

> **Phase II Environmental Site Assessment**

**of the Property located at  
121 East Catherine Street  
Ann Arbor, Michigan 48104**

July 6, 2022  
ECT No. 220400-0200

for  
Downriver Community Conference  
15100 Northline Road  
Southgate, Michigan 48195

On behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

***ECT***


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## Document Review

The dual signatory process is an integral part of Environmental Consulting & Technology, Inc.'s (ECT's) Document Review Policy No. 9.03. All ECT documents undergo technical/peer review prior to dispatching these documents to any outside entity.

The environmental assessment described herein was conducted by the undersigned employees of ECT. ECT's investigation consisted solely of the activities described in the Introduction of this report, and in accordance with the Terms and Conditions of the Standard Consulting Services Agreement signed prior to initiation of the assessment, as applicable.

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## List of Acronyms and Abbreviations

bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DC	direct contact
DCC	Downriver Community Conference
DW	drinking water
ECT	Environmental Consulting & Technology, Inc.
EGLE	Michigan Department of Environment, Great Lakes and Energy
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FES	Fibertec Environmental Services
GSI	groundwater surface water interface
NREPA	Natural Resources and Environmental Protection Act, 1994 PA 451, as amended
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyls
PCE	tetrachloroethene
PID	photoionization detector
ppm	part per million
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
SAP	Sampling and Analysis Plan
TCE	trichloroethene
TMB	trimethylbenzene
USGS	United States Geological Survey
UST	underground storage tank
ug/kg	micrograms per kilogram
ug/m <sup>3</sup>	micrograms per cubic meter
VIAP	Volatilization to Indoor Air Pathway
VOC	volatile organic compound

## 1.0 Introduction

Environmental Consulting & Technology, Inc. (ECT) conducted a Phase II Environmental Site Assessment (ESA) at the single parcel (#09-09-29-135-001) addressed as 121 East Catherine Street, in Ann Arbor, Washtenaw County, Michigan (herein referred to as the Subject Property) for Downriver Community Conference (DCC) on behalf of Avalon Housing and the Ann Arbor Housing Commission. The Subject Property is currently developed as a paved parking lot and was historically commercially and light-industrially developed prior to approximately 1969. The Site Overview Map is provided as **Figure 1**. It is ECT's understanding that the proposed future use of the Subject Property is a multi-story, mixed-used residential and commercial complex.

### 1.1 Purpose

The purpose of the proposed Phase II ESA is to evaluate the presence or absence of environmental impact from two recognized environmental conditions (RECs) identified during a Phase I ESA that was conducted by Environmental Consulting Solutions, LLC on December 10, 2021.

This Phase II ESA report is intended to follow the ASTM International Standard E1903-19 (Standard Practice for Phase II Environmental Site Assessment Process). The purpose of ASTM E1903-19 is to conduct a Phase II ESA of a parcel of property with respect to the presence of, or the likely presence of substances, including but not limited to those required per the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA; 42 U.S.C. §9601) for documenting the assessment, scope, and the constraints on the conduct of the assessment process.

## 2.0 Background Information

### 2.1 Site Description

The Subject Property contains approximately 0.381 acres of land addressed as 121 East Catherine Street and is situated in Section 29, Township 2 South, Range 6 East, in Ann Arbor, Washtenaw County, Michigan. The Subject Property is currently developed as a paved parking lot and is owned by the City of Ann Arbor.

### 2.2 Proposed Development Plans

It is ECT's understanding that the proposed future use of the Subject Property is a six-story, mixed-used residential and commercial complex. Commercial retail businesses are proposed for the first stories and affordable housing units are proposed at the remaining stories.

### 2.3 Phase I ESA Findings

Environmental Consulting Solutions, LLC completed a Phase I ESA for the Subject Property, dated December 10, 2021. The Phase I ESA was prepared in general conformance with the scope and limitations of ASTM Practice E1527-13, E2600-15, and the 2021 Michigan State Housing Development Authority (MSHDA) Environmental Review Guidelines. The Phase I ESA identified the following recognized environmental conditions (RECs):

- **REC #1:** Former commercial/industrial uses at the Site, including a blacksmith, furniture factory, carpenter shop, and dairy (including potential underground fuel storage).
- **REC #2:** Several former commercial/industrial uses at the adjoining properties including a black smith, furniture factory, gas stations (including buried gas tanks), laundry/dry cleaners (including buried naphtha tanks), parking garage and auto glass repair.

The Site Overview Map is provided as **Figure 1** and depicts the above-mentioned features.

### 2.4 Additional Investigations

ECT is not aware of any additional investigations conducted at the Subject Property.

## 3.0 Sampling Activities

A Sampling and Analysis Plan (SAP) was prepared for the Subject Property by ECT and dated May 19, 2022, which provided an explanation of the proposed sampling activities, rationale, data quality objectives, data generation methodologies, and quality assurance measures in accordance with the Quality Assurance Project Plan for DCC dated January 2021. The proposed locations of the soil borings and/or vapor wells were slightly adjusted during field activities based on accessibility, subsurface refusals, and/or observations of soil conditions. The Sample Locations Map is provided as **Figure 2**.

### 3.1 Methods

The following methods and/or guidance were utilized during this Phase II ESA:

Activity	Method or Guidance
Decontamination	ECT SOP-4
Geoprobe Drilling	ASTM D-6282
Soil Sampling	ECT SOP-1 and EPA Method 5035
Soil Gas Sampling	EGLE Vapor Intrusion Pathway Guidance Document

#### 3.1.1 Soil Sampling

On May 26, 2022, eight soil borings (notated as GP-01 through GP-08) were advanced in areas identified as RECs using direct-push drilling technologies. Soils were screened with a calibrated photoionization detector (PID), logged, and characterized by an environmental professional during field activities. The Soil Boring Logs are provided as **Appendix A**.

Three soil borings (GP-01 through GP-03) were advanced to a maximum depth of 10 feet below ground surface (bgs) throughout the footprints of the former structures at the Subject Property to evaluate subsurface conditions from historical commercial and industrial operations, such as the blacksmith shop, stove shop/storage, and the dairy/carpentry factory. One soil sample was collected from each boring at a shallow interval (above four feet bgs) to correspond with the likelihood of impact being derived from surficial spills. These soil samples were analyzed for volatile organic compounds (VOCs), polynuclear aromatic compounds (PAHs), and the Michigan Ten Metals using Environmental Protection Agency (EPA) Methods 8260, 8270, and 6020/7470, respectively.



Two soil borings (GP-04 and GP-05) were advanced to a maximum depth of 20 feet bgs surrounding the historical heater room with the potential of an underground fuel storage tank to evaluate subsurface conditions. One soil sample was collected from each boring at depths that would likely correspond with an underground storage tank (UST). As the content of the former underground fuel storage is unknown (i.e. leaded gasoline, kerosene, etc.), the soil samples were analyzed for VOCs, PAHs, and lead using EPA Methods 8260, 8270, and 6020, respectively.

Three soil borings (GP-06 through GP-08) were advanced to a maximum depth of 20 feet bgs along the eastern, southern, and western boundaries (one boring per boundary) to evaluate the potential environmental impact that may have migrated from the adjoining gasoline filling stations and/or dry cleaning operations. In the SAP, it was proposed that one groundwater sample would be collected from each boring. However, groundwater was not encountered; therefore, ECT collected soil samples from these borings to supplement the investigation. These soil samples were analyzed for VOCs, PAHs, and lead using EPA Methods 8260, 8270, and 6020, respectively.

### **3.1.2 Groundwater Sampling**

No groundwater was encountered during the sampling event; therefore, no groundwater samples were collected.

### **3.1.3 Soil Gas Sampling**

On May 26, 2022, four subsurface vapor points (notated as VP-01 through VP-04) were advanced using direct-push drilling technologies with the installation of vapor wells containing five-foot depth screens. The vapor wells were located in areas of applicable RECs, such as at the historic heating room and adjoining gasoline filling station and dry cleaning operations. In accordance with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) guidance document dated May 2013 with amendments, ECT allowed 48 hours after vapor well installation before sampling the subsurface soil gas.

On May 31, 2021, ECT attempted to collect four soil gas samples from the vapor wells using the water dam leak method. One of the locations (VP-02) encountered perched water within the vapor well;

therefore, only three soil gas samples were successfully collected. These soil gas samples were analyzed for VOCs using EPA Method TO-15. The Soil Gas Field Logs are provided as **Appendix B**.

### 3.1.4 Quality Assurance/Quality Control

Environmental protocols consisting of equipment decontamination, sample preservation, and chain-of-custody documentation were followed during sampling activities. ECT adhered to the quality assurance objectives and procedures outlined in the SAP.

### 3.2 Analytical Laboratory Testing Program

Samples collected during Phase II ESA activities were submitted under chain-of-custody to the Fibertec Environmental Services (FES) analytical laboratory for quantitative analyses. The number of samples submitted for testing and the parameters evaluated are summarized in the table below:

Sample Identification Code	Area of Interest	Media	VOCs Method 8260	PAHS Method 8270	Lead Method 6020	MI Ten Metals Method 6020/7470	VOCs Method TO-15
AH-SB-GP-01 AH-SB-GP-02 AH-SB-GP-03	On-site historical commercial and industrial uses.	Soil	3	3	0	3	0
AH-SB-GP-04 AH-SB-GP-05	On-site potential underground fuel storage.	Soil	2	2	2	0	0
AH-SG-VP-02		Soil Gas (water in tubing)	0	0	0	0	0
AH-GW-GP-06 AH-GW-GP-07 AH-GW-GP-08	Potential migration from adjoining properties	Soil	3	3	3	0	0
AH-SG-VP-01 AH-SG-VP-03 AH-SG-VP-04		Soil gas	0	0	0	0	3
AH-TB-01	Trip blank	1 per cooler	1	0	0	0	0

## 4.0 Results

The following sections discuss the results of the Phase II ESA.

### 4.1 Soil Lithology and Hydrogeology

The Soil Boring Logs are provided as **Appendix A**. Below the pavement, brown, poorly graded sand was generally encountered to a depth ranging between six and 10 feet bgs. Below the sand layer, brown clay was encountered to approximately 15 feet bgs followed by dry, hard, brown-to-gray silty-clay to the maximum explored depth of 20 feet bgs.

