Exhibit I
Environmental

Endpoint Solutions
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Mr. John Ford
President
Three Leaf Partners
504 West Juneau Avenue
Milwaukee, WI 53203

May 12, 2023

Subject: **Report of Results – Site-Wide Fill Test Pit Sampling and Analysis**
Hartland Quarry Apartments
644, 700 & 701 West Capitol Drive, Hartland, Wisconsin

Dear John:

As part of Phase II Environmental Assessment (EA) activities, Endpoint Solutions Corp. (Endpoint) worked with GeoTest, Inc. during the excavation of test pits at the Hartland Quarry Apartment project site located at 644, 700 & 701 West Capitol Drive, in the Village of Hartland, Waukesha County, Wisconsin (the "subject property"). The subject property is the former location of the Hartland Quarry, as well as the Tews and LaFarge concrete plants. The extent of the subject property is depicted on **Figure 1**. While GeoTest, Inc. excavated test pits across the subject property to evaluate the physical characteristics of the fill materials, Endpoint visually evaluated the fill materials for obvious indications of contamination (visual and olfactory) and collected samples for laboratory chemical analysis.

BACKGROUND

HISTORIC AERIAL PHOTOS

Based on a review of historic aerial photographs obtained from the Waukesha County Interactive Mapping Site (www.waukeshacounty.gov/interactivemap), quarrying operations were active on the subject property at the time of the earliest aerial photograph in 1941. Quarrying operations appeared to extend across the entire subject property, and also onto the adjoining property to the west of the subject property currently being considered for development by Kwik Trip. By circa 1970, quarrying operations on the subject property appear to have been completed based on the observation of vegetation maturing across the northern portions of the subject property.

By 1963, several structures were observed in the southwest portion of the subject property, and between 1995 and 2000, the current structure was developed in the far southwestern portion of the subject property. A copy of the historic aerial photographs referenced herein are attached in **Appendix A**.

SITE RECONNAISSANCE

On April 14, 2023, representatives of Endpoint met with representatives of GeoTest, Inc., Three Leaf Partners, Walbec Group and Mr. Ed Troxler to perform a walking reconnaissance of the subject property. Currently, the subject property consists of the offices and shop buildings for BSIT, a bulk aggregate transportation company, and a former aggregate pit which has been partially reclaimed with concrete slabs, concrete washout and reportedly soils transported from Village of Hartland sewer utility projects.

SCOPE OF WORK

Based on the findings of non-soil (waste) inclusions in the surficial fills on the adjoining property to the west of the subject property, the apparent depth of quarrying operations as evidenced by the historic aerial photographs and the time period of the quarrying and filling operations, it is quite likely that various non-soil (waste) materials were included in the soil materials deposited on the subject property. Additionally, during the walking reconnaissance, a five (5) gallon bucket containing used oil filters was observed protruding from the ground surface in a vegetated portion of the subject property. Lastly, it is reported that pieces of equipment were likely buried on the subject property.

While it is impossible to evaluate the entire volume of fill historically placed on the subject property prior to mass grading activities, it is possible to attempt to identify areas of potential concern using historic aerial photos, interviews with knowledgeable persons, reconnaissance of the subject property and visual assessment and sample analysis during test pits advanced as part of the geotechnical evaluation.

Therefore, based on the physical conditions of the subject property and the need to evaluate the physical properties of the soils for foundation support, GeoTest, Inc. proposed to excavate a series of nine (9) test pits (**TP-1 through TP-9**) through the apparent fill materials. Besides providing an opportunity to evaluate the physical characteristics of the fill materials, the test pits were also to provide an indication of the general thickness of the fill materials. Endpoint accompanied GeoTest, Inc. during the test pit exploration process to visually evaluate the soils as well as to collect representative samples of the materials from each test pit location for laboratory testing for volatile organic compounds (VOCs) polycyclic aromatic hydrocarbons (PAHs), metals and polychlorinated biphenyls (PCBs). During these assessment activities, a total of nine (9) samples representing a composite sample of the fill materials from each test pit was submitted for analysis. Additionally, a sample of the underlying native soils from test pit TP-7 was also submitted for laboratory analysis. The sample of the fill materials from test pit TP-7 l was identified as sample TP-7A, while the sample of the underlying native soil was identified as sample TP-7B.

RESULTS

SOIL CONDITIONS

Based on the *Geotechnical Subsurface Investigation Report* prepared by GeoTest, Inc. (May 4, 2023), fill materials have been accepted at the subject property since the 1970s. Reportedly, the fill materials accepted consisted primarily of soil and concrete; however, occasional inert materials such as asphalt, miscellaneous building materials, wood and metal have also been accepted.

The nine (9) test pits were excavated to depths ranging between approximately 5.5 to 11.3 feet below the ground surface (ft bgs). The locations of the test pits are depicted on **Figure 4** provided by GeoTest, Inc. Native soils at the subject property consisted of fine to coarse sand, fine to coarse sand and gravel, fine to coarse gravel and clayey silt. Fill materials consisted of fine sand, fine to coarse sand and gravel, and rubble consisting of concrete, asphalt, wood and metal pieces in a sand & gravel matrix.

VOC Results

No VOC constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis. The VOC results are summarized in **Table A.2.a**.

PAH Results

No PAH constituents were detected in eight (8) of the ten (10) composite samples submitted for analysis. These samples included the native soils from the TP-1, TP-2, TP-3, TP-6 TP-7, TP-8 and TP-9 locations and the fill sample from the TP-5 location. Numerous PAH constituents were detected in the sample of fill materials submitted from the TP-4 location. The concentration of chrysene reported in this sample exceeded its soil-to-groundwater exposure pathway residual contaminant level (RCL) established by the Wisconsin Department of Natural Resources (WDNR). Numerous PAH constituents were also detected in the sample of fill materials submitted from the TP-7 location. The concentrations of benzo(b)fluoranthene and chrysene reported in this sample exceeded their respective soil-to-groundwater exposure pathway RCLs established by the WDNR.

The PAH results are summarized in **Table A.2.b**.

Metals Results

All of the samples submitted for metals analysis contained detected concentrations of several metals. Six (6) of the ten (10) samples submitted reported concentrations which exceeded soil-to-groundwater pathway, non-industrial direct contact and industrial direct contact RCLs and background threshold values (BTVs) established by the WDNR.

- The sample of the native soil submitted from TP-1 contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV, and cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.
- The sample of the native soil from the TP-2 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.
- The sample of the fill material submitted from the TP-4 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV.
- The sample of fill material submitted from the TP-7 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and BTV.
- The sample of native soil underlying the fill materials at the TP-7 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.
- The sample of native soil submitted from the TP-8 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and

industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.

