	1350 1350		SIGN	NQUISH IATURE EIVED B IATURE NO.	HED B HORG HY:	BY: BANIZA	ATION	EAL INTA	ACT NO [INITA	Ls	NOT	//	TEMP. ON	4-1-1-1-1-1	ZIME ZIME	
RECEIVED BY: SIGNATURE/ORGA	ANIZATION	1	M Chilcot	11/29/21 DATE	14	30		SEAL	NO.			S	EAL INTA		INITI	ALS					3.2	



Merit 2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

REPOR	T TO		Lai	poratories, Inc.	CHAI	IN OF	C	US	TO	DY	RE	CO	RD								INVOICE	TO
CONTACT NAME	Sana Be	umel							CO	NTAC	TNAM									7	SAME	
COLLEGABLY	PM Envi		tal			,			co	MPAN	IY	-				1	-16					
ADDDECC	1080 W			d					ADI	DRES	S					111	100			g 7 . 0	9 1	
	Berklay		111.0		STATE	IP CODE	480	72	CIT	Υ							100		7 1	STATE	ZIP CODE	
PHONE NO.	9		FAX NO.		P.O. NO.					ONE N	10.					E-MAIL	ADDRESS					
E-MAIL ADDRESS	Bernel@	menv.	com		QUOTE NO.	5			50	S. M	10.0	102		ANAL	YSIS	(ATTA	CH LIST	IF MC	RE SPA	ACE IS RE	QUIRED)	J:
PROJECT NO./NAM	ol-11288	-1-000	4	William III.	SAMPLER(S) - PLEAS	E PRINT/S	SIGN N	IAME	14:	12	14	1	-	0.1	1/2 / /	86 19	10.0	7 10		100000	fications	
				□2 DAYS □3 DAY	YS X STANDARD	0 0	THEF	۹ _		-	/	_	_						1 1	□ Do	O VAP ☐ Drinking □ NPDES	water
DELIVERABLE	S REQUIRE	ED ST	D DLEV	EL II LEVEL III	LEVEL IV DEC	DD D	отн	ER					-					1	- 3	1 20.55		
	GW=GROUN SL=SLUDGE		WW=WA	ASTEWATER S=SOIL W	L L=LIQUID /P=WIPE A=AIR	SD=SOL W=WA					tainer ervativ			3		0 =			-	□ Def	ct Locations roit New York	ĸ
MERIT	YE	AR	1	SAMPLE TO		MATRIX	OF.	TLES	CI	HNOs	H ₂ SO ₄	МеОН	701	PWAS						□ Oth		
LAB NO. FOR LAB USE ONLY	DATE	TIME	2011	DENTIFICATION-DES	SCRIPTION				Z	Ī	I Z	M N			-	+	++	+	++	Spec	ial Instructions	
30741.13				3.5-4.5'		9	-	+	1	Н		1	1	×			1		1	2.77	divisit for an	-
.14	11/24/21		58.9	4.5 - 5.5	1.0	S		-	1	Ш	11/1	1	X	×	11.1		1			9/	- 11	
	11/24/21		58-9	7-8'		S	9	1	1			1	*	*						Hold		
.16	11/24/21	1040	58-10	3.5-4.5'	51	S	0	1	1			1	X	*	-0	-1,			- 4	al possi	- T - 1	7
.17	11/24/21	1035	58-10	4.5-5.5		5	5 8	1				1	1	×		1 7		- 10	24.01	Sept 1	, 40 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
.18	ग्रिमीम	1030	SB-10	7-8'	1 25 1	5	5 6	2	1			1	*	×			olie.		1 17	Holo	Maria	
30.00						1	- 9	+	1				-	-			1-2			1000	4 - 1 10	
A seminate				11		HE	-	1								1 -	1.0			in portp	you to brose	
1 496	- 1		7				-	1					1	-	-	-			id.	C 1 1	pay-orb	1
	ne od	(- 7	in the lit	ng malagrap		ni h	51	+	of of		12:	100	-	1756	100	1701	00.1				gran com	7
RELINQUISHED B SIGNATURE/ORG	BY:	164	165	PME X	Sampler DA	ATE 124/21	TIME 131				UISHE URE/O		ZATION			,	/	100	1 10	Tahun	DATE	TIME
RECEIVED BY: SIGNATURE/ORG	ANIZATION	PM "	Cold S.	tps+ge	DA	ATE 1 (24/2)	L	50	RE	ECEIV	ED BY: URE/O			\mathcal{L}	X		/			110	DI DATE B	30
RELINQUISHED B SIGNATURE/ORG RECEIVED BY:			111	Mo	1180	ATE	TIME			EAL N		71	- 11	SEAL II		NO□	INITIALS		NOTES	: TE	MP. ON ARRIVAL	_
SIGNATURE/ORG	ANIZATION		VIC	Comos	11/27/2	4	431	0						YES		NO						



Report ID: S30744.01(01) Generated on 12/02/2021

Report to

Attention: Jana Beumel PM Environmental, Inc. 4080 W. Eleven Mile Berkley, MI 48072

Phone: O:248-336-9988 D:248-414-1859 FAX:

Email: Beumel@pmenv.com

Report produced by

Merit Laboratories, Inc. 2680 East Lansing Drive East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions: John Laverty (johnlaverty@meritlabs.com) Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S30744.01-S30744.02 Project: 01-11288-1-0004 / Mariner's Inn

Collected Date(s): 11/24/2021

Submitted Date/Time: 11/29/2021 14:30

Sampled by: Jarrett Humpula P.O. #: 01-11288-1-0004

Table of Contents

Cover Page (Page 1)

General Report Notes (Page 2)

Report Narrative (Page 2)

Laboratory Certifications (Page 3)

Qualifier Descriptions (Page 3)

Glossary of Abbreviations (Page 3)

Method Summary (Page 4)

Sample Summary (Page 5)

Maya Murshak Technical Director

Naya Mushah



General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples

for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report



Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
В	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
Н	Sample submitted and run outside of holding time
1	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
0	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
Т	No correction for total solids
X	Elevated reporting limit due to matrix interference
Υ	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
е	Reported value estimated due to interference
j	Analyte also found in associated method blank
р	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Method Summary