Brick fragments were observed within the sand layer at borings GP-02 at 4.5' bgs and GP-05 at 9' bgs. Subsurface refusals were encountered at borings GP-02 at 5.5' bgs, GP-05 at 18' bgs, GP-07 at 15' bgs, and GP-08 at 13' bgs. It should be noted that three attempts were made in the vicinity of GP-02, in which a subsurface concentrate refusal was encountered at similar depths during each attempt.

An elevated PID reading of 395 ppm and a noxious odor were observed at boring GP-05 at 10' bgs; this evidence of impact observed appeared as a thin layer at this localized area. ECT did not observe any other indicators of environmental impact within the remaining borings. Lastly, no groundwater was encountered in any of the borings.

### 4.2 Soil Analytical Results

The Analytical Laboratory Report for Soil Samples is provided as **Appendix C**. The Soil Analytical Summary is provided as **Table 1** and compares the results to the EGLE Part 201 residential cleanup criteria and volatilization to indoor air pathway (VIAP) screening levels. A summary of the analytical soil results is presented below:

#### VOCs

VOCs, such as sec-butylbenzene, toluene, and xylenes, were detected in soil samples collected from borings GP-05 (10-11'), GP-07 (10-11'), and GP-08 (8-9'). However, none of the VOC concentrations exceed the cleanup criteria or VIAP screening levels.

### **PAHs**

Various PAHs were detected in the soil samples collected from GP-01 (3-4') and GP-02 (3-4'). However, none of the PAH concentrations exceed the cleanup criteria or VIAP screening levels.

### **Metals**

Arsenic was detected in the soil samples from GP-01 (3-4'), GP-02 (3-4'), and GP-03 (3-4') with concentrations ranging between 6,000 and 11,000 ug/kg. All three concentrations exceed the residential drinking water and groundwater-surface water interface cleanup criteria of 4,600 ug/kg. In addition, the concentration of arsenic at GP-01 (3-4') also exceeds the residential direct contact cleanup criterion of 7,600 ug/kg; it should be noted that this concentration is below the nonresidential direct contact cleanup criterion of 37,000 ug/kg.

Mercury (total) was detected in soil samples from GP-01 (3-4') and GP-02 (3-4') with concentrations of 160 ug/kg and 310 ug/kg, respectively. Both concentrations exceed the groundwater-surface water interface cleanup criterion of 50 ug/kg and the residential VIAP screening level of 22 ug/kg. Both concentrations are below the nonresidential VIAP screening level of 390 ug/kg.

Other metals were detected in the soil samples, but their concentrations were either below the cleanup criteria or the statewide default background level.

## **4.3 Groundwater Analytical Results**

Groundwater was not encountered during the subsurface investigation; thus, no groundwater samples were collected.

## **4.4 Soil Gas Analytical Results**

The Analytical Laboratory Report for Soil Gas Samples is provided as **Appendix D**. The Soil Gas Analytical Summary is provided as **Table 2** and compares the results to the residential and nonresidential EGLE VIAP screening levels. A summary of the analytical soil gas results is presented below:

### VOCs

Several VOCs, such as chloroform, 1,3-dichlorobenzene, trans-1,2-dichloroethene, 1,1,2,2-tetrachloroethane, and tetrahydrofuran were detected in the soil gas samples. All concentrations were below the residential and nonresidential screening levels.

## **4.5 Quality Assurance / Quality Control Results**

ECT submitted one quality assurance/quality control sample in the form of a trip blank; no VOCs were detected in the trip blank quality assurance sample. Due to the lack of groundwater samples collected during the investigation, no field blank quality assurance samples were submitted to the laboratory, and due to the limited scope of work involved in this Phase II ESA, no other quality assurance samples, such as field duplicates or matrix spike samples were deemed necessary in the SAP.

All samples were analyzed within their respective hold times. The results of the laboratory's qualifiers and control limits are included within the Analytical Laboratory Reports, provided as **Appendices C and D**. It is ECT's opinion that the laboratory's qualifiers do not impact the conclusions of this report.

## 5.0 Interpretations and Conclusions

Based on the results of the environmental site assessments completed at the Subject Property, ECT offers the following conclusions and opinions:

### **Soil**

Arsenic and mercury were detected in soil samples with concentrations exceeding the EGLE Part 201 residential cleanup criteria and/or residential VIAP screening levels. More specifically, the arsenic concentration at GP-01 (3-4') exceeded the residential direct contact cleanup criteria, and the concentrations of mercury at GP-01 (3-4') and GP-02 (3-4') exceeded the residential VIAP screening level. Based on the exceedances of the Part 201 residential cleanup criteria, the Subject Property is considered a "facility" as defined by the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Although arsenic and mercury concentrations also exceeded the drinking water protection and/or groundwater-surface water interface cleanup criteria, these pathways are considered *not* complete at the Subject Property because proposed development would be supported by municipal water and because there are no surface water bodies located within the immediate vicinity.

No other constituents of concern detected at the Subject Property exceeded the residential cleanup criteria, statewide default background levels, and/or VIAP screening levels. During field activities, ECT observed an elevated PID reading of 395 ppm in addition to the presence of noxious odor at GP-05 (10'); however, the observed impact appeared as a thin layer at this localized area.

### **Groundwater**

Groundwater was not encountered with a maximum explored depth of 20 feet bgs.

### **Soil Gas**

No detections of volatile organics at the Subject Property exceeded the residential VIAP screening levels. Therefore, there does not appear to have been a significant migration of sub-slab soil gas from the adjoining gasoline filling stations or dry cleaning operations.

## 6.0 References

ASTM International Standard E1903-19: Standard Practice for the Phase I Environmental Site Assessment Process, 2019.

Environmental Consulting Solutions, LLC, Phase I Environmental Site Assessment: Public Parking Lot, 121 East Catherine Street, Ann Arbor, Washtenaw County, Michigan, December 10, 2021.

Environmental Consulting & Technology, Inc. (ECT), Sampling and Analysis Plan for Phase II Environmental Site assessment: 121 East Catherine Street, Ann Arbor, Michigan 48104, May 19, 2022.

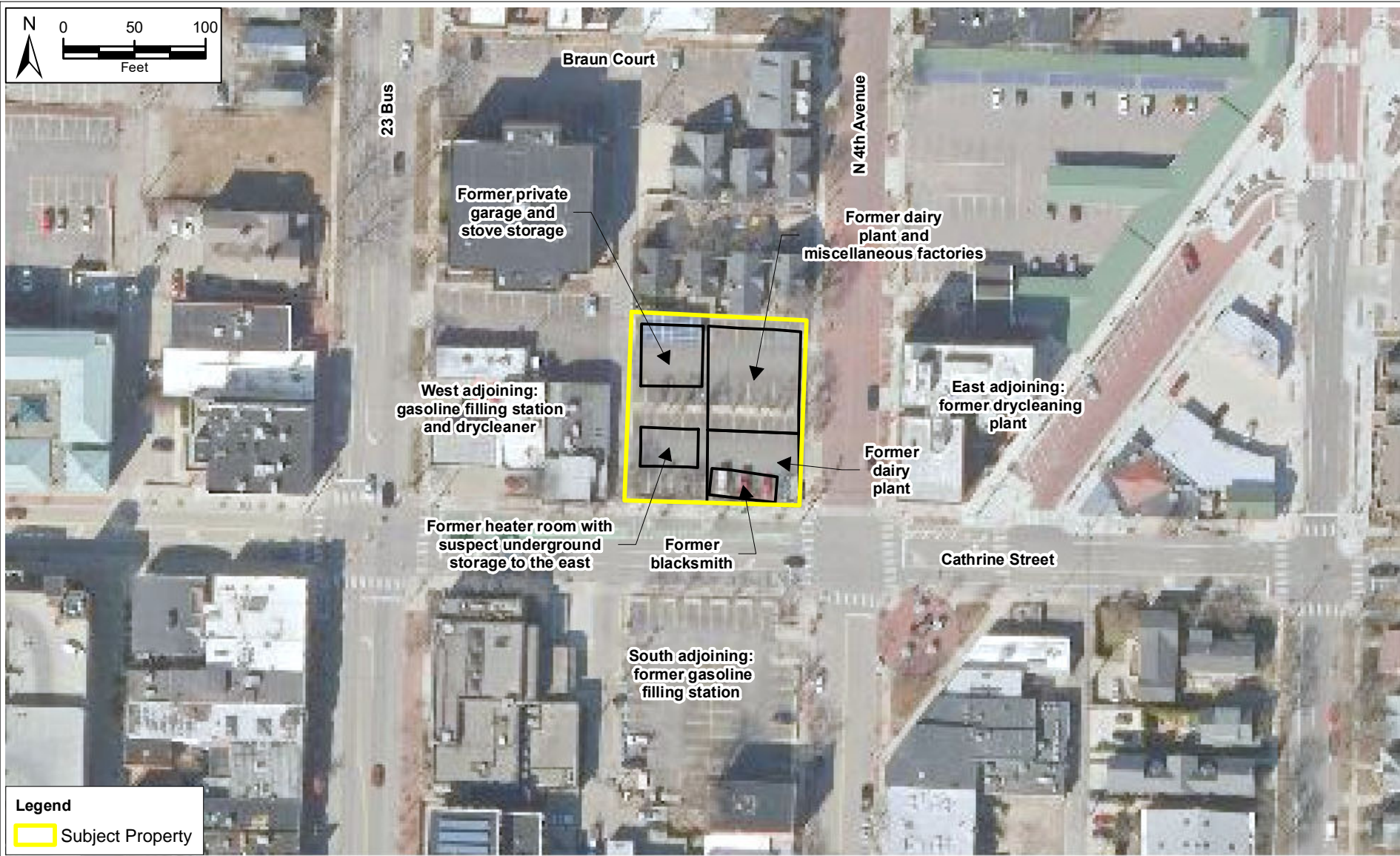
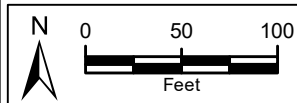
ECT, Quality Assurance Project Plan: United States Environmental Protection Agency Brownfield Grant Program: Grant Number BF-00E02888, January 2021.

Remediation and Redevelopment Division, Cleanup Criteria Requirements for Response Activity, R 299.44 Generic groundwater cleanup criteria, Table 1. Groundwater: Residential and Nonresidential Part 201 Generic Cleanup Criteria and Screening Levels, pages 36-44, effective December 30, 2013, revised August 3, 2020.

Remediation and Redevelopment Division, Cleanup Criteria Requirements for Response Activity, R 299.46 Generic soil cleanup criteria for residential category, Table 2. Soil: Residential Part 201 Generic Cleanup Criteria and Screening Levels, pages 48-68, effective December 30, 2013, revised June 25, 2018.