The metal results are summarized in **Table A.2.c**.

PCB Results

No PCB constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis. The PCB results are summarized in **Table A.2.d**.

A copy of the analytical results and chain-of-custody form are attached in **Appendix A**.

DISCUSSION

Overall, results of the analyses performed on the composite samples submitted from the test pits indicate a lack of widespread significant contamination. None of the samples contained detectable concentrations of any VOC or PCB constituents, and eight (8) of the ten (10) samples submitted did not contain any detectable concentrations of PAH constituents. Detected concentrations of contaminants above published RCLs were limited to metals (arsenic and/or cadmium) in the samples submitted from TP-1, TP-2, the native soils at TP-7 (sample TP-7B) and TP-8, but no results exceeded the arsenic BTV. The samples submitted from TP-4 and the fill soils at TP-7 (sample TP-7A) contained concentrations of chrysene and/or benzo(b)fluoranthene in excess of their respective RCLs. It should be noted that only the concentrations of cadmium reported in the samples collected from TP-1, TP-2 the native soils at TP-7 (sample TP-7B) and TP-8 exceeded the established BTV for cadmium.

RECOMMENDED NEXT STEPS

Based on the lack of VOC and PCB contamination in the test pit samples submitted, volatile vapor migration should not be a concern except potentially in the area of the former leaking underground storage tank (LUST) area in the extreme southern portion of the Site, not evaluated as part of the test pit scope of work. In addition, based on the relatively low concentrations of PAH constituents and metals detected, it is unlikely remedial measures will be required; however, the WDNR would require the soils containing elevated concentrations above RCLs and BTVs to be properly managed on the Site during redevelopment. The four (4) samples which contained detectable concentrations of arsenic were the only samples which exceeded direct contact RCLs (non-industrial and industrial); however, none of these concentrations exceeded the BTV established for arsenic; therefore, it may be necessary to place these soils beneath an exposure barrier. The exposure barrier can consist of buildings, pavements or layers of clean, non-contaminated soil.

As the Site has received extensive amounts of fill materials, the WDNR will require the preparation and submission of an Application to Construct on a Historic Fill Site (the "Application for Exemption"). The Application for Exemption is submitted to both the WDNR Remediation & Redevelopment (R&R) program as well as the Waste Management Program. Vapor intrusion is the greatest concern for both programs (volatile vapors for the R&R program and methane for the Waste Management program). As stated above, it is our opinion there is no widespread concern for

volatile vapor migration beyond the LUST area and none of the test pits encountered major quantities of buried organic matter which could act as a source of methane during decomposition.

Please note, while the test pit sampling did not identify widespread contamination at the Site, our visual observations during the initial Site reconnaissance did identify the presence of a five (5) gallon bucket containing used oil filters. It is likely that other non-soil types of materials have been randomly buried at the Site which may have the potential to cause environmental concerns. Therefore, we recommend an environmental professional be onsite during the earthwork activities to document the procedures as will be required by the approved Application for Exemption, as well as to identify any non-soil items of concern that would require specialized disposal as well as proper management of potentially impacted soils.

CLOSING

We trust this document and its attachments provide the level of information necessary to present to city representatives as part of the approval process. If you have any questions, please feel free to contact me directly.

Sincerely,

Endpoint Solutions

Robert A. Cigale, P.G.
Principal Consultant

ATTACHMENTS
Figures
Appendix A

FIGURES

N

0 2000' 4000'

SOURCE: USGS

LOCATION MAP

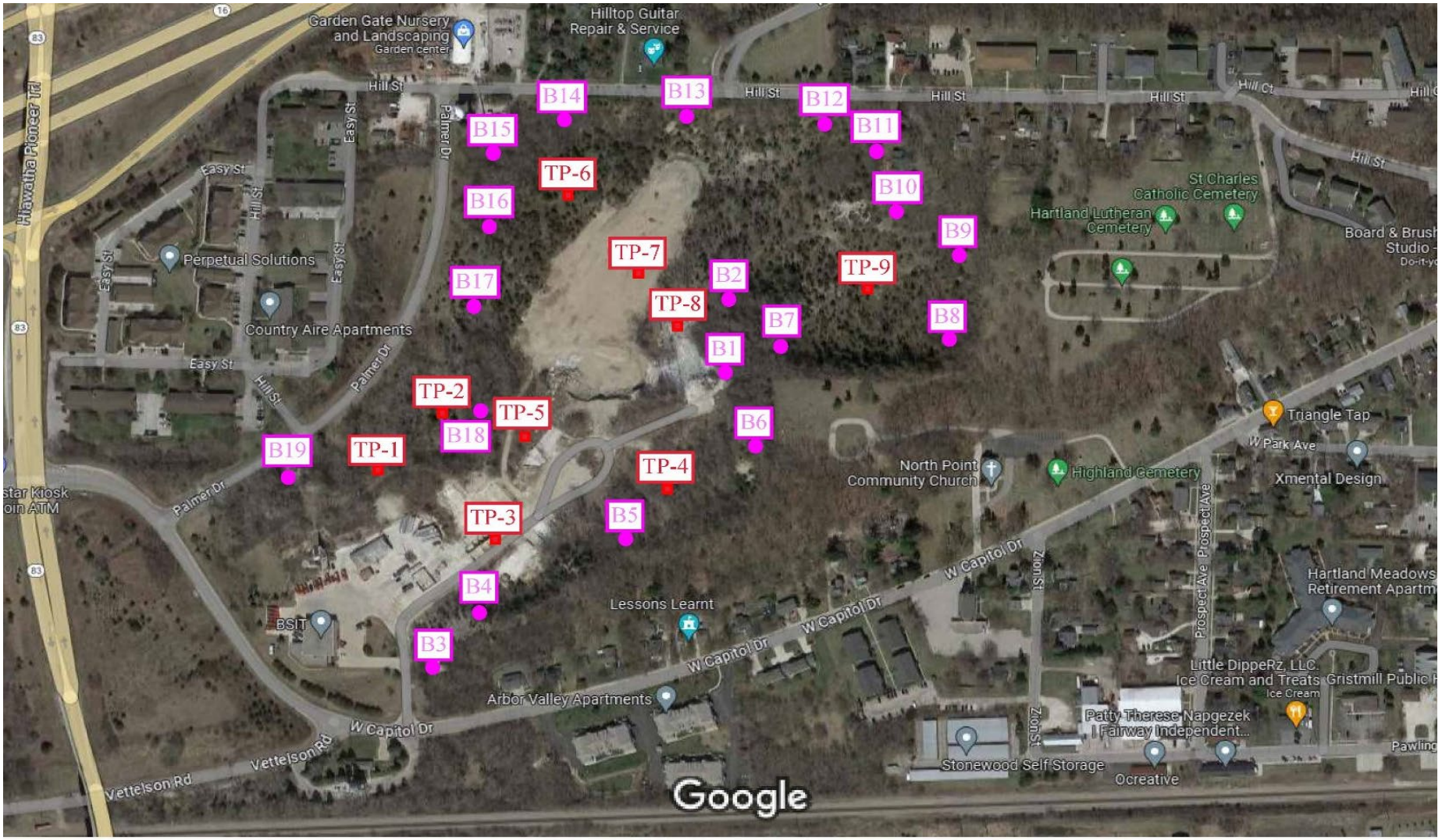
700WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 04/12/2023	Figure 1
REVIEWED BY: RAC	PROJECT NO: 843-001-001	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-001\FIG 01_843-001-001_Location Map.dwg