 Method
 Version

 N/A
 Not Applicable

 TO-15
 EPA TO-15 Second Edition January 1999



Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S30744.01	SG-5R	Air	11/24/21 12:20 - 11/24/21 12:27
S30744.02	SG-10	Air	11/24/21 12:30 - 11/24/21 12:39



Lab Sample ID: S30744.01

Sample Tag: SG-5R

Collected Date/Time: 11/24/2021 12:20 - 11/24/2021 12:27

Matrix: Air

COC Reference: A6832

Sample Containers

Type Preservative(s) Refrigerated? Arrival Temp. (C) Thermometer # No RT IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-4	N/A	11/29/21 16:50	NDK	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/30/21 20:00, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	20		ppbv	10	67-64-1	
1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Benzene	Not detected	2		ppbv	10	71-43-2	
Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Bromoform	Not detected	2		ppbv	10	75-25-2	
Bromomethane	Not detected	2		ppbv	10	74-83-9	
Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Carbon disulfide	Not detected	5		ppbv	10	75-15-0	
Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloroethane	Not detected	20		ppbv	10	75-00-3	
Chloroform	Not detected	2		ppbv	10	67-66-3	
Chloromethane	Not detected	20		ppbv	10	74-87-3	
3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
Cyclohexane	Not detected	2		ppbv	10	110-82-7	
1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethanol*	Not detected	25		ppbv	10	64-17-5	
Ethylbenzene	Not detected	2		ppbv	10	100-41-4	
Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
Freon 113	Not detected	2		ppbv	10	76-13-1	



Lab Sample ID: S30744.01 (continued)

Sample Tag: SG-5R

TO-15, Method: TO-15, Run Date: 11/30/21 20:00, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	Not detected	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	Not detected	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	100		ppbv	10	115-07-1	
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	10		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	Not detected	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	Not detected	4		ppbv	10		
o-Xylene	Not detected	2		ppbv	10	95-47-6	
Total Xylenes	Not detected	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 11/30/21 20:00, Analyst: KAG

	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
I,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	Not detected	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
/inyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	16		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	



Lab Sample ID: S30744.01 (continued)