## Figures





**Legend**  
Subject Property

FIGURE 1.  
SITE OVERVIEW  
121 EAST CATHERINE STREET  
ANN ARBOR, WASHTENAW COUNTY, MICHIGAN

Sources: Washtenaw Co. Imagery, 2020; ECT, 2022.



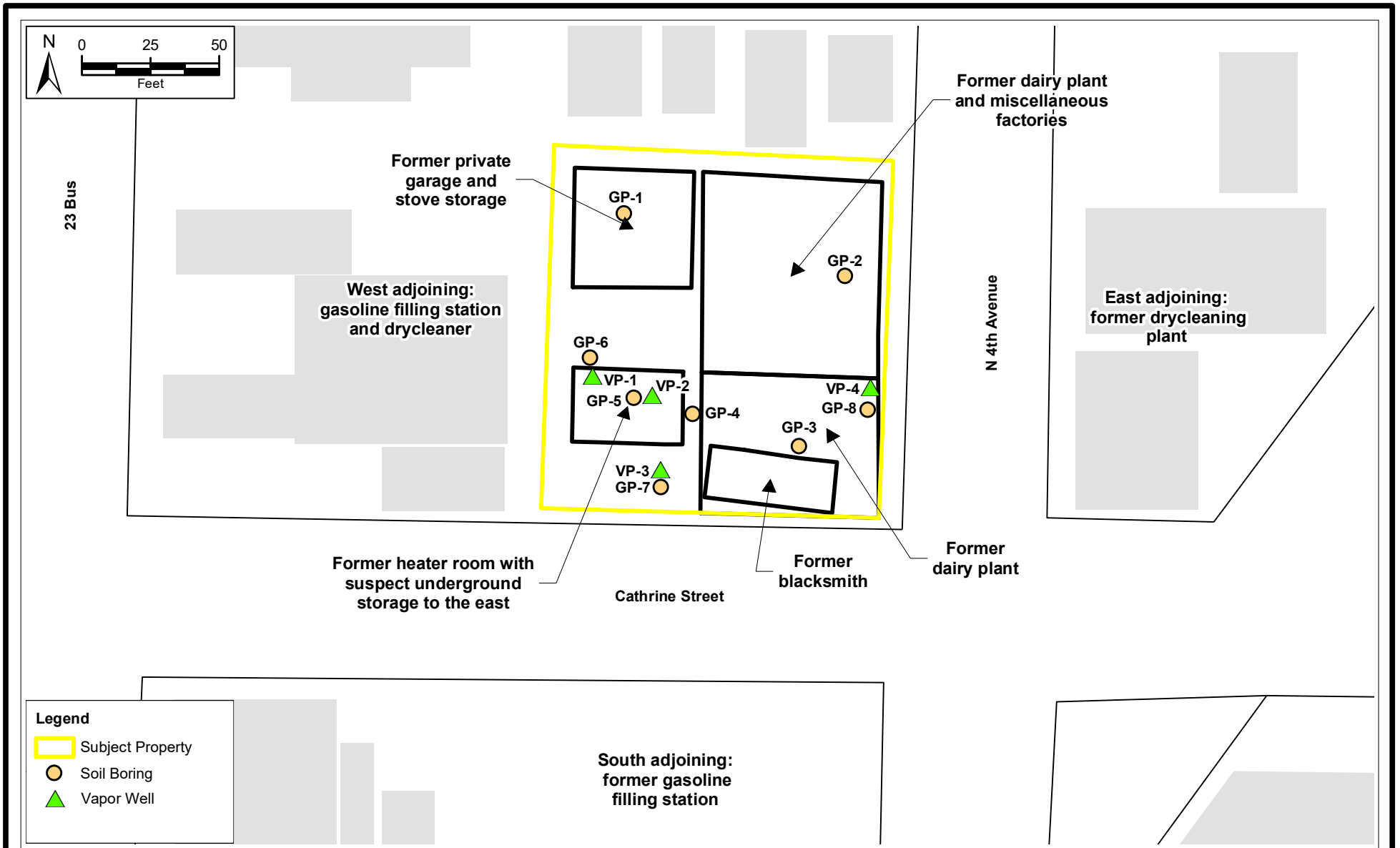


FIGURE 2.  
 SAMPLE LOCATIONS  
 121 EAST CATHERINE STREET  
 ANN ARBOR, WASHTENAW COUNTY, MICHIGAN

Source: ECT, 2022.



## Tables

**Table 1. Soil Analytical Summary**  
**121 East Catherine Street, Ann Arbor, Michigan**  
 Matrix: Soil  
 Cleanup Criteria: Residential

	Chemical Abstract Service Numbers	Statewide Default Background Levels	Part 201 Cleanup Criteria (June 2018)						VIAP 2020		Sample Locations (and Depths)							
			Residential						Residential	Nonres	AH-SB-GP-01 (3-4')	AH-SB-GP-02 (3-4')	AH-SB-GP-03 (3-4')	AH-SB-GP-04 (9-10')	AH-SB-GP-05 (10-11')	AH-SB-GP-06 (8-9')	AH-SB-GP-07 (10-11')	AH-SB-GP-08 (8-9')
			Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels	VIAP Screening Levels	VIAP Screening Levels	5/26/22	5/26/22	5/26/22	5/26/22	5/26/22	5/26/22	5/26/22	5/26/22
<b>VOC, ug/kg - Method 8260</b>																		
Benzene	71432	NA	100	240	1,600	13,000	180,000	400,000	2	47	nd	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	135988	NA	1,600	ID	ID	ID	2,500,000	10,000,000	3,800	66,000	nd	nd	nd	nd	52	nd	nd	nd
Ethylbenzene	100414	NA	1,500	360	87,000	720,000	22,000,000	140,000	12	340	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	108883	NA	16,000	5,400	330,000	2,800,000	50,000,000	250,000	3,700	64,000	nd	nd	nd	nd	nd	nd	63	76
Xylenes	1330207	NA	5,600	980	6,300,000	46,000,000	410,000,000	150,000	280	5,000	nd	nd	nd	nd	nd	nd	51	240
Other VOCs	varies	NL	NL	NL	NL	NL	NL	NL	NL	NL	nd	nd	nd	nd	nd	nd	nd	nd
<b>PAH, ug/kg - Method 8270</b>																		
Acenaphthene	83329	NA	300,000	8,700	190,000,000	81,000,000	41,000,000	NA	200,000	3,600,000	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	208968	NA	5,900	ID	1,600,000	2,200,000	1,600,000	NA	NA	NA	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	120127	NA	41,000	ID	1,000,000,000	1,400,000,000	230,000,000	NA	13,000,000	220,000,000	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	56553	NA	NLL	NLL	NLV	NLV	20,000	NA	160,000	11,000,000	360	650	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	50328	NA	NLL	NLL	NLV	NLV	2,000	NA	NA	NA	800	850	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	205992	NA	NLL	NLL	ID	ID	20,000	NA	NA	NA	1,000	1,200	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLV	NLV	2,500,000	NA	NA	NA	540	450	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	207089	NA	NLL	NLL	NLV	NLV	200,000	NA	NA	NA	nd	340	nd	nd	nd	nd	nd	nd
Chrysene	218019	NA	NLL	NLL	ID	ID	2,000,000	NA	NA	NA	470	620	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)anthracene	53703	NA	NLL	NLL	NLV	NLV	2,000	NA	NA	NA	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	206440	NA	730,000	5,500	1,000,000,000	740,000,000	46,000,000	NA	NA	NA	480	1,200	nd	nd	nd	nd	nd	nd
Fluorene	86737	NA	390,000	5,300	580,000,000	130,000,000	27,000,000	NA	470,000	8,300,000	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	193395	NA	NLL	NLL	NLV	NLV	20,000	NA	NA	NA	640	570	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	91576	NA	57,000	4,200	2,700,000	1,500,000	8,100,000	NA	1,700	30,000	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	91203	NA	35,000	730	250,000	300,000	16,000,000	NA	67	1,900	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	85018	NA	56,000	2,100	2,800,000	160,000	1,600,000	NA	1,700	29,000	nd	460	nd	nd	nd	nd	nd	nd
Pyrene	129000	NA	480,000	ID	1,000,000,000	650,000,000	29,000,000	NA	25,000,000	440,000,000	670	1,100	nd	nd	nd	nd	nd	nd
<b>Total Metals, ug/kg - Method 6020/7470/7471</b>																		
Arsenic	7440382	<b>5,800</b>	<b>4,600</b>	<b>4,600</b>	NLV	NLV	<b>7,600</b>	NA	NA	NA	<b>11,000</b>	<b>6,300</b>	<b>6,000</b>	na	na	na	na	na
Barium	7440393	75,000	1,300,000	440,000	NLV	NLV	37,000,000	NA	NA	NA	59,000	64,000	17,000	na	na	na	na	na
Cadmium	7440439	1,200	6,000	3,000	NLV	NLV	550,000	NA	NA	NA	180	270	140	na	na	na	na	na
Chromium (Total)	7440473	18,000	30,000	<b>3,300</b>	NLV	NLV	2,500,000	NA	NA	NA	9,100	8,200	7,600	na	na	na	na	na
Copper	7440508	32,000	5,800,000	75,000	NLV	NLV	20,000,000	NA	NA	NA	17,000	15,000	11,000	na	na	na	na	na
Lead (Total)	7439921	<b>21,000</b>	700,000	2,500,000	NLV	NLV	400,000	NA	NA	NA	32,000	100,000	5,300	11,000	7,100	10,000	6,200	7,100
Mercury (Total)	varies	<b>130</b>	1,700	<b>50 (M); 1.2</b>	48,000	52,000	160,000	NA	<b>22</b>	390	<b>160</b>	<b>310</b>	nd	na	na	na	na	na
Selenium	7782492	410	4,000	400	NLV	NLV	2,600,000	NA	NA	NA	nd	nd	nd	na	na	na	na	na
Silver	7440224	1,000	4,500	<b>100 (M); 27</b>	NLV	NLV	2,500,000	NA	NA	NA	310	nd	nd	na	na	na	na	na
Zinc	7440666	<b>47,000</b>	2,400,000	170,000	NLV	NLV	170,000,000	NA	NA	NA	59,000	83,000	33,000	na	na	na	na	na