■ Test Pit Locations

● Bluff Samples

GeoTest

Project Name:	Hartland Quarry Apartments	**Project No.:**	7708
Project Location:	700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Date:**	4/29/23
		Drawn By:	MDF
		Scale:	NTS

FIGURE 4
Sampling Location Diagram

TABLES

Table A.2.a
Soil Analytical Results - VOCs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

VOCs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Sample ID, Date of Collection, Soil Type, Relative Water Content									
				TP-1 Composite 4/17/2023 Native Unsaturated	**TP-2** Composite 4/17/2023 Native Unsaturated	**TP-3** Composite 4/17/2023 Native Unsaturated	**TP-4** Composite 4/17/2023 Fill Unsaturated	**TP-5** Composite 4/17/2023 Fill Unsaturated	**TP-6** Composite 4/17/2023 Native Unsaturated	**TP-7A** Composite 4/17/2023 Fill Unsaturated	**TP-7B** Composite 4/17/2023 Native Unsaturated	**TP-8** Composite 4/17/2023 Native Unsaturated	**TP-9** Composite 4/17/2023 Native Unsaturated
Benzene	**7.07**	1.6	*0.0051*	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Bromobenzene	**679**	342	-----	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	**1.83**	0.418	*0.0003*	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
Bromoform	**113**	25.4	*0.0023*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
tert-Butylbenzene	**183**	183	-----	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
sec-Butylbenzene	**145**	145	-----	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
n-Butylbenzene	**108**	108	-----	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029
Carbon Tetrachloride	**4.03**	0.916	*0.0039*	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
Chlorobenzene	**761**	370	-----	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
Chloroethane	**2,120**	2,120	*0.2266*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	**1.98**	0.454	*0.0033*	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
Chloromethane	**669**	159	*0.0155*	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064
2-Chlorotoluene	**907**	907	-----	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034
4-Chlorotoluene	**253**	253	-----	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
1,2-Dibromo-3-chloropropane	**0.092**	0.008	*0.0002*	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055
Dibromodichloromethane	**530**	126	*0.032*	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038
1,4-Dichlorobenzene	**16.4**	3.74	*0.144*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
1,3-Dichlorobenzene	**297**	297	*1.1528*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
1,2-Dichlorobenzene	**376**	376	*1.168*	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Dichlorodifluoromethane	**530**	126	*3.0863*	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
1,2-Dichloroethane	**2.87**	0.652	*0.0028*	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
1,1-Dichloroethane	**22.2**	5.06	*0.4834*	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
1,1-Dichloroethene	**1,190**	320	*0.005*	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049
cis-1,2-Dichloroethene	**2,340**	156	*0.0412*	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
trans-1,2-Dichloroethene	**1,850**	1,560	*0.0626*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,2-Dichloropropane	**15**	3.4	*0.0033*	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,3-Dichloropropane	**1,490**	1,490	-----	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
trans-1,3-Dichloropropene	**1,510**	1,510	*0.0003*	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
cis-1,3-Dichloropropene	**1,210**	1,210	*0.0003*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Di-isopropyl ether	**2,260**	2,260	-----	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028
1,2-Dibromoethane (EDB)	**0.221**	0.05	-----	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Ethylbenzene	**35.4**	8.02	*1.57*	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Hexachlorobutadiene	**7.19**	1.63	-----	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	**268**	268	-----	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
p-Isopropyltoluene	**162**	162	-----	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methylene Chloride	**1,150**	61.8	*0.0026*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl-tert-butyl-ether (MTBE)	**282**	63.8	*0.027*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
Naphthalene	**24.1**	5.52	*0.6582*	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
n-Propylbenzene	**264**	264	-----	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	**3.6**	0.810	*0.0002*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1,2-Tetrachloroethane	**12.3**	2.78	*0.0534*	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041
Tetrachloroethene (PCE)	**145**	33	*0.0045*	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
Toluene	**818**	818	*1.1072*	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
1,2,4-Trichlorobenzene	**113**	24	*0.408*	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
1,2,3-Trichlorobenzene	**934**	62.6	-----	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
1,1,1-Trichloroethane	**640**	640	*0.1402*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,2-Trichloroethane	**7.01**	1.59	*0.0032*	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037
Trichloroethene (TCE)	**8.41**	1.3	*0.0036*	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
Trichlorofluoromethane	**1,230**	1,230	-----	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066
1,2,4-Trimethylbenzene	**219**	219	*0.6890*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
1,3,5-Trimethylbenzene	**182**	182		<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Vinyl Chloride	**2.08**	0.067	*0.0001*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
m&p-Xylene	**260**	260	*3.96*	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062
o-Xylene				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

1) VOC - Volatile Organic Compound
2) mg/kg - milligrams per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established