Sample Tag: SG-5R

Parameter Result RL MDL Units Dilution CAS# Flags
Cyclohexane Not detected 6.9 ug/m3 10 110-82-7 1,1-Dichloroethane Not detected 8.1 ug/m3 10 75-34-3 1,1-Dichloroethane Not detected 7.9 ug/m3 10 75-35-4 1,2-Dichloroethane Not detected 15 ug/m3 10 106-93-4 1,2-Dichloropthane Not detected 8.1 ug/m3 10 107-06-2 1,2-Dichloroptopane Not detected 9.2 ug/m3 10 78-87-5 1,4-Dioxane Not detected 9.9 ug/m3 10 75-71-8 Dichlorodifluoromethane Not detected 7.9 ug/m3 10 75-71-8 Dibromochloromethane Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-69-2 cis-1,2-Dichloroptopene Not detected 9.1 ug/m3 10 156-59-2 cis-1,2-Dichlorobenzene Not detected 12 ug/m3
1,1-Dichloroethane Not detected 8.1 ug/m3 10 75-34-3 1,1-Dichloroethane Not detected 7.9 ug/m3 10 75-35-4 1,2-Dibromethane Not detected 15 ug/m3 10 106-93-4 1,2-Dichloroethane Not detected 8.1 ug/m3 10 107-06-2 1,2-Dichloropropane Not detected 9.2 ug/m3 10 75-87-5 1,4-Dioxane Not detected 9.0 ug/m3 10 123-91-1 Dichlorodifluoromethane Not detected 9.9 ug/m3 10 123-91-1 Dibromochloromethane Not detected 7.9 ug/m3 10 124-48-1 trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,3-Dichloropethene Not detected 7.9 ug/m3 10 156-59-2 cis-1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 u
1,1-Dichloroethene Not detected 7.9 ug/m3 10 75-35-4 1,2-Dichloroethane Not detected 15 ug/m3 10 106-93-4 1,2-Dichloroethane Not detected 8.1 ug/m3 10 107-06-2 1,2-Dichloropropane Not detected 9.2 ug/m3 10 78-87-5 1,4-Dioxane Not detected 9.9 ug/m3 10 75-71-8 Dibromochloromethane Not detected 17 ug/m3 10 124-48-1 trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichloropropene Not detected 7.9 ug/m3 10 156-60-5 cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 156-60-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichloropopopene Not detected 12 ug/
1,2-Dibromoethane Not detected 8.1 ug/m3 10 106-93-4 1,2-Dichloroethane Not detected 8.1 ug/m3 10 107-06-2 1,2-Dichloropropane Not detected 9.2 ug/m3 10 78-87-5 1,4-Dioxane Not detected 90 ug/m3 10 75-71-8 Dibromochloromethane Not detected 17 ug/m3 10 124-48-1 trans-1,2-Dichloroethane Not detected 7.9 ug/m3 10 124-48-1 trans-1,2-Dichloroethane Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichloroethane Not detected 7.9 ug/m3 10 156-69-2 cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-01-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,4-Dichloropopene Not detected 9.1 ug/m3 10 10061-02-6 Ethylanci Not detected 9.1 ug/m
1,2-Dichloroethane Not detected 8.1 ug/m3 10 107-06-2 1,2-Dichloropropane Not detected 9.2 ug/m3 10 78-87-5 1,4-Dioxane Not detected 90 ug/m3 10 123-91-1 Dichlorodifluoromethane Not detected 9.9 ug/m3 10 75-71-8 Dibromochloromethane Not detected 1.7 ug/m3 10 124-48-1 trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichlorobenzene Not detected 7.9 ug/m3 10 156-60-5 cis-1,3-Dichloropropene Not detected 1.2 ug/m3 10 106-10-15 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichlorobenzene Not detected 47 </td
1,2-Dichloropropane Not detected 9.2 ug/m3 10 78-87-5 1,4-Dioxane Not detected 90 ug/m3 10 123-91-1 Dichlorodiffluoromethane Not detected 9.9 ug/m3 10 75-71-8 Dibromochloromethane Not detected 17 ug/m3 10 124-48-1 trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,3-Dichloropropene Not detected 7.9 ug/m3 10 156-60-5 cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 156-69-2 cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 9.1 ug/m3 10 1064-67 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 1064-07 Ethyliberacene Not detected 9.1
1,4-Dioxane Not detected 90 ug/m3 10 123-91-1 Dichlorodifluoromethane Not detected 9.9 ug/m3 10 75-71-8 Dibromochloromethane Not detected 17 ug/m3 10 124-48-1 trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-69-2 cis-1,3-Dichloropropene Not detected 12 ug/m3 10 10061-01-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 47 ug/m3 10 64-17-5 Ethylone Not detected 8.7 ug/m3 10 100-41-4 Ethylone Not detected 72 ug/m3
Dichlorodiffluoromethane Not detected 9.9 ug/m3 10 75-71-8 Dibromochloromethane Not detected 17 ug/m3 10 124-48-1 trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-59-2 cis-1,3-Dichloroppopene Not detected 9.1 ug/m3 10 10061-01-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichloropenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-02-6 Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyltoluene Not detected 9.8 ug/m
Dibromochloromethane Not detected 17 ug/m3 10 124-48-1
trans-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-60-5 cis-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-59-2 cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-01-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-02-6 Ethanol* Not detected 47 ug/m3 10 10061-02-6 Ethylbenzene Not detected 8.7 ug/m3 10 64-17-5 Ethylbenzene Not detected 72 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 101-41-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-13-1 Freon 114 Not detected 8.2 ug/m3 10 142-82-5 Hexane Not detected 7.0 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 10-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 59 ug/m3 10 78-93-3
cis-1,2-Dichloroethene Not detected 7.9 ug/m3 10 156-59-2 cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-01-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 1006-40-7 Ethanol* Not detected 9.1 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 7.2 ug/m3 10 141-78-6 4-Ethyl Inducene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-14-2 Heptane Not detected 8.2 ug/m3 10
cis-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-01-5 1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 1006-10-2-6 Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyltoluene Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 8.2 ug/m3 10 76-14-2 Heyane Not detected 2.1 ug/m3 10 110-54-3
1,3-Dichlorobenzene Not detected 12 ug/m3 10 541-73-1 1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-02-6 Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heptane Not detected 21 ug/m3 10 110-54-3 Hexane Not detected 7.0 ug/m3 10 110-54-3
1,2-Dichlorobenzene Not detected 12 ug/m3 10 95-50-1 1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-02-6 Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heyzane Not detected 21 ug/m3 10 142-82-5 Hexane Not detected 21 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 <
1,4-Dichlorobenzene Not detected 12 ug/m3 10 106-46-7 trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-02-6 Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heysane Not detected 8.2 ug/m3 10 142-82-5 Hexane Not detected 7.0 ug/m3 10 10-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 17 ug/m3 10 67-63-0 <
trans-1,3-Dichloropropene Not detected 9.1 ug/m3 10 10061-02-6 Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heptane Not detected 8.2 ug/m3 10 76-14-2 Hexachlorobutadiene Not detected 21 ug/m3 10 142-82-5 Hexane Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Ethanol* Not detected 47 ug/m3 10 64-17-5 Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heyane Not detected 8.2 ug/m3 10 142-82-5 Hexane Not detected 21 ug/m3 10 87-68-3 Hexanone* Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 17 ug/m3 10 67-63-0 Methylene chloride Not detected 59 ug/m3 10 75-09-2 2-Butanone (MEK)
Ethylbenzene Not detected 8.7 ug/m3 10 100-41-4 Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heyane Not detected 8.2 ug/m3 10 142-82-5 Hexane Not detected 21 ug/m3 10 87-68-3 2-Hexanone* Not detected 20 ug/m3 10 110-54-3 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Ethyl Acetate* Not detected 72 ug/m3 10 141-78-6 4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heptane Not detected 8.2 ug/m3 10 142-82-5 Hexachlorobutadiene Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
4-Ethyltoluene Not detected 9.8 ug/m3 10 622-96-8 Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heptane Not detected 8.2 ug/m3 10 142-82-5 Hexachlorobutadiene Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Freon 113 Not detected 15 ug/m3 10 76-13-1 Freon 114 Not detected 14 ug/m3 10 76-14-2 Heptane Not detected 8.2 ug/m3 10 142-82-5 Hexachlorobutadiene Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Freon 114 Not detected 14 ug/m3 10 76-14-2 Heptane Not detected 8.2 ug/m3 10 142-82-5 Hexachlorobutadiene Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Heptane Not detected 8.2 ug/m3 10 142-82-5 Hexachlorobutadiene Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Hexachlorobutadiene Not detected 21 ug/m3 10 87-68-3 Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Hexane Not detected 7.0 ug/m3 10 110-54-3 2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
2-Hexanone* Not detected 20 ug/m3 10 591-78-6 Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Isopropyl Alcohol* Not detected 49 ug/m3 10 67-63-0 Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
Methylene chloride Not detected 17 ug/m3 10 75-09-2 2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
2-Butanone (MEK) Not detected 59 ug/m3 10 78-93-3 4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
4-Methyl-2-pentanone (MIBK) Not detected 20 ug/m3 10 108-10-1
tert-Methyl butyl ether (MTBE) Not detected 7.2 ug/m3 10 1634-04-4
Methyl methacrylate Not detected 8.2 ug/m3 10 80-62-6
Naphthalene Not detected 10 ug/m3 10 91-20-3
Propylene* Not detected 170 ug/m3 10 115-07-1
Styrene Not detected 8.5 ug/m3 10 100-42-5
1,1,1-Trichloroethane Not detected 11 ug/m3 10 71-55-6
1,1,2,2-Tetrachloroethane Not detected 14 ug/m3 10 79-34-5
1,1,2-Trichloroethane Not detected 11 ug/m3 10 79-00-5
1,2,4-Trichlorobenzene Not detected 37 ug/m3 10 120-82-1
1,2,4-Trimethylbenzene Not detected 9.8 ug/m3 10 95-63-6
1,3,5-Trimethylbenzene Not detected 9.8 ug/m3 10 108-67-8
2,2,4-Trimethylpentane Not detected 9.3 ug/m3 10 540-84-1
Tert-butyl Alcohol Not detected 30 ug/m3 10 75-65-0
Tetrachloroethene Not detected 14 ug/m3 10 127-18-4
Tetrahydrofuran* Not detected 5.9 ug/m3 10 109-99-9
Toluene Not detected 7.5 ug/m3 10 108-88-3
Trichloroethene Not detected 11 ug/m3 10 79-01-6
Trichlorofluoromethane Not detected 11 ug/m3 10 75-69-4
Vinyl chloride Not detected 5.1 ug/m3 10 75-01-4