Notes: ID = insufficient data to develop criterion  
 M = calculated criterion is below the analytical target detection limit - criterion defaults to the target detection limit.  
 na = not analyzed  
 NA = not available  
 nd = not detected  
 NL = not listed in the respective source table  
 NLL = not likely to leach under most soil conditions  
 NLV = not likely to volatilize under most conditions  
 shaded criterion indicates at least one result exceeds the respective criterion  
 shaded metals result indicates the result exceeds at least one criterion AND the respective background value  
 shaded non-metal result indicates the result exceeds at least one criterion

Assumptions: hardness of receiving waters = 150 mg/L  
 protective for surface water that is used as a drinking water source



**Table 2. Soil Gas Analytical Summary**  
**121 East Catherine Street, Ann Arbor, Michigan**

Matrix: Subslab Soil Gas

Cleanup Criteria: Residential and Nonresidential

	Chemical Abstract Service Numbers	VIAP Screening Levels (September 2020)		Sample Locations			
		Residential Soil Vapor	Nonresidential Soil Vapor	AH-SG-VP-01 5/31/22	AH-SG-VP-02 5/31/22	AH-SG-VP-03 5/31/22	AH-SG-VP-04 5/31/22
<b>VOC, ug/m<sup>3</sup> - Method TO-15</b>							
Chloroform	67663	37	87	15	ns	22	9.7
1,3-Dichlorobenzene	541731	100	150	nd	ns	nd	57
trans-1,2-Dichloroethene	156605	2,800	4,100	52	ns	38	25
1,1,2,2-Tetrachloroethane	79345	15	34	nd	ns	nd	3.7
Tetrahydrofuran	109999	70,000	100,000	nd	ns	6.8	6.4
Other VOCs	varies	NL	NL	nd	ns	nd	nd

Notes: NA = not available  
 nd = not detected  
 NL = not listed in the VIAP source tables  
 ns = not sampled due to water in tubing



## Appendix A Soil Boring Logs



# LOG OF BORING: GP-01

Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0			<1			brown, dry SAND, fine grained to small gravel, no odor	
1	SP		<1				
2			<1	4		brown to dark brown, dry, noncohesive SANDY CLAY, nonplastic, no odor	
3			<1		AH-SB-GP-01 (3-4')		
4	CL		<1				
5			<1				
6			<1				
7			<1				
8	CL		<1	3		brown, moist, cohesive CLAY, low plasticity, no odor	
9			<1				
10			<1				
End of Boring at 10' bgs							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

06-30-2022 P:\Downriver Community Conference\Projects\220400 - Avalon Housing - 121 E. Catherine St\3\_Data-Dwgs-Maps\Boring Logs\GP-01.b









# LOG OF BORING: GP-02

Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	
0	FB		<1			ASPHALT/SMALL GRAVEL	Three attempts were made in the vicinity of GP-02; however, all three attempts resulted with refusals.	
1			<1			brown, dry, fine grained SAND, poorly graded, no odor		
2			<1	3				
3	SP		<1		AH-SB-GP-02 (3-4')			
4			<1			brick fragments observed at ~4.5' bgs		
5			<1	0.5				
6	End of Boring at 5.5' bgs (Refusal)							
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								





# LOG OF BORING: GP-03

Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	
0	FB		<1			ASPHALT/SMALL GRAVEL		
1			<1			brown, dry, fine grained SAND, poorly graded, no odor		
2			<1	3.5				
3			<1					
4	SP		<1		AH-SB-GP-03 (3-4')			
5			<1					
6			<1					
7			<1					
8			<1	3.5				
9			<1					
10	CL		<1			brown, moist, very stiff, cohesive CLAY, medium plasticity, no odor		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
End of Boring at 10' bgs								



# LOG OF BORING: GP-04

Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0	FB		<1			ASPHALT/SMALL GRAVEL	
1			<1			brown to dark brown, dry, poorly graded SAND, no odor	
2			<1	2.5			
3			<1				
4			<1			very dark brown from 4-4.5' bgs	
5	SP		<1				
6			<1			slightly more clay rich from 5.5-6.5' bgs	
7			<1				
8			<1	3			
9			<1			some small to large gravel from 5-10' bgs	
10			<1		AH-SB-GP-04 (9-10')		
11			<1			brown, dry, hard, cohesive CLAY, low plasticity, no odor	
12			<1				
13	CL		<1	5			
14			<1			noncohesive, nonplastic from 12-15' bgs	
15			<1				
16			<1			gray, dry, hard, noncohesive SILTY CLAY, nonplatic, no odor	
17			<1				
18	CL		<1	5			
19			<1				
20			<1				
End of Boring at 20' bgs							



# LOG OF BORING: GP-05 / VP-02

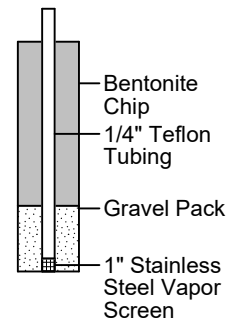
Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	Soil Gas Point: VP-02
0	FB		<1			ASPHALT/SMALL AND LARGE GRAVEL		
1			<1			brown to dark brown, dry, fine grained SAND with large gravel, poorly graded, no odor		
2			<1	2.5				
3			<1					
4			<1					
5	SP		<1			slightly moist at 5' bgs		
6			<1					
7			<1					
8			<1	2				
9			<1			brick fragments at ~9' bgs		
10			395					
11			<1		AH-SB-GP-05 (10-11')	brown, dry, hard, noncohesive CLAY, nonplastic, strong odor at 10' bgs		
12	CL		<1					
13			<1	5				
14			<1					
15			<1					
16	CL		<1			brownish gray, dry, hard, noncohesive SILTY CLAY, nonplastic, no odor		
17			<1	3				
18			<1					
End of Boring at 18' bgs (Refusal)								
19								
20								





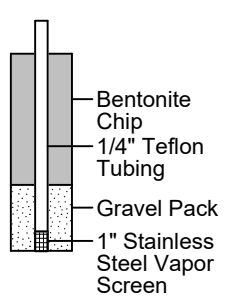
# LOG OF BORING: GP-06 / VP-01

Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS	
0	FB		<1			ASPHALT/SMALL AND LARGE GRAVEL		Soil Gas Point: VP-01  
1			<1			dark brown, dry, fine grained SAND, some small gravel, no odor		
2			<1	2				
3	SP		<1					
4			<1					
5			<1					
6			<1			brown, dry, medium stiff, cohesive SANDY CLAY, medium plasticity, no odor		
7			<1					
8	CL		<1	2				
9			<1		AH-SB-GP-06 (8-9')			
10			<1					
11			<1			brown, dry, hard, noncohesive CLAY, nonplastic, no odor		
12			<1					
13	CL		<1	5				
14			<1					
15			<1					
16			<1			gray, dry, hard, noncohesive SILTY CLAY, nonplastic, no odor		
17			<1					
18	CL		<1	5				
19			<1					
20			<1					

End of Boring at 20' bgs



# LOG OF BORING: GP-07 / VP-03

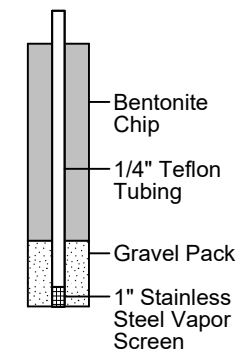
Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0	FB		<1			ASPHALT/ SMALL AND LARGE GRAVEL	
1			<1			brown, dry, fine grained SAND, poorly graded, no odor	
2			<1	1.5			
3			<1				
4			<1				
5	SP		<1				
6			<1				
7			<1				
8			<1	0			
9			<1				
10			<1				
11			<1		AH-SB-GP-07 (10-11')	brown, dry, hard, cohesive CLAY, nonplastic, no odor	
12	CL		<1				
13			<1	3			
14			<1				
15			<1				
End of Boring at 15' bgs (Refusal)							
16							
17							
18							
19							
20							





# LOG OF BORING: GP-08 / VP-04

Downriver Community Conference  
on behalf of  
Avalon Housing and  
Ann Arbor Housing Commission

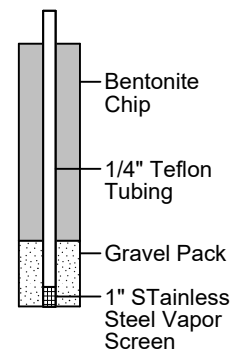
Date Completed : 5/26/2022  
Hole Diameter : 4.25"  
Drilling Company : JSS  
Drilling Method : Geoprobe  
Company Rep. : JBK (ECT)

Boring Location : Subject Property  
: 121 East Catherine Street  
: Ann Arbor, Michigan 48104

Project #220400

Depth in Feet	USCS	GRAPHIC	PID (ppm)	Recovery (ft)	Sample ID	DESCRIPTION	REMARKS
0	FB		<1			ASPHALT/LARGE GRAVEL	
1			<1			brown, dry, fine grained SAND, poorly graded, no odor	
2			<1	2.5			
3			<1				
4			<1				
5	SP		<1				
6			<1				
7			<1				
8			<1	2			
9			<1		AH-SB-GP-08 (8-9')		
10			<1			brown, dry, very stiff, cohesive CLAY, low plasticity, no odor	
11	CL		<1				
12			<1	3			
13			<1				
End of Boring at 13' bgs (Refusal)							
14							
15							
16							
17							
18							
19							
20							

Soil Gas Point: VP-04



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## Appendix B Soil Gas Field Logs

CLIENT:  
 LOCATION:  
 Site ID#:

Avalon Housing



Sample ID: ~~MA~~ 56-1  
 Well Type: COX PIN SS

Date: 5/21/22 Sampler: JPL /ECT  
 Container Type: Bottleneck Container ID: 2581

Lab:  
 Concrete Thickness (ft) & Required Purge Volume: 1.5 ft 30 cc  
 Pin 40 cc  
 Purge Volumes: (circle)  
 Purge Testing (Water Levels) After Vacuum Test  
 Pre -Purge (cc): Post-Purge (CC) - 10 min.  
 Actual \_\_\_\_\_ min.  
 Pre-Purge PID Readings: (opt) ppm  
 Purging Moisture Identified (circle): Yes  No System Failure, if water in sampling tubing!