Table A.2.b
Soil Analytical Results - PAHs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PAHs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Sample ID, Date of Collection, Soil Type, Relative Water Content									
				TP-1 Composite 4/17/23 Native Unsaturated	**TP-2** Composite 4/17/23 Native Unsaturated	**TP-3** Composite 4/17/23 Native Unsaturated	**TP-4** Composite 4/17/23 Fill Unsaturated	**TP-5** Composite 4/17/23 Fill Unsaturated	**TP-6** Composite 4/17/23 Native Unsaturated	**TP-7A** Composite 4/17/23 Fill Unsaturated	**TP-7B** Composite 4/17/23 Native Unsaturated	**TP-8** Composite 4/17/23 Native Unsaturated	**TP-9** Composite 4/17/23 Native Unsaturated
Acenaphthene	**45,200**	3,590	-----	<0.0118	<0.0118	<0.0118	<0.0118	<0.0118	<0.0118	0.012 "J"	<0.0118	<0.0118	<0.0118
Acenaphthylene	-----	-----	-----	<0.0149	<0.0149	<0.0149	<0.0149	<0.0149	<0.0149	0.083	<0.0149	<0.0149	<0.0149
Anthracene	**100,000**	17,900	*196.9492*	<0.0105	<0.0105	<0.0105	0.02 "J"	<0.0105	<0.0105	0.049	<0.0105	<0.0105	<0.0105
Benzo(a)anthracene	**20.8**	1.14	-----	<0.0164	<0.0164	<0.0164	0.083	<0.0164	<0.0164	0.241	<0.0164	<0.0164	<0.0164
Benzo(a)pyrene	**2.11**	0.115	*0.47*	<0.0137	<0.0137	<0.0137	0.064	<0.0137	<0.0137	0.34	<0.0137	<0.0137	<0.0137
Benzo(b)fluoranthene	**21.1**	1.15	*0.2390*	<0.0144	<0.0144	<0.0144	0.121	<0.0144	<0.0144	*0.43*	<0.0144	<0.0144	<0.0144
Benzo(g,h,i)perylene	-----	-----	-----	<0.0151	<0.0151	<0.0151	0.109	<0.0151	<0.0151	0.42	<0.0151	<0.0151	<0.0151
Benzo(k)fluoranthene	**211**	11.5	-----	<0.0199	<0.0199	<0.0199	0.055 "J"	<0.0199	<0.0199	0.194	<0.0199	<0.0199	<0.0199
Chrysene	**2,110**	115	*0.0721*	<0.0162	<0.0162	<0.0162	*0.101*	<0.0162	<0.0162	*0.283*	<0.0162	<0.0162	<0.0162
Dibenzo(a,h)anthracene	**2.11**	0.115	-----	<0.0151	<0.0151	<0.0151	<0.0151	<0.0151	<0.0151	0.063	<0.0151	<0.0151	<0.0151
Fluoranthene	**30,100**	2,390	*88.8778*	<0.013	<0.013	<0.013	0.138	<0.013	<0.013	0.205	<0.013	<0.013	<0.013
Fluorene	**30,100**	2,390	*14.8299*	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136
Indeno(1,2,3-cd)pyrene	**21.10**	1.15	-----	<0.0163	<0.0163	<0.0163	0.075	<0.0163	<0.0163	0.304	<0.0163	<0.0163	<0.0163
1-Methyl naphthalene	**72.7**	17.6	-----	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096
2-Methyl naphthalene	**3,010**	239	-----	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193
Naphthalene	**24.1**	5.52	*0.6582*	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219
Phenanthrene	-----	-----	-----	<0.0124	<0.0124	<0.0124	0.065	<0.0124	<0.0124	0.065	<0.0124	<0.0124	<0.0124
Pyrene	**22,600**	1,790	*54.5455*	<0.0135	<0.0135	<0.0135	0.11	<0.0135	<0.0135	0.215	<0.0135	<0.0135	<0.0135

1) PAHs - Polycyclic Aromatic Hydrocarbons
2) mg/kg - milligrams per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established
5) "J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)
6) Italicized result indicates Soil-to-Groundwater Pathway RCL exceedance
7) Orange highlighted result indicates Soil-to-Groundwater Pathway RCL exceedance

TABLE A.2.c
Soil Analytical Table - Metals
644, 700 & 701 West Capitol Drive
Hartland , Wisconsin

Metals (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Background Threshold Value	Sample ID, Date of Collection, Soil Type, Relative Water Content									
					TP-1 Composite Unsaturated 4/17/2023 Native	**TP-2** Composite Unsaturated 4/17/2023 Native	**TP-3** Composite Unsaturated 4/17/2023 Native	**TP-4** Composite Unsaturated 4/17/2023 Fill	**TP-5** Composite Unsaturated 4/17/2023 Fill	**TP-6** Composite Unsaturated 4/17/2023 Native	**TP-7A** Composite Unsaturated 4/17/2023 Fill	**TP-7B** Composite Unsaturated 4/17/2023 Native	**TP-8** Composite Unsaturated 4/17/2023 Native	**TP-9** Composite Unsaturated 4/17/2023 Native
Arsenic	**3**	0.677	*0.584*	8	1.32 "J"	<1.08	<1.08	1.43 "J"	<1.08	<1.08	<1.08	**6.39**	**6.98**	<1.08
Barium	**100,000**	15,300	*164.8*	364	53.8	43.2	12.8	47.8	7.73	11.4	37.9	32.7	41.8	3.93 "J"
Cadmium	**985**	71.1	*0.752*	1	*1.08*	*1.03*	0.559	0.678	0.405	0.456	*0.831*	*2.08*	*2.47*	0.215 "J"
Chromium, total	-----	-----	*360,000*	44	9.30	8.53	3.72	5.47	2.59	4.21	7.24	7.74	9.85	2.32
Lead	**800**	400	*27*	52	4.82	4.18	2.32	17.2	1.11 "J"	1.32 "J"	6.20	12.1	15.3	0.925 "J"
Mercury	**3.13**	3.13	*0.208*	-----	0.0775 "J"	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426
Selenium	**5,840**	391	*0.52*	-----	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29
Silver	**5,840**	391	*0.8491*	-----	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112

1) mg/kg - milligrams per kilogram
2) RCL - Residual Contaminant Level
3) ----- - Standard not established
4) "J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)
5) Bold result indicates a Industrial Direct Contact RCL exceedance
6) Underlined result indicates Non-Industrial Direct Contact RCL exceedance
7) Italicized result indicates Soil-to-Groundwater Pathway RCL exceedance
8) Gray shaded result indicates background threshold exceedance