Lab Sample ID: S30744.01 (continued)

Sample Tag: SG-5R

TO-15, Method: TO-15, Run Date: 11/30/21 20:00, Analyst: KAG (continued)

10 10, 1110111041 10 10, 110	10 10, mother 10 10, Ran Batel 11/00/21 20100, Fallaryott 10 to Containada,								
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags		
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4			
p,m-Xylene	Not detected	17		ug/m3	10				
o-Xylene	Not detected	8.7		ug/m3	10	95-47-6			
Total Xvlenes	Not detected	26		ua/m3	10	1330-20-7			



Lab Sample ID: S30744.02

Sample Tag: SG-10

Collected Date/Time: 11/24/2021 12:30 - 11/24/2021 12:39

Matrix: Air

COC Reference: A6832

Sample Containers

Type Preservative(s) Refrigerated? Arrival Temp. (C) Thermometer # 1 Air Canister None No RT IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-4	N/A	11/29/21 16:50	NDK	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 11/30/21 20:32, Analyst: KAG

Acetone Not detected 20 ppbv 10 67-64-1 J.3-Butadiene Not detected 20 ppbv 10 106-99-0 Benzene 3 2 ppbv 10 71-43-2 Bromodichlioromethane Not detected 2 ppbv 10 75-27-4 Bromodichlioromethane Not detected 2 ppbv 10 75-27-2 Bromomethane Not detected 2 ppbv 10 75-27-2 Bromodichlioromethane Not detected 2 ppbv 10 75-80-3 Vinyl bromide Not detected 2 ppbv 10 75-16-0 Carbon disulfide Not detected 2 ppbv 10 75-16-0 Chlorochtane Not detected 2 ppbv 10 75-10-3 Chlorochtane Not detected 2 ppbv 10 76-66-3 Chlorochtane Not detected 2 ppbv 10 75-36-4 Chloropropene <	Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzene 3 2 ppbv 10 71-43-2 Bromodichloromthane Not detected 2 ppbv 10 75-27-4 Bromoform Not detected 2 ppbv 10 75-27-2 Bromomethane Not detected 2 ppbv 10 74-83-9 Vinyl bromide Not detected 2 ppbv 10 593-60-2 Benzyl chloride Not detected 2 ppbv 10 75-15-0 Chlorobenzene Not detected 2 ppbv 10 75-15-0 Chloroform Not detected 2 ppbv 10 75-15-0 Chloroform Not detected 2 ppbv 10 75-63-3 Chloroform Not detected 2 ppbv 10 75-84-3 Chloroformethane Not detected 2 ppbv 10 75-34-3 2-Chlorotoluene Not detected 2 ppbv 10 75-34-3 1,1-Dichlorotethane Not detecte	Acetone	Not detected	20		ppbv	10	67-64-1	
Bromodichloromethane Not detected 2 ppbv 10 75-27-4 Bromoform Not detected 2 ppbv 10 75-25-2 Bromomethane Not detected 2 ppbv 10 75-25-2 Bernzyl chloride Not detected 2 ppbv 10 593-60-2 Bernzyl chloride Not detected 5 ppbv 10 100-44-7 Carbon disulfide Not detected 5 ppbv 10 100-44-7 Chlorobenzene Not detected 2 ppbv 10 108-90-7 Chlorocethane Not detected 20 ppbv 10 75-00-3 Chlororopropene Not detected 2 ppbv 10 74-87-3 Chlororotoluene Not detected 2 ppbv 10 75-96-83 Carbon tetrachloride Not detected 2 ppbv 10 75-34-3 Cyclohexane Not detected 2 ppbv 10 75-34-3 1,-Di	1,3-Butadiene	Not detected	20		ppbv	10	106-99-0	
Bromoform Not detected 2 ppbv 10 75-25-2 Brommethane Not detected 2 ppbv 10 74-83-9 Vinyl bromide Not detected 2 ppbv 10 59-36-0-2 Benzyl chloride Not detected 2 ppbv 10 100-44-7 Carbon disulfide Not detected 2 ppbv 10 75-15-0 Chloropethane Not detected 2 ppbv 10 75-00-3 Chloropethane Not detected 2 ppbv 10 67-66-3 Chloropropene Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 20 ppbv 10 75-96-3 Chlorokoluene Not detected 2 ppbv 10 97-94-8 Carbon tetrachloride Not detected 2 ppbv 10 95-49-8 Cyclohexane 8 2 ppbv 10 75-34-3 1,1-Dichloroethane	Benzene	3	2		ppbv	10	71-43-2	
Bromomethane Not detected 2 ppbv 10 74-83-9 Vinyl bromide Not detected 2 ppbv 10 593-60-2 Benzyl chloride Not detected 2 ppbv 10 100-44-7 Carbon disulfide Not detected 5 ppbv 10 75-15-0 Chlorobenzene Not detected 2 ppbv 10 75-00-3 Chloroform Not detected 2 ppbv 10 75-00-3 Chloromethane Not detected 2 ppbv 10 67-66-3 Chloromethane Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 20 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 110-82-7 Cyclohexane 8 2 ppbv 10 15-34-3 1,1-Dichloroethane <td>Bromodichloromethane</td> <td>Not detected</td> <td>2</td> <td></td> <td>ppbv</td> <td>10</td> <td>75-27-4</td> <td></td>	Bromodichloromethane	Not detected	2		ppbv	10	75-27-4	
Vinyl bromide Not detected 2 ppbv 10 593-60-2 Benzyl chloride Not detected 2 ppbv 10 100-44-7 Carbon disulfide Not detected 5 ppbv 10 75-15-0 Chlorobenzene Not detected 2 ppbv 10 108-90-7 Chloroethane Not detected 20 ppbv 10 75-00-3 Chloropform Not detected 20 ppbv 10 75-66-3 Chloropforpene Not detected 20 ppbv 10 74-87-3 3-Chlorotoluene Not detected 2 ppbv 10 107-06-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 10-8-93-8 Cyclohexane 8 2 ppbv 10 75-34-8 1,1-Dichloroethane Not detected 2 ppbv 10 10-93-4 1,2-Dichloroetha	Bromoform	Not detected	2		ppbv	10	75-25-2	
Benzyl chloride Not detected 2 ppbv 10 100-44-7 Carbon disulfide Not detected 5 ppbv 10 75-15-0 Chlorosbenzene Not detected 2 ppbv 10 108-90-7 Chlorosthane Not detected 20 ppbv 10 75-00-3 Chloromethane Not detected 20 ppbv 10 76-86-3 Chloromethane Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 20 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-35-4 1,2-Dichloroethane Not detected 2 ppbv 10 106-93-4 1,2-Dichlo	Bromomethane	Not detected	2		ppbv	10	74-83-9	
Carbon disulfide Not detected 5 ppbv 10 75-15-0 Chlorobenzene Not detected 2 ppbv 10 108-90-7 Chloroferhane Not detected 20 ppbv 10 75-00-3 Chloroform Not detected 2 ppbv 10 67-66-3 Chloropropene Not detected 20 ppbv 10 74-87-3 3-Chlorotoluene Not detected 20 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-35-4 1,2-Dichloroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloroethane Not detected 2 ppbv 10 75-71-8 Dibromochlor	Vinyl bromide	Not detected	2		ppbv	10	593-60-2	
Chlorobenzene Not detected 2 ppbv 10 108-90-7 Chloroethane Not detected 20 ppbv 10 75-00-3 Chloroform Not detected 20 ppbv 10 67-66-3 Chloromethane Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 2 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,2-Dibromoethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 75-71-8 Dibromoc	Benzyl chloride	Not detected	2		ppbv	10	100-44-7	
Chloroethane Not detected 20 ppbv 10 75-00-3 Chloroform Not detected 2 ppbv 10 67-66-3 Chloromethane Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 20 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,2-Dibinomethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloropropane Not detected 2 ppbv 10 178-87-5 1,4-Dioxane Not detected 2 ppbv 10 75-71-8 Dibromochlo	Carbon disulfide	Not detected	5		ppbv	10	75-15-0	
Chloroform Not detected 2 ppbv 10 67-66-3 Chloromethane Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 20 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,2-Dibromoethane Not detected 2 ppbv 10 75-34-3 1,2-Dibrioroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 175-34-3 1,4-Dioxane Not detected 2 ppbv 10 123-91-1 Dichlorodifluoromethane Not detected 2 ppbv 10 124-48-1	Chlorobenzene	Not detected	2		ppbv	10	108-90-7	
Chloromethane Not detected 20 ppbv 10 74-87-3 3-Chloropropene Not detected 20 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,2-Dichloroethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloropthane Not detected 2 ppbv 10 107-06-2 1,2-Dichloroptpane Not detected 2 ppbv 10 75-87-5 1,4-Dioxane Not detected 2 ppbv 10 75-71-8 Dichlorodifluoromethane Not detected 2 ppbv 10 124-48-1	Chloroethane	Not detected	20		ppbv	10	75-00-3	