Sample Start Time: 9:34 Sample End Time:  
 Leak Detection Method: ECT Water Chamber Last Known Rain Event: 1 week  
 Weather Conditions: Sunny Barometric Pressure: 29.98 inHg  
 Temperature: 80°F Relative Humidity: 63%  
 Wind Speed: 11 mph Other:  
 Wind Direction: SW  
 Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)

Canister Starting Vacuum: 29 in Hg Canister Ending Vacuum: in Hg  
 Volume of Canister: 1000 ml Other: Water must be in chamber during and after vacuum test, always sealed!  
 Regulator ID #: 4051 Vacuum Test (circle):  Pass Fail

Field Measurements

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments			
			Chamber Water Level (cc)	Water in Tubing	Add Water	New Water Level (cc)
0	100-200	29	60 cc	Y/N	Y/N	
12	100-200	18		Y/N	Y/N	
24	100-200	9		Y/N	Y/N	
36	100-200	0		Y/N	Y/N	
48	100-200			Y/N	Y/N	
50	100-200			Y/N	Y/N	
6	100-200			Y/N	Y/N	

Sample Notes:  
 Chamber must be filled with water above 10 cc, and no water in sampling tubing.  
 Standardized tubing/fitting types/sizes must be used.  
 If water level drops and tubing has water - Seal or Replace Pin

Pin Cap Type (circle): SS PVC

Post Sampling PID Readings: ppm  
 COC#: Circle: VOCs / Methane / CVOCs

CH<sub>4</sub> - 0% LEL  
 O<sub>2</sub> - 20.0 vol%  
 CO<sub>2</sub> - 0.8 vol%



CLIENT:  
 LOCATION: *Avalon Housing*  
 Site ID#:



Sample ID: *MP-56-2*  
 Well Type: COX PIN SS

Date: \_\_\_\_\_ Sampler: \_\_\_\_\_ /ECT  
 Container Type: \_\_\_\_\_ Container ID: \_\_\_\_\_

Lab:  
 Concrete Thickness (ft) & Required Purge Volume: \_\_\_\_\_ Purge Testing (Water Levels) After Vacuum Test  

Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):	Post-Purge (CC) - 10 min.
	Pin	40 cc		Actual _____ min.

 Pre-Purge PID Readings: (opt) \_\_\_\_\_ ppm  
 Purging Moisture Identified (circle): Yes No *System Failure, if water in sampling tubing!*

Sample Start Time: \_\_\_\_\_ Sample End Time: \_\_\_\_\_  
 Leak Detection Method: ECT Water Chamber Last Known Rain Event: \_\_\_\_\_  
 Weather Conditions: \_\_\_\_\_ Barometric Pressure: \_\_\_\_\_  
 Temperature: \_\_\_\_\_ Relative Humidity: \_\_\_\_\_  
 Wind Speed: \_\_\_\_\_ Other: \_\_\_\_\_  
 Wind Direction: \_\_\_\_\_  
*Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)*

Canister Starting Vacuum: \_\_\_\_\_ in Hg Canister Ending Vacuum: \_\_\_\_\_ in Hg  
 Volume of Canister: \_\_\_\_\_ ml Other: *Water must be in chamber during and after vacuum test, always sealed!*  
 Regulator ID # \_\_\_\_\_ # Vacuum Test (circle): Pass Fail

**Field Measurements**

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments			
			Chamber Water Level (cc)	Water in Tubing	Add Water	New Water Level (cc)
0	100-200		cc	Y/N	Y/N	
1	100-200		cc	Y/N	Y/N	
2	100-200		cc	Y/N	Y/N	
3	100-200		cc	Y/N	Y/N	
4	100-200		cc	Y/N	Y/N	
5	100-200		cc	Y/N	Y/N	
6	100-200		cc	Y/N	Y/N	

*Sample Notes:  
 Chamber must be filled with water above 10 cc, and no water in sampling tubing.  
 Standardized tubing/fitting types/sizes must be used.  
 If water level drops and tubing has water - Seal or Replace Pin*

Pin Cap Type (circle): SS PVC

Post Sampling PID Readings: \_\_\_\_\_ ppm  
 COC#: \_\_\_\_\_ Circle: VOCs / Methane / CVOCs

*Could not collect sample - Water in sample tubing*

CLIENT: Avalon Housing  
 LOCATION:  
 Site ID#:



Sample ID: ~~100~~ 56-3  
 Well Type: COX PIN SS

Date: 5/31/22 Sampler: JBV /ECT  
 Container Type: Bottlewa Container ID: 2712

Concrete Thickness (ft) & Required Purge Volume:			Purge Testing (Water Levels) After Vacuum Test	
Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):	Post-Purge (CC) - 10 min.
	Pin	40 cc		Actual _____ min.
Pre-Purge PID Readings: (opt) _____ ppm				

Purging Moisture Identified (circle): Yes **No** System Failure, if water in sampling tubing!

Sample Start Time: 9:56 Sample End Time: 10:02  
 Leak Detection Method: ECT Water Chamber Last Known Rain Event: > 1 week  
 Weather Conditions: Sunny Barometric Pressure: 29.97 in Hg  
 Temperature: 80°F Relative Humidity: 60%  
 Wind Speed: 10 mph Other:  
 Wind Direction: SSW

*Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)*

Canister Starting Vacuum: 29 in Hg Canister Ending Vacuum: 0 in Hg  
 Volume of Canister: 1000 ml Other: Water must be in chamber during and after vacuum test, always sealed!  
 Regulator ID # 1192  
 Vacuum Test (circle): **Pass** Fail

**Field Measurements**

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments			
			Chamber Water Level (cc)	Water in Tubing	Add Water	New Water Level (cc)
0	100-200	29	60 cc	Y/N	Y/N	
1 2	100-200	18	60 cc	Y/N	Y/N	
2 4	100-200	8	60 cc	Y/N	Y/N	
3 6	100-200	0	cc	Y/N	Y/N	
4 8	100-200		cc	Y/N	Y/N	
5 10	100-200		cc	Y/N	Y/N	
8	100-200		cc	Y/N	Y/N	

**Sample Notes:**  
 Chamber must be filled with water above 10 cc, and no water in sampling tubing.  
 Standardized tubing/fitting types/sizes must be used.  
 If water level drops and tubing has water - Seal or Replace Pin

Pin Cap Type (circle): SS PVC

Post Sampling PID Readings: \_\_\_\_\_ ppm  
 COC#: \_\_\_\_\_ Circle: **VOCs** / Methane / CVOCs

CH<sub>4</sub> - 0% LEL  
 O<sub>2</sub> - 19.9 vol %  
 CO<sub>2</sub> - 0.3 vol %

CLIENT:  
 LOCATION: Avalon Housing  
 Site ID#:



Sample ID: ~~VIA~~ 56-4  
 Well Type: COX PIN SS

Date: 5/31/22 Sampler: JPK /ECT  
 Container Type: Bottle Container ID: 4160

Lab:

Concrete Thickness (ft) & Required Purge Volume:		Purge Testing (Water Levels) After Vacuum Test	
Purge Volumes: (circle)	1.5 ft	30 cc	Pre -Purge (cc):
	Pin	40 cc	

Pre-Purge PID Readings: (opt) ppm

Purging Moisture Identified (circle): Yes  No  System Failure, if water in sampling tubing!

Sample Start Time: 10:10 Sample End Time: 10:18  
 Leak Detection Method: ECT Water Chamber Last Known Rain Event: > 1 week  
 Weather Conditions: Sunny Barometric Pressure: 29.97 inHg  
 Temperature: 80°F Relative Humidity: 59%  
 Wind Speed: 11 mph Other:  
 Wind Direction: SSW

Cox Pin - Needs to be installed and capped 45 Minutes before Sampling! (Recommend Purge Testing)

Canister Starting Vacuum: 27 in Hg Canister Ending Vacuum: in Hg  
 Volume of Canister: 1000 ml Other: Water must be in chamber during and after vacuum test, always sealed!  
 Regulator ID #: 2651  
 # Vacuum Test (circle):  Pass  Fail

Field Measurements

Test Time (min)	Flow Rate (ml/min)	Vacuum (in Hg)	Comments			
			Chamber Water Level (cc)	Water in Tubing	Add Water	New Water Level (cc)
0	100-200	27	60 cc	Y/N	Y/N	
2	100-200	17	60 cc	Y/N	Y/N	
4	100-200	8	60 cc	Y/N	Y/N	
6	100-200	2	60 cc	Y/N	Y/N	
8	100-200	0	60 cc	Y/N	Y/N	
10	100-200		cc	Y/N	Y/N	
8	100-200		cc	Y/N	Y/N	

Sample Notes:  
 Chamber must be filled with water above 10 cc, and no water in sampling tubing.  
 Standardized tubing/fitting types/sizes must be used.  
 If water level drops and tubing has water - Seal or Replace Pin

Pin Cap Type (circle): SS PVC

Post Sampling PID Readings: ppm  
 COC#: Circle: VOCs / Methane / CVOCs

CH<sub>4</sub> - 0% LEL  
 O<sub>2</sub> - 18.0 vol %  
 CO<sub>2</sub> - 2.1 vol %

## Appendix C Analytical Laboratory Report for Soil Samples



Friday, June 10, 2022

Fibertec Project Number: A08791  
Project Identification: Avalou Housing (220400) /220400  
Submittal Date: 05/27/2022

Ms. Maura Gibbons  
Environmental Consulting & Tech., Inc. - Detroit  
1155 Brewery Park Blvd  
Suite 115  
Detroit, MI 48207

Dear Ms. Gibbons,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Bailey Welch at 10:37 AM, Jun 10, 2022

For Daryl P. Strandbergh  
Laboratory Director

Enclosures

1914 Holloway Drive  
11766 E Grand River  
8660 S Mackinaw Trail

Hbt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

T: (517) 699-0345  
T: (810) 220-3300  
T: (231) 775-8368

F: (517) 699-0388  
F: (810) 220-3311  
F: (231) 775-8584

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-01 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>09:10</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-001** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>11</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Michigan 10 Elements by ICP/MS** Aliquot ID: **A08791-001** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	<b>11000</b>		µg/kg	100	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
2. Barium	<b>59000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
3. Cadmium	<b>180</b>		µg/kg	50	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
4. Chromium	<b>9100</b>		µg/kg	500	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
5. Copper	<b>17000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
6. Lead	<b>32000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
7. Selenium	U		µg/kg	200	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
8. Silver	<b>310</b>		µg/kg	100	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
9. Zinc	<b>59000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA

**Mercury by CVAAS** Aliquot ID: **A08791-001** Matrix: **Soil/Solid**  
**Method: EPA 7471B** Description: **AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	<b>160</b>		µg/kg	50	10	06/02/22	PM22F02A	06/02/22	M722F02B	JLH