TABLE A.2.d
Soil Analytical Results - PCBs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PCBs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Background Threshold Value	Sample ID, Date of Collection, Soil Type, Relative Water Content									
					TP-1 Composite Unsaturated Native 4/17/23	**TP-2** Composite Unsaturated Native 4/17/23	**TP-3** Composite Unsaturated Native 4/17/23	**TP-4** Composite Unsaturated Fill 4/17/23	**TP-5** Composite Unsaturated Fill 4/17/23	**TP-6** Composite Unsaturated Native 4/17/23	**TP-7A** Composite Unsaturated Fill 4/17/23	**TP-7B** Composite Unsaturated Native 4/17/23	**TP-8** Composite Unsaturated Native 4/17/23	**TP-9** Composite Unsaturated Native 4/17/23
Aroclor 1016	*28*	4.11	**0.0094**	-----	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Aroclor 1221	*0.883*	0.213	**0.0094**	-----	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Aroclor 1232	*0.792*	0.19	**0.0094**	-----	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Aroclor 1242	*0.972*	0.235	**0.0094**	-----	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Aroclor 1248	*0.975*	0.236	**0.0094**	-----	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Aroclor 1254	*0.988*	0.239	**0.0094**	-----	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
Aroclor 1260	*1*	0.243	**0.0094**	-----	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007

mg/kg - milligrams per kilogram
PCBs - Polychlorinated biphenyls
RCL - Residual Contaminant Level
----- - Standard not established
"J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)

APPENDIX A

ANALYTICAL RESULTS

CHAIN-OF-CUSTODY

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

TRAVIS MANSER
ENDPOINT SOLUTIONS
6871 SOUTH LOVER'S LANE
FRANKLIN, WI 53132

Report Date *04-May-23*

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	81.6	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	1.32 "J"	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	53.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	1.08	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	9.30	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	4.82	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	0.0775 "J"	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281B
Sample ID TP-2
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	43.2	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	1.03	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	8.53	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	4.18	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281B
Sample ID TP-2
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	99	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	90	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281C
Sample ID TP-3
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.1	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	12.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.559	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	3.72	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	2.32	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281C
Sample ID TP-3
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281D
Sample ID TP-4
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.8	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	1.43 "J"	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	47.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.678	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	5.47	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	17.2	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	0.02 "J"	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	0.083	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	0.064	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	0.121	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	0.109	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	0.055 "J"	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	0.101	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	0.138	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	0.075	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	0.065	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	0.11	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281D
Sample ID TP-4
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281E
Sample ID TP-5
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	7.73	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.405	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	2.59	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	1.11 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281E
Sample ID TP-5
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281F
Sample ID TP-6
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	11.4	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.456	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	4.21	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	1.32 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281F
Sample ID TP-6
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281G
Sample ID TP-7A
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	37.9	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.831	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	7.24	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	6.20	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	0.012 "J"	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	0.083	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	0.049	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	0.241	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	0.34	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	0.43	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	0.42	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	0.194	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	0.283	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	0.063	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	0.205	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	0.304	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	0.065	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	0.215	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281G
Sample ID TP-7A
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	93	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281H
Sample ID TP-7B
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.8	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	6.39	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	32.7	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	2.08	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	7.74	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	12.1	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	3
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281H
Sample ID TP-7B
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	96	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	102	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	102	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281I
Sample ID TP-8
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	6.98	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	41.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	2.47	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	9.85	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	15.3	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281I
Sample ID TP-8
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281J
Sample ID TP-9
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	96.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	3.93 "J"	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.215 "J"	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	2.32	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	0.925 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281J
Sample ID TP-9
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	96	Rec %			1	8260B		4/21/2023	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
3	The matrix spike not within established limits.

SL denotes sub contract lab - Certification #399089350

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, LLC

www.synergy-lab.net
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Chain # 45974
Page 1 of 1

Sample Handling Request
___ Rush Analysis Date Required: _____
(Rushes accepted only with prior authorization)
✓ Normal Turn Around

Lab I.D. #
QUOTE # :
Project #: TBD "843"
Sampler: (signature)
Project (Name / Location): Hartland Quarry // 644, 700 & 701 W. Capitol Drive, Hartland, WI

Reports To: Travis Manser	Invoice To:
Company Endpoint Solutions Corp.	Company
Address 6871 South Lovers Lane	Address SAME
City State Zip Franklin, WI	City State Zip
Phone 414-858-2265	Phone
Email travis@endpointcorporation.com	Email

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
504228 1 A	TP-1	4/17	0845	N	4	Soil	MeOH / none
B	TP-2		0915				
C	TP-3		0920				
D	TP-4		1000				
E	TP-5		1100				
F	TP-6		1115				
G	TP-7A		1130				
H	TP-7B		1130				
I	TP-8		1200				
J	TP-9		1230				

Analysis Requested / **Other Analysis**

DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-RCRA METALS	PID/FID
					X	X						X		X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: CS
Temp. of Temp. Blank: ____ °C On Ice: Y
Cooler seal intact upon receipt: Y Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0826	4-18-23			

Received in Laboratory By: Time: 915a Date: 04.19.23

From: Larry Raether
To: Robert Cigale
Cc: John Ford; Amtmann, Ryan
Subject: RE: Hartland Quarry Apartments
Date: Thursday, July 6, 2023 2:53:43 PM
Attachments: image001.png
image004.jpg
image005.jpg
image002.jpg
image007.jpg

The path is reasonable. I communicate with Ryan. I assume that he or others on the team communicate with the Plan Commission.

From: Robert Cigale <bob@endpointcorporation.com>
Sent: Thursday, July 6, 2023 2:45 PM
To: Larry Raether <larry.raether@intertek.com>
Cc: John Ford <jford@threeleafdevelopment.com>
Subject: [External] RE: Hartland Quarry Apartments

We appreciate your understanding. Are you comfortable with the proposed path forward of Phase II activities in the former LUST area, preparation and submittal of an Application for Exemption to Construct on a Historic Fill Site and oversight during earthwork activities by an experienced environmental professional to identify and address issues of concern, or are there other activities that you would recommend we consider to address the potential environmental concerns at the site? If you are in agreement with our proposed path forward, can we assume you will communicate your support for the project with the Plan Commission?

Thanks, Bob

Robert A. Cigale, P.G.
Owner/Principal Geologist
Endpoint Solutions Corp.
6871 South Lovers Lane
Franklin, WI 53132

Phone: 414-858-1202
Mobile: 414-897-3240

Web: http://www.endpointcorporation.com [endpointcorporation.com]
Email: bob@endpointcorporation.com

[facebook.com] [linkedin.com]

From: Larry Raether <larry.raether@intertek.com>
Sent: Thursday, July 6, 2023 2:18 PM
To: Robert Cigale <bob@endpointcorporation.com>
Cc: John Ford <jford@threeleafdevelopment.com>

Subject: RE: Hartland Quarry Apartments

No meeting or call is necessary. We don't want to void the agreement or subject Three Leaf Partners to potential damages.