3-Chloropropene Not detected 20 ppbv 10 107-05-1 2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-35-4 1,2-Dibromoethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroptopane Not detected 2 ppbv 10 107-06-2 1,2-Dichloroptopane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 <	Chloroform	Not detected	2		ppbv	10	67-66-3	
2-Chlorotoluene Not detected 2 ppbv 10 95-49-8 Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-35-4 1,2-Dichloroethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroptopane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,3-Dichloroptopene Not detected 2 ppbv 10 10061-01-5 <	Chloromethane	Not detected	20		ppbv	10	74-87-3	
Carbon tetrachloride Not detected 2 ppbv 10 56-23-5 Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,2-Dichloroethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloropthane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 2 ppbv 10 75-71-8 1,4-Dioxane Not detected 2 ppbv 10 75-71-8 1,4-Dioxane Not detected 2 ppbv 10 124-48-1 1trans-1,2-Dichloroethane Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethane Not detected 2 ppbv 10 156-60-5	3-Chloropropene	Not detected	20		ppbv	10	107-05-1	
Cyclohexane 8 2 ppbv 10 110-82-7 1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,1-Dichloroethane Not detected 2 ppbv 10 75-35-4 1,2-Dichloroethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 25 ppbv 10 75-71-8 Dichlorodifluoromethane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroptenene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloroptenene Not detected 2 ppbv 10 541-73-1 <td>2-Chlorotoluene</td> <td>Not detected</td> <td>2</td> <td></td> <td>ppbv</td> <td>10</td> <td>95-49-8</td> <td></td>	2-Chlorotoluene	Not detected	2		ppbv	10	95-49-8	
1,1-Dichloroethane Not detected 2 ppbv 10 75-34-3 1,1-Dichloroethene Not detected 2 ppbv 10 75-35-4 1,2-Dichromoethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 2 ppbv 10 123-91-1 Dichlorodifluoromethane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10	Carbon tetrachloride	Not detected	2		ppbv	10	56-23-5	
1,1-Dichloroethene Not detected 2 ppbv 10 75-35-4 1,2-Dibromoethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 25 ppbv 10 123-91-1 Dichlorodifluoromethane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 1066-01-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,4-Dichloropropene Not detected 2 ppbv 10 <td>Cyclohexane</td> <td>8</td> <td>2</td> <td></td> <td>ppbv</td> <td>10</td> <td>110-82-7</td> <td></td>	Cyclohexane	8	2		ppbv	10	110-82-7	
1,2-Dibromoethane Not detected 2 ppbv 10 106-93-4 1,2-Dichloroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 25 ppbv 10 123-91-1 1,2-Dichloroethane Not detected 2 ppbv 10 75-71-8 1,2-Dichloromethane Not detected 2 ppbv 10 124-48-1 1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 1,3-Dichloropthene Not detected 2 ppbv 10 156-59-2 1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichloropropene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 1,4-Dichloropropene Not detected 2 ppbv 10 1066-46-7 1,4-Dichloropropene Not detected 2 ppbv 10 10061-02-6 1,4-Dichloropropene Not detected 2 pp	1,1-Dichloroethane	Not detected	2		ppbv	10	75-34-3	
1,2-Dichloroethane Not detected 2 ppbv 10 107-06-2 1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 2 ppbv 10 123-91-1 1,2-Dichloromethane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 Itrans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 1,4-Dichloropropene Not detected 2 ppbv 10 106-46-7 1,4-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 2 ppbv 10 100-41-4 Ethyl Itoluene Not detect	1,1-Dichloroethene	Not detected	2		ppbv	10	75-35-4	
1,2-Dichloropropane Not detected 2 ppbv 10 78-87-5 1,4-Dioxane Not detected 25 ppbv 10 123-91-1 Dichlorodifluoromethane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-69-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 106-46-7 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethyl Acetate* Not detected 20 ppbv 10	1,2-Dibromoethane	Not detected	2		ppbv	10	106-93-4	
1,4-Dioxane Not detected 25 ppbv 10 123-91-1 Dichlorodifluoromethane Not detected 2 ppbv 10 75-71-8 Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	1,2-Dichloroethane	Not detected	2		ppbv	10	107-06-2	
Dichlorodifluoromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 1061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 10 10061-01-5 1,4-Dichlorobenzene Not detected 2 ppbv 10 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 10061-02-6 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyltoluene Not detected 20 ppbv 10 100-41-4 Ethyltoluene	1,2-Dichloropropane	Not detected	2		ppbv	10	78-87-5	
Dibromochloromethane Not detected 2 ppbv 10 124-48-1 trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 10061-02-6 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 2 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	1,4-Dioxane	Not detected	25		ppbv	10	123-91-1	
trans-1,2-Dichloroethene Not detected 2 ppbv 10 156-60-5 cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	Dichlorodifluoromethane	Not detected	2		ppbv	10	75-71-8	
cis-1,2-Dichloroethene Not detected 2 ppbv 10 156-59-2 cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	Dibromochloromethane	Not detected	2		ppbv	10	124-48-1	
cis-1,3-Dichloropropene Not detected 2 ppbv 10 10061-01-5 1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	trans-1,2-Dichloroethene	Not detected	2		ppbv	10	156-60-5	
1,3-Dichlorobenzene Not detected 2 ppbv 10 541-73-1 1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	cis-1,2-Dichloroethene	Not detected	2		ppbv	10	156-59-2	
1,2-Dichlorobenzene Not detected 2 ppbv 10 95-50-1 1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	cis-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-01-5	
1,4-Dichlorobenzene Not detected 2 ppbv 10 106-46-7 trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	1,3-Dichlorobenzene	Not detected	2		ppbv	10	541-73-1	
trans-1,3-Dichloropropene Not detected 2 ppbv 10 10061-02-6 Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	1,2-Dichlorobenzene	Not detected	2		ppbv	10	95-50-1	
Ethanol* Not detected 25 ppbv 10 64-17-5 Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	1,4-Dichlorobenzene	Not detected	2		ppbv	10	106-46-7	
Ethylbenzene 54 2 ppbv 10 100-41-4 Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	trans-1,3-Dichloropropene	Not detected	2		ppbv	10	10061-02-6	
Ethyl Acetate* Not detected 20 ppbv 10 141-78-6 4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	Ethanol*	Not detected	25		ppbv	10	64-17-5	
4-Ethyltoluene Not detected 2 ppbv 10 622-96-8	Ethylbenzene	54	2		ppbv	10	100-41-4	
,	Ethyl Acetate*	Not detected	20		ppbv	10	141-78-6	
Freon 113 Not detected 2 ppbv 10 76-13-1	4-Ethyltoluene	Not detected	2		ppbv	10	622-96-8	
	Freon 113	Not detected	2		ppbv	10	76-13-1	