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-001A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
‡ 2. Acrylonitrile	U		µg/kg	120	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22 19:26	VP22F01A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-01 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>09:10</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-001A** Matrix: **Soil/Solid**  
Description: **AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
10. n-Butylbenzene	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
14. Carbon Tetrachloride	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
19. 2-Chlorotoluene	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-01 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>09:10</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

**Aliquot ID: A08791-001A**      **Matrix: Soil/Solid**  
**Description: AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
49. Toluene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	60	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
61. o-Xylene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22	19:26	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)**  
**Method: EPA 3546/EPA 8270E**

**Aliquot ID: A08791-001**      **Matrix: Soil/Solid**  
**Description: AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
4. Benzo(a)anthracene (SIM)	<b>360</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
5. Benzo(a)pyrene (SIM)	<b>800</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
6. Benzo(b)fluoranthene (SIM)	<b>1000</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
7. Benzo(ghi)perylene (SIM)	<b>540</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
9. Chrysene (SIM)	<b>470</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
11. Fluoranthene (SIM)	<b>480</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	<b>640</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	21:35	SN22F07B	ALS

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-001**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-01 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>09:10</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Polynuclear Aromatic Hydrocarbons (PNAs)** Aliquot ID: **A08791-001** Matrix: **Soil/Solid**  
 Method: **EPA 3546/EPA 8270E** Description: **AH-SB-GP-01 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 21:35	SN22F07B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 21:35	SN22F07B	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 21:35	SN22F07B	ALS
17. Pyrene (SIM)	<b>670</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 21:35	SN22F07B	ALS

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-002**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-02 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:05</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-002** Matrix: **Soil/Solid**  
 Method: **ASTM D2216-10** Description: **AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>9</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Michigan 10 Elements by ICP/MS** Aliquot ID: **A08791-002** Matrix: **Soil/Solid**  
 Method: **EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	<b>6300</b>		µg/kg	100	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
2. Barium	<b>64000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
3. Cadmium	<b>270</b>		µg/kg	50	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
4. Chromium	<b>8200</b>		µg/kg	500	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
5. Copper	<b>15000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
6. Lead	<b>100000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
7. Selenium	U		µg/kg	200	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
8. Silver	U		µg/kg	100	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA
9. Zinc	<b>83000</b>		µg/kg	1000	20	06/03/22	PT22F03C	06/03/22	T422F03B	CJA

**Mercury by CVAAS** Aliquot ID: **A08791-002** Matrix: **Soil/Solid**  
 Method: **EPA 7471B** Description: **AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	<b>310</b>		µg/kg	50	10	06/02/22	PM22F02A	06/02/22	M722F02B	JLH

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-002A** Matrix: **Soil/Solid**  
 Method: **EPA 5035A/EPA 8260D** Description: **AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
‡ 2. Acrylonitrile	U		µg/kg	120	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22 19:53	VP22F01A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-02 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:05</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-002A** Matrix: **Soil/Solid**  
Description: **AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
10. n-Butylbenzene	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
14. Carbon Tetrachloride	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
19. 2-Chlorotoluene	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC

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Client Identification:	<b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description:	<b>AH-SB-GP-02 (3-4')</b>	Chain of Custody:	<b>202906</b>
Client Project Name:	<b>Avalou Housing (220400)</b>	Sample No.:		Collect Date:	<b>05/26/22</b>
Client Project No.:	<b>220400</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:05</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

**Aliquot ID: A08791-002A**      **Matrix: Soil/Solid**  
**Description: AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
49. Toluene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
61. o-Xylene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22	19:53	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)**  
**Method: EPA 3546/EPA 8270E**

**Aliquot ID: A08791-002**      **Matrix: Soil/Solid**  
**Description: AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
4. Benzo(a)anthracene (SIM)	<b>650</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
5. Benzo(a)pyrene (SIM)	<b>850</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
6. Benzo(b)fluoranthene (SIM)	<b>1200</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
7. Benzo(ghi)perylene (SIM)	<b>450</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
8. Benzo(k)fluoranthene (SIM)	<b>340</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
9. Chrysene (SIM)	<b>620</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
11. Fluoranthene (SIM)	<b>1200</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	<b>570</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22	22:01	SN22F07B	ALS

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-002**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-02 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:05</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Polynuclear Aromatic Hydrocarbons (PNAs)** Aliquot ID: **A08791-002** Matrix: **Soil/Solid**  
 Method: **EPA 3546/EPA 8270E** Description: **AH-SB-GP-02 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 22:01	SN22F07B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 22:01	SN22F07B	ALS
16. Phenanthrene (SIM)	<b>460</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 22:01	SN22F07B	ALS
17. Pyrene (SIM)	<b>1100</b>		µg/kg	330	1.0	06/07/22	PS22F07I	06/07/22 22:01	SN22F07B	ALS

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-03 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-003** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>11</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Michigan 10 Elements by ICP/MS** Aliquot ID: **A08791-003** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	<b>6000</b>		µg/kg	100	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
2. Barium	<b>17000</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
3. Cadmium	<b>140</b>		µg/kg	50	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
4. Chromium	<b>7600</b>		µg/kg	500	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
5. Copper	<b>11000</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
6. Lead	<b>5300</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
7. Selenium	U		µg/kg	200	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
8. Silver	U		µg/kg	100	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA
9. Zinc	<b>33000</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA

**Mercury by CVAAS** Aliquot ID: **A08791-003** Matrix: **Soil/Solid**  
**Method: EPA 7471B** Description: **AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	06/02/22	PM22F02A	06/02/22	M722F02B	JLH

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-003A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
‡ 2. Acrylonitrile	U		µg/kg	130	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC

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Client Identification:	<b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description:	<b>AH-SB-GP-03 (3-4')</b>	Chain of Custody:	<b>202906</b>
Client Project Name:	<b>Avalou Housing (220400)</b>	Sample No.:		Collect Date:	<b>05/26/22</b>
Client Project No.:	<b>220400</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>10:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-003A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
10. n-Butylbenzene	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
14. Carbon Tetrachloride	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
19. 2-Chlorotoluene	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-03 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

**Aliquot ID: A08791-003A**      **Matrix: Soil/Solid**  
**Description: AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
49. Toluene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	64	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
61. o-Xylene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22 20:20	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)**  
**Method: EPA 3546/EPA 8270E**

**Aliquot ID: A08791-003**      **Matrix: Soil/Solid**  
**Description: AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
9. Chrysene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-003**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-03 (3-4')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>10:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Polynuclear Aromatic Hydrocarbons (PNAs)** Aliquot ID: **A08791-003** Matrix: **Soil/Solid**  
 Method: **EPA 3546/EPA 8270E** Description: **AH-SB-GP-03 (3-4')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD
17. Pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 08:53	S622F03B	SJD

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-08 (8-9')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:40</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-004** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-08 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>10</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Trace Elements by ICP/MS** Aliquot ID: **A08791-004** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-08 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Lead	<b>7100</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-004A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-08 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
‡ 2. Acrylonitrile	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
10. n-Butylbenzene	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
14. Carbon Tetrachloride	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
19. 2-Chlorotoluene	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-08 (8-9')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:40</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

**Aliquot ID: A08791-004A Matrix: Soil/Solid**  
**Description: AH-SB-GP-08 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
49. Toluene	<b>76</b>		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	76	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC
60. m&p-Xylene	<b>130</b>		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	20:46	VP22F01A	BRC

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-004**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-08 (8-9')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>11:40</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-004A** Matrix: **Soil/Solid**  
 Description: **AH-SB-GP-08 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
61. o-Xylene	<b>110</b>		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC
‡ 62. Xylenes	<b>240</b>		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22 20:46	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)**  
**Method: EPA 3546/EPA 8270E**

Aliquot ID: **A08791-004** Matrix: **Soil/Solid**  
 Description: **AH-SB-GP-08 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
9. Chrysene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD
17. Pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:21	S622F03B	SJD

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-04 (9-10')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>12:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-005** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>5</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Trace Elements by ICP/MS** Aliquot ID: **A08791-005** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Lead	<b>11000</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-005A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
‡ 2. Acrylonitrile	U		µg/kg	120	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
10. n-Butylbenzene	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
14. Carbon Tetrachloride	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
19. 2-Chlorotoluene	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC

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Client Identification:	<b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description:	<b>AH-SB-GP-04 (9-10')</b>	Chain of Custody:	<b>202906</b>
Client Project Name:	<b>Avalou Housing (220400)</b>	Sample No.:		Collect Date:	<b>05/26/22</b>
Client Project No.:	<b>220400</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>12:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-005A** Matrix: **Soil/Solid**  
Description: **AH-SB-GP-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
49. Toluene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	59	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC

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Client Identification:	<b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description:	<b>AH-SB-GP-04 (9-10')</b>	Chain of Custody:	<b>202906</b>
Client Project Name:	<b>Avalou Housing (220400)</b>	Sample No:		Collect Date:	<b>05/26/22</b>
Client Project No:	<b>220400</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>12:35</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-005A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
61. o-Xylene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22 21:13	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)** Aliquot ID: **A08791-005** Matrix: **Soil/Solid**  
**Method: EPA 3546/EPA 8270E** Description: **AH-SB-GP-04 (9-10')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
9. Chrysene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD
17. Pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 09:48	S622F03B	SJD

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-05 (10-11')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-006** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-05 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>12</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Trace Elements by ICP/MS** Aliquot ID: **A08791-006** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-05 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Lead	<b>7100</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-006A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-05 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
‡ 2. Acrylonitrile	U		µg/kg	130	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
10. n-Butylbenzene	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
11. sec-Butylbenzene	<b>52</b>		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
14. Carbon Tetrachloride	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
19. 2-Chlorotoluene	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC

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Client Identification:	<b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description:	<b>AH-SB-GP-05 (10-11')</b>	Chain of Custody:	<b>202906</b>
Client Project Name:	<b>Avalou Housing (220400)</b>	Sample No.:		Collect Date:	<b>05/26/22</b>
Client Project No.:	<b>220400</b>	Sample Matrix:	<b>Soil/Solid</b>	Collect Time:	<b>13:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

**Aliquot ID: A08791-006A Matrix: Soil/Solid**  
**Description: AH-SB-GP-05 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
49. Toluene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	65	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	21:40	VP22F01A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-05 (10-11')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>13:20</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-006A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-05 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
61. o-Xylene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22 21:40	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)** Aliquot ID: **A08791-006** Matrix: **Soil/Solid**  
**Method: EPA 3546/EPA 8270E** Description: **AH-SB-GP-05 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
9. Chrysene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD
17. Pyrene (SIM)	U		µg/kg	330	1.0	06/03/22	PS22F03H	06/04/22 10:16	S622F03B	SJD