Thanks,

Larry

From: Robert Cigale <bob@endpointcorporation.com>
Sent: Thursday, July 6, 2023 2:03 PM
To: Larry Raether <larry.raether@intertek.com>
Cc: John Ford <jford@threeleafdevelopment.com>
Subject: [External] Hartland Quarry Apartments

After significant internal discussions with the project team we are submitting the attached opinion statement regarding the reporting of a release to the WDNR based on the PAH detections in the two (2) test pit soil samples. Based historical on the use of the Site as a concrete batch plant which accepted fill materials from local road construction projects, and the likelihood those fill materials contained small inclusions of asphalt pavement and/or millings along with the lack of observable sources for the contaminants in the fill materials at these two (2) locations, it was our opinion the elevated PAH constituent concentrations were isolated random detections which were not indicative of a release of contaminants at these locations. Furthermore, as the Spills law states, "property owners or the person who caused the discharge are responsible for reporting contamination". Three Leaf Partners does not currently own the Site and is limited contractually from sharing specific results with the current Site owner. As such, the act of submitting a Report of a Release to the WDNR at this time could void the agreement between Three Leaf Partners and the current Site owner, and subject Three Leaf Partners to potential damages associated with such a report. However, Three Leaf Partners does intend to proceed with the pre-development process, including engaging the WDNR, prior to taking ownership of the Site through the submittal of an Application for Exemption which will include a summary of Site conditions, including the results of the test pit sample analyses. If following the review of the Application for Exemption submittal, the WDNR determines that the PAH detections should be reported as a release, the proper submittals will be made to the WDNR at that time.

John has informed Ryan Amtmann and Ryan Bailey of this information being sent. Following your review, if necessary, John has suggested a meeting and/or teleconference be scheduled to discuss this issue.

Thanks, Bob

Robert A. Cigale, P.G.
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You'll be amazed where you find Intertek.

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www.endpointcorporation.com

Mr. Larry Raether
PSI Intertek
821 Corporate Court
Pewaukee, WI 53189

July 6, 2023

Subject: **Professional Opinion**
WDNR Release Reporting
Hartland Quarry Apartments

Dear Larry:

As previously discussed, two (2) of the soil samples collected from the onsite fill materials which were submitted for laboratory analysis during the recent test pit investigation performed at the proposed Hartland Quarry Apartment redevelopment site (the "Site") contained concentrations of polycyclic aromatic hydrocarbon (PAH) constituents chrysene and benzo(b)fluoranthene which exceeded their respective soil-to-groundwater pathway residual contaminant levels (RCLs). Based historical on the use of the Site as a concrete batch plant which accepted fill materials from local road construction projects, and the likelihood those fill materials contained small inclusions of asphalt pavement and/or millings along with the lack of observable sources for the contaminants in the fill materials at these two (2) locations, it was our opinion the elevated PAH constituent concentrations were isolated random detections which were not indicative of a release of contaminants at these locations. Therefore, it is our opinion the elevated concentrations of PAH constituents at these two (2) locations do not require reporting to the Wisconsin Department of Natural Resources (WDNR) as a release, but rather should be managed by the WDNR via the Application for Exemption to Construct on a Historic Fill Site (Application for Exemption) process.

RELEASE REPORTING REQUIREMENTS

The WDNR Remediation and Redevelopment Program (R&R) references the Spills Law (Wisconsin Statute [Wis. Stat.] Chapter 292 as the requirement for reporting a release to the environment. "*Property owners or the person who caused the discharge are responsible for reporting contamination. The Spills Law applies equally to a recent spill and to old contamination that has been discovered. If the DNR determines that further investigation is needed, the responsible person will receive a letter from the DNR outlining the requirements.*"

The State of Wisconsin promulgated the Wisconsin Administrative Code (WAC) Chapter NR 700 series "*to establish consistent, uniform standards and procedures that allow for site-specific flexibility, pertaining to the identification, investigation and remediation of sites and facilities which are subject to regulation under chs. 289 and 292, Wis Stat.*"

Wis. Stat. Chapter 292.11(2)(a), Hazardous Substance Spills states, "*a person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance shall notify the department immediately of any discharge not exempted under sub. (9)*". Exempted discharges listed in sub (9) include the following:

- *Any person holding a valid permit under ch. 283 (WPDES) is exempted from the reporting and penalty requirements of this section with respect to substances discharged within the limits authorized by the permit.*

- *Law enforcement officers or members of a fire department using hazardous substances in carrying out their responsibility to protect public health, safety and welfare are exempted from the penalty requirements of this section but shall report to the department any discharges of a hazardous substance occurring within the performance of their duties.*

- *Any person discharging in conformity with a permit or program approved under chs. 281 (water and sewage), 285 (air pollution) or 289 (solid waste), 291 (hazardous waste management), 292 (remedial action), 293 (non-ferrous mining), 295 (non-metallic mining) and 299 (general environmental), is exempted from the reporting and penalty requirements of this section.*

Hazardous substance is defined in Wis. Stat. Chapter 292.01(5) as, "*any substance or combination of substances including any waste of a solid, semisolid, liquid or gaseous form which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration or physical, chemical or infectious characteristics. This term includes, but is not limited to, substances which are toxic, corrosive, flammable, irritants, strong sensitizers or explosives as determined by the department.*"

Based on these definitions, it is our opinion the concentrations of benzo(b)fluoranthene and chrysene detected in two (2) of the soil samples submitted for laboratory analysis from the test pit evaluation which exceeded their respective generic soil-to-groundwater pathway residual contaminant levels (RCLs) calculated using the United States Environmental Protection Agency's USEPA's regional screening level (RSL) web-calculator in accordance with WAC Chapter NR 720 do not meet the definition of a hazardous substance per Wis. Stat. Chapter 292.01(5).

WAC Chapter NR 706, Hazardous Substance Discharge Notification and Source Confirmation Requirements, states in Chapter NR 706.02 (2), "*Section NR 706.05 applies to all persons who have responsibility under s. 292.11, Stats., for any hazardous substance discharge that may occur"*. WAC Chapter NR 706.05(a) further states, "*Unless the discharge is specifically exempted under s. NR 706.07, persons who cause the discharge to the environment of a hazardous substance or who possess or control a hazardous substance which is discharged to the environment shall immediately notify the department of the discharge. Discharges to the environment may include recent discharges, historic discharges, and discharges caused by the long-term application of a substance.*" Again, Chapter NR 700 (25) refers to Wis. Stat. 291.07 (7) for the definition of a hazardous substance.