Lab Sample ID: S30744.02 (continued)

Sample Tag: SG-10

TO-15, Method: TO-15, Run Date: 11/30/21 20:32, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Freon 114	Not detected	2		ppbv	10	76-14-2	
Heptane	24	2		ppbv	10	142-82-5	
Hexachlorobutadiene	Not detected	2		ppbv	10	87-68-3	
Hexane	33	2		ppbv	10	110-54-3	
2-Hexanone*	Not detected	5		ppbv	10	591-78-6	
Isopropyl Alcohol*	Not detected	20		ppbv	10	67-63-0	
Methylene chloride	Not detected	5		ppbv	10	75-09-2	
2-Butanone (MEK)	Not detected	20		ppbv	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	5		ppbv	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	2		ppbv	10	1634-04-4	
Methyl methacrylate	Not detected	2		ppbv	10	80-62-6	
Naphthalene	Not detected	2		ppbv	10	91-20-3	
Propylene*	Not detected	201		ppbv	10	115-07-1	Χ
Styrene	Not detected	2		ppbv	10	100-42-5	
1,1,1-Trichloroethane	Not detected	2		ppbv	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	2		ppbv	10	79-34-5	
1,1,2-Trichloroethane	Not detected	2		ppbv	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	5		ppbv	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	2		ppbv	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	2		ppbv	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	2		ppbv	10	540-84-1	
Tert-butyl Alcohol	Not detected	10		ppbv	10	75-65-0	
Tetrachloroethene	Not detected	2		ppbv	10	127-18-4	
Tetrahydrofuran*	Not detected	2		ppbv	10	109-99-9	
Toluene	3	2		ppbv	10	108-88-3	
Trichloroethene	Not detected	2		ppbv	10	79-01-6	
Trichlorofluoromethane	Not detected	2		ppbv	10	75-69-4	
Vinyl chloride	Not detected	2		ppbv	10	75-01-4	
Vinyl acetate	Not detected	20		ppbv	10	108-05-4	
p,m-Xylene	235	4		ppbv	10		
o-Xylene	75	2		ppbv	10	95-47-6	
Total Xylenes	310	6		ppbv	10	1330-20-7	