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-06 (8-9')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-007** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-06 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>13</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Trace Elements by ICP/MS** Aliquot ID: **A08791-007** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-06 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Lead	<b>10000</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-007A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-06 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
‡ 2. Acrylonitrile	U		µg/kg	160	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
3. Benzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
7. Bromoform	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
8. Bromomethane	U		µg/kg	200	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
10. n-Butylbenzene	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
14. Carbon Tetrachloride	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
16. Chloroethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
17. Chloroform	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
18. Chloromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
19. 2-Chlorotoluene	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-06 (8-9')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-007A** Matrix: **Soil/Solid**  
Description: **AH-SB-GP-06 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
28. 1,2-Dichloroethane	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
32. 1,2-Dichloropropane	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
42. MTBE	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
45. Styrene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
49. Toluene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	80	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/01/22	VP22F01A	06/01/22	22:06	VP22F01A	BRC

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-007**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-06 (8-9')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:00</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-007A** Matrix: **Soil/Solid**  
 Description: **AH-SB-GP-06 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
61. o-Xylene	U		µg/kg	50	1.0	06/01/22	VP22F01A	06/01/22 22:06	VP22F01A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/01/22	VP22F01A	06/01/22 22:06	VP22F01A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)**  
**Method: EPA 3546/EPA 8270E**

Aliquot ID: **A08791-007** Matrix: **Soil/Solid**  
 Description: **AH-SB-GP-06 (8-9')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:13	SN22F07B	ALS

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-07 (10-11')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Water (Moisture) Content Dried at 105 ± 5°C** Aliquot ID: **A08791-008** Matrix: **Soil/Solid**  
**Method: ASTM D2216-10** Description: **AH-SB-GP-07 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	<b>13</b>		%	1	1.0	06/02/22	MC220602	06/03/22	MC220602	LJK

**Trace Elements by ICP/MS** Aliquot ID: **A08791-008** Matrix: **Soil/Solid**  
**Method: EPA 0200.2/EPA 6020A** Description: **AH-SB-GP-07 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Lead	<b>6200</b>		µg/kg	1000	20	06/06/22	PT22F06B	06/06/22	T422F06A	CJA

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-008A** Matrix: **Soil/Solid**  
**Method: EPA 5035A/EPA 8260D** Description: **AH-SB-GP-07 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
1. Acetone	U		µg/kg	1000	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
‡ 2. Acrylonitrile	U		µg/kg	160	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
3. Benzene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
4. Bromobenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
7. Bromoform	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
8. Bromomethane	U		µg/kg	200	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
9. 2-Butanone	U	V+ L+	µg/kg	750	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
10. n-Butylbenzene	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
14. Carbon Tetrachloride	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
16. Chloroethane	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
17. Chloroform	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
18. Chloromethane	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
19. 2-Chlorotoluene	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
22. Dibromomethane	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-07 (10-11')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035**  
**Method: EPA 5035A/EPA 8260D**

Aliquot ID: **A08791-008A** Matrix: **Soil/Solid**  
Description: **AH-SB-GP-07 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
28. 1,2-Dichloroethane	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
32. 1,2-Dichloropropane	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
37. 2-Hexanone	U		µg/kg	2500	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
42. MTBE	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
43. Naphthalene	U		µg/kg	330	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
45. Styrene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
49. Toluene	<b>63</b>		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	80	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
53. Trichloroethene	U		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
54. Trichlorofluoromethane	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	06/02/22	VP22F02A	06/02/22	17:01	VP22F02A	BRC

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08791**  
**Laboratory Sample Number: A08791-008**

Order: A08791  
 Date: 06/10/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SB-GP-07 (10-11')</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Soil/Solid</b>	Collect Time: <b>14:50</b>

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS, 5035** Aliquot ID: **A08791-008A** Matrix: **Soil/Solid**  
 Method: **EPA 5035A/EPA 8260D** Description: **AH-SB-GP-07 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
61. o-Xylene	<b>51</b>		µg/kg	50	1.0	06/02/22	VP22F02A	06/02/22 17:01	VP22F02A	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	06/02/22	VP22F02A	06/02/22 17:01	VP22F02A	BRC

**Polynuclear Aromatic Hydrocarbons (PNAs)** Aliquot ID: **A08791-008** Matrix: **Soil/Solid**  
 Method: **EPA 3546/EPA 8270E** Description: **AH-SB-GP-07 (10-11')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	06/07/22	PS22F07I	06/08/22 01:40	SN22F07B	ALS

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-TB-01</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Blank: Trip</b>	Collect Time: <b>14:50</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS**      Aliquot ID: **A08791-009**      Matrix: **Blank: Trip**  
**Method: EPA 5030C/EPA 8260D**      Description: **AH-TB-01**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
3. Benzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
4. Bromobenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
5. Bromochloromethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
7. Bromoform	U	V+ L+	µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
8. Bromomethane	U	V-	µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
9. 2-Butanone	U	V+	µg/L	25	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
13. Carbon Disulfide	U	V+	µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
15. Chlorobenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
16. Chloroethane	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
17. Chloroform	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
18. Chloromethane	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	V+ L+	µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
21. Dibromochloromethane	U	V+	µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
22. Dibromomethane	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
33. cis-1,3-Dichloropropene	U	V+	µg/L	0.50	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
34. trans-1,3-Dichloropropene	U	V+	µg/L	0.50	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
35. Ethylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-TB-01</b>	Chain of Custody: <b>202906</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/26/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Blank: Trip</b>	Collect Time: <b>14:50</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**Volatile Organic Compounds (VOCs) by GC/MS**

Aliquot ID: **A08791-009** Matrix: **Blank: Trip**

Method: **EPA 5030C/EPA 8260D**

Description: **AH-TB-01**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
37. 2-Hexanone	U	V+	µg/L	50	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
39. 4-Methyl-2-pentanone	U	V+ L+	µg/L	50	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
40. Methylene Chloride	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
42. MTBE	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
43. Naphthalene	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
45. Styrene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
46. 1,1,1,2-Tetrachloroethane	U	V+	µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
49. Toluene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
53. Trichloroethene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
60. m&p-Xylene	U		µg/L	2.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
61. o-Xylene	U		µg/L	1.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/07/22	VM22F07C	06/08/22 11:28	VM22F07C	SNC

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- \***: Value reported is outside QC limits

**Exception Summary:**

- L+** : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
- V-** : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
- V+** : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

**Analysis Locations:**

All analyses performed in Holt.



Accreditation Number(s):

**T104704518-19-8 (TX)**

1914 Holloway Drive  
11766 E Grand River  
8660 S Mackinaw Trail

Holt, MI 48842  
Brighton, MI 48116  
Cadillac, MI 49601

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T: (231) 775-8368

F: (517) 699-0388  
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## Appendix D Analytical Laboratory Report for Soil Gas Samples



Friday, June 17, 2022

Fibertec Project Number: A08802  
Project Identification: Avalou Housing (220400) /220400  
Submittal Date: 05/31/2022

Ms. Maura Gibbons  
Environmental Consulting & Tech., Inc. - Detroit  
1155 Brewery Park Blvd  
Suite 115  
Detroit, MI 48207

Dear Ms. Gibbons,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

*By Kaitlyn Miracle at 8:34 AM, Jun 17, 2022*

For Daryl P. Strandbergh  
Laboratory Director

Enclosures

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F: (231) 775-8584

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SG-UP-01</b>	Chain of Custody: <b>202972</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/31/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Air</b>	Collect Time: <b>09:34</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**TO-15 (Bottle-Vac)** Aliquot ID: **A08802-001** Matrix: **Air**  
**Method: EPA TO-15** Description: **AH-SG-UP-01**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	57	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
2. Benzene	U		µg/m3	19	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
3. Benzyl Chloride	U		µg/m3	6.2	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
4. Bromodichloromethane	U		µg/m3	8.0	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
5. Bromoform	U	V+ L+	µg/m3	62	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
6. Bromomethane	U		µg/m3	23	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
7. 1,3-Butadiene	U		µg/m3	2.7	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
8. 2-Butanone	U		µg/m3	35	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 9. Carbon Disulfide	U		µg/m3	37	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
10. Carbon Tetrachloride	U		µg/m3	7.5	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
11. Chlorobenzene	U		µg/m3	28	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
12. Chloroethane	U		µg/m3	16	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
13. Chloroform	15		µg/m3	5.9	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
14. Chloromethane	U		µg/m3	12	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
15. Cyclohexane	U		µg/m3	41	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
16. Dibromochloromethane	U		µg/m3	4.1	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
17. 1,2-Dichlorobenzene	U		µg/m3	36	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
18. 1,3-Dichlorobenzene	U		µg/m3	36	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
19. 1,4-Dichlorobenzene	U	L+	µg/m3	36	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
20. Dichlorodifluoromethane	U		µg/m3	30	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
21. 1,1-Dichloroethane	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
22. 1,2-Dichloroethane	U		µg/m3	4.9	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
23. 1,1-Dichloroethene	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
24. cis-1,2-Dichloroethene	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
25. trans-1,2-Dichloroethene	52		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
26. 1,2-Dichloropropane	U		µg/m3	28	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
27. cis-1,3-Dichloropropene	U		µg/m3	27	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
28. trans-1,3-Dichloropropene	U		µg/m3	27	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
29. 1,4-Dioxane	U		µg/m3	22	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 30. Ethyl Acetate	U		µg/m3	43	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
31. Ethylbenzene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
32. Ethylene Dibromide	U		µg/m3	0.92	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
33. n-Heptane	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
34. Hexachlorobutadiene	U		µg/m3	5.1	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
35. n-Hexane	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 36. 2-Hexanone	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA

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F: (231) 775-8584

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SG-UP-01</b>	Chain of Custody: <b>202972</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/31/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Air</b>	Collect Time: <b>09:34</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**TO-15 (Bottle-Vac)** Aliquot ID: **A08802-001** Matrix: **Air**  
**Method: EPA TO-15** Description: **AH-SG-UP-01**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 37. Isopropanol	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
38. 4-Methyl-2-pentanone	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
39. Methylene Chloride	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 40. 2-Methylnaphthalene	U		µg/m3	140	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
41. MTBE	U		µg/m3	22	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 42. Naphthalene	U		µg/m3	19	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
43. Styrene	U		µg/m3	51	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	3.3	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
45. Tetrachloroethene	U		µg/m3	41	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 46. Tetrahydrofuran	U		µg/m3	3.5	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
47. Toluene	U		µg/m3	23	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
48. 1,2,4-Trichlorobenzene	U		µg/m3	89	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
49. 1,1,1-Trichloroethane	U		µg/m3	33	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
50. 1,1,2-Trichloroethane	U		µg/m3	6.5	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
51. Trichloroethene	U		µg/m3	1.6	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
52. Trichlorofluoromethane	U		µg/m3	34	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	46	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
54. 1,2,4-Trimethylbenzene	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
55. 1,3,5-Trimethylbenzene	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
56. Vinyl Acetate	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
57. Vinyl Chloride	U		µg/m3	15	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
58. m&p-Xylene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
59. o-Xylene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA
‡ 60. Xylenes	U		µg/m3	100	4.0	06/10/22	VQ22F10A	06/10/22 23:01	VQ22F10A	CMA

Surrogate Summary			Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	88	%	80-120	VQ	VQ22F10A	6/10/2022 23:01	1	VQ400

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**Analytical Laboratory Report**  
**Laboratory Project Number: A08802**  
**Laboratory Sample Number: A08802-002**

Order: A08802  
 Date: 06/17/22

Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SG-UP-03</b>	Chain of Custody: <b>202972</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/31/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Air</b>	Collect Time: <b>09:56</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**TO-15 (Bottle-Vac)** Aliquot ID: **A08802-002** Matrix: **Air**  
 Method: **EPA TO-15** Description: **AH-SG-UP-03**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	57	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
2. Benzene	U		µg/m3	19	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
3. Benzyl Chloride	U		µg/m3	6.2	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
4. Bromodichloromethane	U		µg/m3	8.0	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
5. Bromoform	U	V+ L+	µg/m3	62	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
6. Bromomethane	U		µg/m3	23	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
7. 1,3-Butadiene	U		µg/m3	2.7	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
8. 2-Butanone	U		µg/m3	35	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 9. Carbon Disulfide	U		µg/m3	37	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
10. Carbon Tetrachloride	U		µg/m3	7.5	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
11. Chlorobenzene	U		µg/m3	28	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
12. Chloroethane	U		µg/m3	16	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
13. Chloroform	22		µg/m3	5.9	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
14. Chloromethane	U		µg/m3	12	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
15. Cyclohexane	U		µg/m3	41	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
16. Dibromochloromethane	U		µg/m3	4.1	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
17. 1,2-Dichlorobenzene	U		µg/m3	36	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
18. 1,3-Dichlorobenzene	U		µg/m3	36	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
19. 1,4-Dichlorobenzene	U	L+	µg/m3	36	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
20. Dichlorodifluoromethane	U		µg/m3	30	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
21. 1,1-Dichloroethane	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
22. 1,2-Dichloroethane	U		µg/m3	4.9	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
23. 1,1-Dichloroethene	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
24. cis-1,2-Dichloroethene	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
25. trans-1,2-Dichloroethene	38		µg/m3	24	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
26. 1,2-Dichloropropane	U		µg/m3	28	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
27. cis-1,3-Dichloropropene	U		µg/m3	27	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
28. trans-1,3-Dichloropropene	U		µg/m3	27	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
29. 1,4-Dioxane	U		µg/m3	22	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 30. Ethyl Acetate	U		µg/m3	43	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
31. Ethylbenzene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
32. Ethylene Dibromide	U		µg/m3	0.92	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
33. n-Heptane	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
34. Hexachlorobutadiene	U		µg/m3	5.1	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
35. n-Hexane	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 36. 2-Hexanone	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SG-UP-03</b>	Chain of Custody: <b>202972</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/31/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Air</b>	Collect Time: <b>09:56</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**TO-15 (Bottle-Vac)**  
**Method: EPA TO-15**

**Aliquot ID: A08802-002**      **Matrix: Air**  
**Description: AH-SG-UP-03**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 37. Isopropanol	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
38. 4-Methyl-2-pentanone	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
39. Methylene Chloride	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 40. 2-Methylnaphthalene	U		µg/m3	140	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
41. MTBE	U		µg/m3	22	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 42. Naphthalene	U		µg/m3	19	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
43. Styrene	U		µg/m3	51	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	3.3	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
45. Tetrachloroethene	U		µg/m3	41	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 46. Tetrahydrofuran	<b>6.8</b>		µg/m3	3.5	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
47. Toluene	U		µg/m3	23	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
48. 1,2,4-Trichlorobenzene	U		µg/m3	89	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
49. 1,1,1-Trichloroethane	U		µg/m3	33	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
50. 1,1,2-Trichloroethane	U		µg/m3	6.5	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
51. Trichloroethene	U		µg/m3	1.6	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
52. Trichlorofluoromethane	U		µg/m3	34	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	46	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
54. 1,2,4-Trimethylbenzene	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
55. 1,3,5-Trimethylbenzene	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
56. Vinyl Acetate	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
57. Vinyl Chloride	U		µg/m3	15	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
58. m&p-Xylene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
59. o-Xylene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA
‡ 60. Xylenes	U		µg/m3	100	4.0	06/10/22	VQ22F10A	06/10/22 23:49	VQ22F10A	CMA

**Surrogate Summary**

			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	<b>91</b>	%	80-120	VQ	VQ22F10A	6/10/2022 23:49	1	VQ400

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SG-UP-04</b>	Chain of Custody: <b>202972</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/31/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Air</b>	Collect Time: <b>10:10</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**TO-15 (Bottle-Vac)** Aliquot ID: **A08802-003** Matrix: **Air**  
**Method: EPA TO-15** Description: **AH-SG-UP-04**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	57	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
2. Benzene	U		µg/m3	19	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
3. Benzyl Chloride	U		µg/m3	6.2	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
4. Bromodichloromethane	U		µg/m3	8.0	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
5. Bromoform	U	V+ L+	µg/m3	62	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
6. Bromomethane	U		µg/m3	23	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
7. 1,3-Butadiene	U		µg/m3	2.7	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
8. 2-Butanone	U		µg/m3	35	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 9. Carbon Disulfide	U		µg/m3	37	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
10. Carbon Tetrachloride	U		µg/m3	7.5	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
11. Chlorobenzene	U		µg/m3	28	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
12. Chloroethane	U		µg/m3	16	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
13. Chloroform	<b>9.7</b>		µg/m3	5.9	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
14. Chloromethane	U		µg/m3	12	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
15. Cyclohexane	U		µg/m3	41	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
16. Dibromochloromethane	U		µg/m3	4.1	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
17. 1,2-Dichlorobenzene	U		µg/m3	36	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
18. 1,3-Dichlorobenzene	<b>57</b>		µg/m3	36	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
19. 1,4-Dichlorobenzene	U	L+	µg/m3	36	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
20. Dichlorodifluoromethane	U		µg/m3	30	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
21. 1,1-Dichloroethane	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
22. 1,2-Dichloroethane	U		µg/m3	4.9	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
23. 1,1-Dichloroethene	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
24. cis-1,2-Dichloroethene	U		µg/m3	24	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
25. trans-1,2-Dichloroethene	<b>25</b>		µg/m3	24	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
26. 1,2-Dichloropropane	U		µg/m3	28	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
27. cis-1,3-Dichloropropene	U		µg/m3	27	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
28. trans-1,3-Dichloropropene	U		µg/m3	27	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
29. 1,4-Dioxane	U		µg/m3	22	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 30. Ethyl Acetate	U		µg/m3	43	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
31. Ethylbenzene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
32. Ethylene Dibromide	U		µg/m3	0.92	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
33. n-Heptane	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
34. Hexachlorobutadiene	U		µg/m3	5.1	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
35. n-Hexane	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 36. 2-Hexanone	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA

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Client Identification: <b>Environmental Consulting &amp; Tech., Inc. - Detroit</b>	Sample Description: <b>AH-SG-UP-04</b>	Chain of Custody: <b>202972</b>
Client Project Name: <b>Avalou Housing (220400)</b>	Sample No:	Collect Date: <b>05/31/22</b>
Client Project No: <b>220400</b>	Sample Matrix: <b>Air</b>	Collect Time: <b>10:10</b>

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

**TO-15 (Bottle-Vac)** Aliquot ID: **A08802-003** Matrix: **Air**  
**Method: EPA TO-15** Description: **AH-SG-UP-04**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 37. Isopropanol	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
38. 4-Methyl-2-pentanone	U		µg/m3	49	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
39. Methylene Chloride	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 40. 2-Methylnaphthalene	U		µg/m3	140	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
41. MTBE	U		µg/m3	22	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 42. Naphthalene	U		µg/m3	19	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
43. Styrene	U		µg/m3	51	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
44. 1,1,2,2-Tetrachloroethane	3.7		µg/m3	3.3	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
45. Tetrachloroethene	U		µg/m3	41	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 46. Tetrahydrofuran	6.4		µg/m3	3.5	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
47. Toluene	U		µg/m3	23	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
48. 1,2,4-Trichlorobenzene	U		µg/m3	89	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
49. 1,1,1-Trichloroethane	U		µg/m3	33	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
50. 1,1,2-Trichloroethane	U		µg/m3	6.5	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
51. Trichloroethene	U		µg/m3	1.6	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
52. Trichlorofluoromethane	U		µg/m3	34	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	46	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
54. 1,2,4-Trimethylbenzene	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
55. 1,3,5-Trimethylbenzene	U		µg/m3	29	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
56. Vinyl Acetate	U		µg/m3	42	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
57. Vinyl Chloride	U		µg/m3	15	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
58. m&p-Xylene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
59. o-Xylene	U		µg/m3	52	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA
‡ 60. Xylenes	U		µg/m3	100	4.0	06/10/22	VQ22F10A	06/11/22 00:37	VQ22F10A	CMA

Surrogate Summary			Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	91	%	80-120	VQ	VQ22F10A	6/11/2022 00:37	1	VQ400

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**Definitions/ Qualifiers:**

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- \***: Value reported is outside QC limits
- D:** The sample or extract was analyzed at a DF greater than 1.

**Exception Summary:**

- L+** : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
- V+** : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

**Analysis Locations:**

All analyses performed in Holt.



Accreditation Number(s):

**T104704518-19-8 (TX)**

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