There are no references in Wis. Stat. Chapter 292 or the WAC Chapter NR 700 series to a requirement to report a release to the environment strictly on the presence of laboratory quantified RCL exceedances. While the results of the laboratory analyses indicate the presence of elevated concentrations of benzo(b)fluoranthene and chrysene in two (2) soil samples, there is no indication that the elevated concentrations are due to the discharge of a hazardous substance to the environment. As previously stated, it is our opinion the elevated concentrations of PAH constituents in the two (2) test pit samples were likely due to the presence of asphalt milling inclusions in the fill materials. Furthermore, while the concentrations of benzo(b)fluoranthene and chrysene detected exceeded their respective soil-to-groundwater pathway RCLs, the concentrations detected were well below the respective non-industrial direct contact RCLs. As such, it is difficult to conclude that the concentrations of PAHs detected would be expected to "*cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration or physical, chemical or infectious characteristics*", as defined in Wis. Stat. 292.01(5).

As the Site contains demolition wastes (concrete rubble), an Application for Exemption to Construct on a Historic Fill Site will be required to be submitted to the WDNR for review and approval. The WDNR Waste Management (WA) and R&R Programs jointly implement the exemption process. For sites where a hazardous substance discharge has occurred, or is likely to have occurred, a case-by-case evaluation is performed by both programs.

CLOSING

Based on the Site-specific findings from the test pit investigation, as well as the proposed redevelopment plan, it is our opinion that "reporting" the results of the test pit investigation as part of the Application for Exemption meets the spirit of the Spills Law in notifying the WDNR R&R Program of the presence of elevated constituent concentrations in the fill material at the Site. Three Leaf Partners is committed to creating a development on the Site that is protective of human health and the environment. Three Leaf Partners intends to work closely with WDNR representatives in the R&R and WA programs to ensure compliance with all environmental regulations throughout the development process. Furthermore, Three Leaf Partners is committed to having an experienced environmental professional onsite during earthwork activities to oversee the conditions encountered and properly manage the materials, which in our opinion, is a much better method to further evaluate the Site conditions rather than the traditional investigative process which would result from a Spills Law Report of Release.

Furthermore, as the Spills law states, "*property owners or the person who caused the discharge are responsible for reporting contamination*". Three Leaf Partners does not currently own the Site and is limited contractually from sharing specific results with the current Site owner. As such, the act of submitting a Report of a Release to the WDNR at this time could void the agreement between Three Leaf Partners and the current Site owner and subject Three Leaf Partners to potential damages associated with such a report. It is the intent of Three Leaf Partners to continue the pre-development process, including engaging the WDNR, prior to taking ownership of the Site through the submittal of an Application for Exemption which include a summary of Site conditions, including the results of the test pit sample analyses. If following the review of the Application for Exemption submittal, the WDNR determines that the PAH detections should be reported as a release, the proper submittals will be made to the WDNR at that time.

If you have any questions or concerns regarding the contents of this letter or the proposed path forward, please contact me directly at 414-858-1202 or via email at bob@endpointcorporation.com.

Sincerely,

Endpoint Solutions

Robert A. Cigale, P.G.
Principal

cc: John Ford – Three Leaf Partners

Endpoint Solutions
6871 South Lovers Lane
Franklin, WI 53132
Telephone: (414) 427-1200
Fax: (414) 427-1259
www.endpointcorporation.com

Mr. John Ford
President
Three Leaf Partners
504 West Juneau Avenue
Milwaukee, WI 53203

May 12, 2023

Subject: **Report of Results – Site-Wide Fill Test Pit Sampling and Analysis**
Hartland Quarry Apartments
644, 700 & 701 West Capitol Drive, Hartland, Wisconsin

Dear John:

As part of Phase II Environmental Assessment (EA) activities, Endpoint Solutions Corp. (Endpoint) worked with GeoTest, Inc. during the excavation of test pits at the Hartland Quarry Apartment project site located at 644, 700 & 701 West Capitol Drive, in the Village of Hartland, Waukesha County, Wisconsin (the "subject property"). The subject property is the former location of the Hartland Quarry, as well as the Tews and LaFarge concrete plants. The extent of the subject property is depicted on **Figure 1**. While GeoTest, Inc. excavated test pits across the subject property to evaluate the physical characteristics of the fill materials, Endpoint visually evaluated the fill materials for obvious indications of contamination (visual and olfactory) and collected samples for laboratory chemical analysis.

BACKGROUND

HISTORIC AERIAL PHOTOS

Based on a review of historic aerial photographs obtained from the Waukesha County Interactive Mapping Site (www.waukeshacounty.gov/interactivemap), quarrying operations were active on the subject property at the time of the earliest aerial photograph in 1941. Quarrying operations appeared to extend across the entire subject property, and also onto the adjoining property to the west of the subject property currently being considered for development by Kwik Trip. By circa 1970, quarrying operations on the subject property appear to have been completed based on the observation of vegetation maturing across the northern portions of the subject property.

By 1963, several structures were observed in the southwest portion of the subject property, and between 1995 and 2000, the current structure was developed in the far southwestern portion of the subject property. A copy of the historic aerial photographs referenced herein are attached in **Appendix A**.

SITE RECONNAISSANCE

On April 14, 2023, representatives of Endpoint met with representatives of GeoTest, Inc., Three Leaf Partners, Walbec Group and Mr. Ed Troxler to perform a walking reconnaissance of the subject property. Currently, the subject property consists of the offices and shop buildings for BSIT, a bulk aggregate transportation company, and a former aggregate pit which has been partially reclaimed with concrete slabs, concrete washout and reportedly soils transported from Village of Hartland sewer utility projects.

SCOPE OF WORK

Based on the findings of non-soil (waste) inclusions in the surficial fills on the adjoining property to the west of the subject property, the apparent depth of quarrying operations as evidenced by the historic aerial photographs and the time period of the quarrying and filling operations, it is quite likely that various non-soil (waste) materials were included in the soil materials deposited on the subject property. Additionally, during the walking reconnaissance, a five (5) gallon bucket containing used oil filters was observed protruding from the ground surface in a vegetated portion of the subject property. Lastly, it is reported that pieces of equipment were likely buried on the subject property.

While it is impossible to evaluate the entire volume of fill historically placed on the subject property prior to mass grading activities, it is possible to attempt to identify areas of potential concern using historic aerial photos, interviews with knowledgeable persons, reconnaissance of the subject property and visual assessment and sample analysis during test pits advanced as part of the geotechnical evaluation.