TO-15, Method: TO-15, Run Date: 11/30/21 20:32, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	48		ug/m3	10	67-64-1	
1,3-Butadiene	Not detected	44		ug/m3	10	106-99-0	
Benzene	9.6	6.4		ug/m3	10	71-43-2	
Bromodichloromethane	Not detected	13		ug/m3	10	75-27-4	
Bromoform	Not detected	21		ug/m3	10	75-25-2	
Bromomethane	Not detected	7.8		ug/m3	10	74-83-9	
Vinyl bromide	Not detected	8.7		ug/m3	10	593-60-2	
Benzyl chloride	Not detected	10		ug/m3	10	100-44-7	
Carbon disulfide	Not detected	16		ug/m3	10	75-15-0	
Chlorobenzene	Not detected	9.2		ug/m3	10	108-90-7	
Chloroethane	Not detected	53		ug/m3	10	75-00-3	
Chloroform	Not detected	9.8		ug/m3	10	67-66-3	
Chloromethane	Not detected	41		ug/m3	10	74-87-3	
3-Chloropropene	Not detected	63		ug/m3	10	107-05-1	

X-Elevated reporting limit due to matrix interference



Lab Sample ID: S30744.02 (continued)

Sample Tag: SG-10

TO-15, Method: TO-15, Run Date: 11/	30/21 20:32, Ana	lyst: KAG	(continued)				
Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Chlorotoluene	Not detected	10		ug/m3	10	95-49-8	
Carbon tetrachloride	Not detected	13		ug/m3	10	56-23-5	
Cyclohexane	28	6.9		ug/m3	10	110-82-7	
1,1-Dichloroethane	Not detected	8.1		ug/m3	10	75-34-3	
1,1-Dichloroethene	Not detected	7.9		ug/m3	10	75-35-4	
1,2-Dibromoethane	Not detected	15		ug/m3	10	106-93-4	
1,2-Dichloroethane	Not detected	8.1		ug/m3	10	107-06-2	
1,2-Dichloropropane	Not detected	9.2		ug/m3	10	78-87-5	
1,4-Dioxane	Not detected	90		ug/m3	10	123-91-1	
Dichlorodifluoromethane	Not detected	9.9		ug/m3	10	75-71-8	
Dibromochloromethane	Not detected	17		ug/m3	10	124-48-1	
trans-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-60-5	
cis-1,2-Dichloroethene	Not detected	7.9		ug/m3	10	156-59-2	
cis-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-01-5	
1,3-Dichlorobenzene	Not detected	12		ug/m3	10	541-73-1	
1,2-Dichlorobenzene	Not detected	12		ug/m3	10	95-50-1	
1,4-Dichlorobenzene	Not detected	12		ug/m3	10	106-46-7	
trans-1,3-Dichloropropene	Not detected	9.1		ug/m3	10	10061-02-6	
Ethanol*	Not detected	47		ug/m3	10	64-17-5	
Ethylbenzene	230	8.7		ug/m3	10	100-41-4	
Ethyl Acetate*	Not detected	72		ug/m3	10	141-78-6	
4-Ethyltoluene	Not detected	9.8		ug/m3	10	622-96-8	
Freon 113	Not detected	15		ug/m3	10	76-13-1	
Freon 114	Not detected	14		ug/m3	10	76-14-2	
Heptane	98	8.2		ug/m3	10	142-82-5	
Hexachlorobutadiene	Not detected	21		ug/m3	10	87-68-3	
Hexane	120	7.0		ug/m3	10	110-54-3	
2-Hexanone*	Not detected	20		ug/m3	10	591-78-6	
Isopropyl Alcohol*	Not detected	49		ug/m3	10	67-63-0	
Methylene chloride	Not detected	17		ug/m3	10	75-09-2	
2-Butanone (MEK)	Not detected	59		ug/m3	10	78-93-3	
4-Methyl-2-pentanone (MIBK)	Not detected	20		ug/m3	10	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	7.2		ug/m3	10	1634-04-4	
Methyl methacrylate	Not detected	8.2		ug/m3	10	80-62-6	
Naphthalene	Not detected	10		ug/m3	10	91-20-3	
Propylene*	Not detected	346		ug/m3	10	115-07-1	Χ
Styrene	Not detected	8.5		ug/m3	10	100-42-5	
1,1,1-Trichloroethane	Not detected	11		ug/m3	10	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	14		ug/m3	10	79-34-5	
1,1,2-Trichloroethane	Not detected	11		ug/m3	10	79-00-5	
1,2,4-Trichlorobenzene	Not detected	37		ug/m3	10	120-82-1	
1,2,4-Trimethylbenzene	Not detected	9.8		ug/m3	10	95-63-6	
1,3,5-Trimethylbenzene	Not detected	9.8		ug/m3	10	108-67-8	
2,2,4-Trimethylpentane	Not detected	9.3		ug/m3	10	540-84-1	
Tert-butyl Alcohol	Not detected	30		ug/m3	10	75-65-0	
Tetrachloroethene	Not detected	14		ug/m3	10	127-18-4	
Tetrahydrofuran*	Not detected	5.9		ug/m3	10	109-99-9	
Toluene	11	7.5		ug/m3	10	108-88-3	
Trichloroethene	Not detected	11		ug/m3	10	79-01-6	
THOMOTOGRADIO	. tot doteoled			agriilo	10	10-01-0	

X-Elevated reporting limit due to matrix interference



Lab Sample ID: S30744.02 (continued)

Sample Tag: SG-10

TO-15, Method: TO-15, Run Date: 11/30/21 20:32, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	11		ug/m3	10	75-69-4	
Vinyl chloride	Not detected	5.1		ug/m3	10	75-01-4	
Vinyl acetate	Not detected	70		ug/m3	10	108-05-4	
p,m-Xylene	1,020	17		ug/m3	10		
o-Xylene	330	8.7		ug/m3	10	95-47-6	
Total Xylenes	1,300	26		ug/m3	10	1330-20-7	

Merit Laboratories Login Checklist

Lab Set ID:S30744

Client: PME02 (PM Environmental, Inc. - Berkley)

Project: 01-11288-1-0004 / Mariner's Inn Submitted: 11/29/2021 14:30 Login User: PFD Attention: Jana Beumel Address: PM Environmental, Inc. 4080 W. Eleven Mile Berkley, MI 48072

Phone: 0:248-336-9988 FAX: Email: Beumel@pmenv.com

Selection	Description Note
Sample Receiving	
01. Yes X No N/A	Samples are received at 4C +/- 2C Thermometer #
02. Yes X No N/A	Received on ice/ cooling process begun
03. Yes X No N/A	Samples shipped
04. Yes X No N/A	Samples left in 24 hr. drop box
05. Yes No XNA	Are there custody seals/tape or is the drop box locked
Chain of Custody	
06. X Yes No N/A	COC adequately filled out
07. X Yes No N/A	COC signed and relinquished to the lab
08. X Yes No N/A	Sample tag on bottles match COC
09. Yes X No N/A	Subcontracting needed? Subcontacted to:
Preservation	
10. X Yes No N/A	Do sample have correct chemical preservation
11. Yes No X N/A	Completed pH checks on preserved samples? (no VOAs)
12. Yes X No N/A	Did any samples need to be preserved in the lab?
Bottle Conditions	
13. X Yes No N/A	All bottles intact
14. X Yes No N/A	Appropriate analytical bottles are used
15. X Yes No N/A	Merit bottles used
16. X Yes No N/A	Sufficient sample volume received
17. Yes X No N/A	Samples require laboratory filtration
18. X Yes No N/A	Samples submitted within holding time
19. Yes No X N/A	Do water VOC or TOX bottles contain headspace

Corrective action for all	exceptions is to	call the client	and to notify th	ne project manag	er.
Client Review By:			Date:_		_



2680 East Lansing Dr., East Lansing, MI 48823 Phone (517) 332-0167 Fax (517) 332-4034 www.meritlabs.com

C.O.C. PAGE # 1 OF 1

A 6832

REPORT TO	AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD
-----------	---

INVOICE TO

CONTACT NAM	Jang Beumel							CONTACT NAME XSAME												
COMPANY		4 Environ						COMPANY												
ADDRESS	100	III.	en Mile Rd					ADDRESS												
CITY	-	erkley			STATE	I ZIP CODE	48072	2 CITY STATE ZIP CODE												
PHONE NO.			FAX NO.		P.O. NO.			PHONE NO. EMAIL ADDRESS												
EMAIL ADDRES	Be	unel@pmen	v.com	100	QUOTE NO.		201	ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)												
PROJECT NO./NAME OI - 11288 - 1-0004 / Mariner's TAN TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DA				SAMPLER(S) - I	West Hu	SIGN NAME	Certifications DoD NELAP					Sample Type				A	nalyses			
				EVEL III LEVEL	•		THER _							Air	1	SS	notes)		notes)	
MERIT SAMPLE TAG LAB NO. FOR LAB USE ONLY IDENTIFICATION-DESCRIPTION			1	Start		Stop Canisi Vacuum Field, (Start		n Vacuum in	Flow Controller	Canister ID	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (specify in notes)	TO-15	Other (specify in			
		5G-5R			11/24/21	1220	11/24/	21 1227	27	5	124	13728			×				×	
30744.	2	56-10			11/24/21	1230	11/24/		29	5	186	28910		7	×				X	
be	n :			n gran		(73 km	cutta						9.11						0	
					Turning to 1	an subba	2001	HZ												
5												71								
			ray Language	in an indo-		T.	La de													
-1	00		THE PARTY	tidae art a		N GE	47					210								
		The same	IN a			0.1.1						- 10								
		121				dw.j						11,03 11				100				
ye.		Tem	perature (Fahrenhe	eit)		0,759	1711	Р	ressure (inc	hes of Hg)			Notes				_			
	Interi	or	Ambient	Notes	3	100	Inter	erior Ambient			Notes	Analysis: VOCs								
Start			38"			Star	t	3		30.15										
Stop			380			Stop	0		30	.13										
RELINQUISHE SIGNATURE/C			with the	We s	Sampler	DATE U/24/24	TIME 1350	RELINQUISHEI SIGNATURE/O			^	/	,				DATE	Ē	TIME	
RECEIVED BY: SIGNATURE/C		NIZATION P/U	Cold	Storage		U/24/21	TIME	RECEIVED BY: SIGNATURE/O	RGANIZATION				1/2	XE	1		DATE	13	375	
RELINQUISHE SIGNATURE/C	RGAN	1	M	5	11-292	A DATE IL	3 C	SEAL NO.		SEAL INTACT YES [INITIAL NO 🗆	.S		September 1990	TEMP.	ON AF	RIVAL	D.	+	
RECEIVED BY: SIGNATURE/O		NIZATION	m	Vilcon	11/20		130	SEAL NO.		SEAL INTACT YES []	INITIAL NO 🗆	S .						7	1	

Appendix E



MODEL DOCUMENT – NOTICE TO CONSTRUCTION AND UTILITY CONTRACTORS

Date

Addressee Title Address Line 1 Address Line 2

RE: Notice to Construction and Utility Contractors Working at the Property Located at 445 Ledyard (Parcel ID: 0200618-9), Detroit, Michigan

Dear Addressee:

The Anchor at Mariners Inn, LDHA, LP is providing a further written notice to easement holder and public utilities that serve the above-referenced property to satisfy the reporting requirements in accordance with Michigan Department of Environment, Great Lakes, and Energy (EGLE) due care obligations under Rule 1013 of Section 20107a of Part 201 of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451 of 1994 (Part 201), as amended.

The subject property is a "facility" as specified in Section 20120a(1)(a) or (17) in Part 201 based on the analytical results of soil and/or groundwater samples collected during subsurface investigation. Contaminants, including volatile organic compounds (VOCs), polynuclear aromatic compounds (PNAs), and metals, have been identified on the subject property at levels above the EGLE Part 201 Generic Cleanup Criteria.

All contractors who may work sub-grade within contaminated area of the subject property (Figure X), including excavation contractors and utility employees, are advised to take appropriate safety precautions when working within the contaminated areas of the subject property. Training in accordance with 29 CFR 1910-210, personal protection equipment, and site safety plans may be necessary in the event that subsurface work is completed in the contaminated areas of the subject property. Additional documentation concerning the existing subsurface contamination is available upon request.

Please contact us at (XXX) XXX-XXXX if you have any questions or require any additional information.

Sincerely,

Name Title

Enclosure: Figure X