Therefore, based on the physical conditions of the subject property and the need to evaluate the physical properties of the soils for foundation support, GeoTest, Inc. proposed to excavate a series of nine (9) test pits (**TP-1 through TP-9**) through the apparent fill materials. Besides providing an opportunity to evaluate the physical characteristics of the fill materials, the test pits were also to provide an indication of the general thickness of the fill materials. Endpoint accompanied GeoTest, Inc. during the test pit exploration process to visually evaluate the soils as well as to collect representative samples of the materials from each test pit location for laboratory testing for volatile organic compounds (VOCs) polycyclic aromatic hydrocarbons (PAHs), metals and polychlorinated biphenyls (PCBs). During these assessment activities, a total of nine (9) samples representing a composite sample of the fill materials from each test pit was submitted for analysis. Additionally, a sample of the underlying native soils from test pit TP-7 was also submitted for laboratory analysis. The sample of the fill materials from test pit TP-7 l was identified as sample TP-7A, while the sample of the underlying native soil was identified as sample TP-7B.

RESULTS

SOIL CONDITIONS

Based on the *Geotechnical Subsurface Investigation Report* prepared by GeoTest, Inc. (May 4, 2023), fill materials have been accepted at the subject property since the 1970s. Reportedly, the fill materials accepted consisted primarily of soil and concrete; however, occasional inert materials such as asphalt, miscellaneous building materials, wood and metal have also been accepted.

The nine (9) test pits were excavated to depths ranging between approximately 5.5 to 11.3 feet below the ground surface (ft bgs). The locations of the test pits are depicted on **Figure 4** provided by GeoTest, Inc. Native soils at the subject property consisted of fine to coarse sand, fine to coarse sand and gravel, fine to coarse gravel and clayey silt. Fill materials consisted of fine sand, fine to coarse sand and gravel, and rubble consisting of concrete, asphalt, wood and metal pieces in a sand & gravel matrix.

VOC Results

No VOC constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis. The VOC results are summarized in **Table A.2.a**.

PAH Results

No PAH constituents were detected in eight (8) of the ten (10) composite samples submitted for analysis. These samples included the native soils from the TP-1, TP-2, TP-3, TP-6 TP-7, TP-8 and TP-9 locations and the fill sample from the TP-5 location. Numerous PAH constituents were detected in the sample of fill materials submitted from the TP-4 location. The concentration of chrysene reported in this sample exceeded its soil-to-groundwater exposure pathway residual contaminant level (RCL) established by the Wisconsin Department of Natural Resources (WDNR). Numerous PAH constituents were also detected in the sample of fill materials submitted from the TP-7 location. The concentrations of benzo(b)fluoranthene and chrysene reported in this sample exceeded their respective soil-to-groundwater exposure pathway RCLs established by the WDNR.

The PAH results are summarized in **Table A.2.b**.

Metals Results

All of the samples submitted for metals analysis contained detected concentrations of several metals. Six (6) of the ten (10) samples submitted reported concentrations which exceeded soil-to-groundwater pathway, non-industrial direct contact and industrial direct contact RCLs and background threshold values (BTVs) established by the WDNR.

- The sample of the native soil submitted from TP-1 contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV, and cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.
- The sample of the native soil from the TP-2 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.
- The sample of the fill material submitted from the TP-4 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV.
- The sample of fill material submitted from the TP-7 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and BTV.
- The sample of native soil underlying the fill materials at the TP-7 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.
- The sample of native soil submitted from the TP-8 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and

industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.

The metal results are summarized in **Table A.2.c**.

PCB Results

No PCB constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis. The PCB results are summarized in **Table A.2.d**.

A copy of the analytical results and chain-of-custody form are attached in **Appendix A**.

DISCUSSION

Overall, results of the analyses performed on the composite samples submitted from the test pits indicate a lack of widespread significant contamination. None of the samples contained detectable concentrations of any VOC or PCB constituents, and eight (8) of the ten (10) samples submitted did not contain any detectable concentrations of PAH constituents. Detected concentrations of contaminants above published RCLs were limited to metals (arsenic and/or cadmium) in the samples submitted from TP-1, TP-2, the native soils at TP-7 (sample TP-7B) and TP-8, but no results exceeded the arsenic BTV. The samples submitted from TP-4 and the fill soils at TP-7 (sample TP-7A) contained concentrations of chrysene and/or benzo(b)fluoranthene in excess of their respective RCLs. It should be noted that only the concentrations of cadmium reported in the samples collected from TP-1, TP-2 the native soils at TP-7 (sample TP-7B) and TP-8 exceeded the established BTV for cadmium.

RECOMMENDED NEXT STEPS

Based on the lack of VOC and PCB contamination in the test pit samples submitted, volatile vapor migration should not be a concern except potentially in the area of the former leaking underground storage tank (LUST) area in the extreme southern portion of the Site, not evaluated as part of the test pit scope of work. In addition, based on the relatively low concentrations of PAH constituents and metals detected, it is unlikely remedial measures will be required; however, the WDNR would require the soils containing elevated concentrations above RCLs and BTVs to be properly managed on the Site during redevelopment. The four (4) samples which contained detectable concentrations of arsenic were the only samples which exceeded direct contact RCLs (non-industrial and industrial); however, none of these concentrations exceeded the BTV established for arsenic; therefore, it may be necessary to place these soils beneath an exposure barrier. The exposure barrier can consist of buildings, pavements or layers of clean, non-contaminated soil.

As the Site has received extensive amounts of fill materials, the WDNR will require the preparation and submission of an Application to Construct on a Historic Fill Site (the "Application for Exemption"). The Application for Exemption is submitted to both the WDNR Remediation & Redevelopment (R&R) program as well as the Waste Management Program. Vapor intrusion is the greatest concern for both programs (volatile vapors for the R&R program and methane for the Waste Management program). As stated above, it is our opinion there is no widespread concern for

volatile vapor migration beyond the LUST area and none of the test pits encountered major quantities of buried organic matter which could act as a source of methane during decomposition.

Please note, while the test pit sampling did not identify widespread contamination at the Site, our visual observations during the initial Site reconnaissance did identify the presence of a five (5) gallon bucket containing used oil filters. It is likely that other non-soil types of materials have been randomly buried at the Site which may have the potential to cause environmental concerns. Therefore, we recommend an environmental professional be onsite during the earthwork activities to document the procedures as will be required by the approved Application for Exemption, as well as to identify any non-soil items of concern that would require specialized disposal as well as proper management of potentially impacted soils.

CLOSING

We trust this document and its attachments provide the level of information necessary to present to city representatives as part of the approval process. If you have any questions, please feel free to contact me directly.

Sincerely,

Endpoint Solutions

Robert A. Cigale, P.G.
Principal Consultant

ATTACHMENTS
Figures
Appendix A

FIGURES

N

0 2000' 4000'

SOURCE: USGS

LOCATION MAP

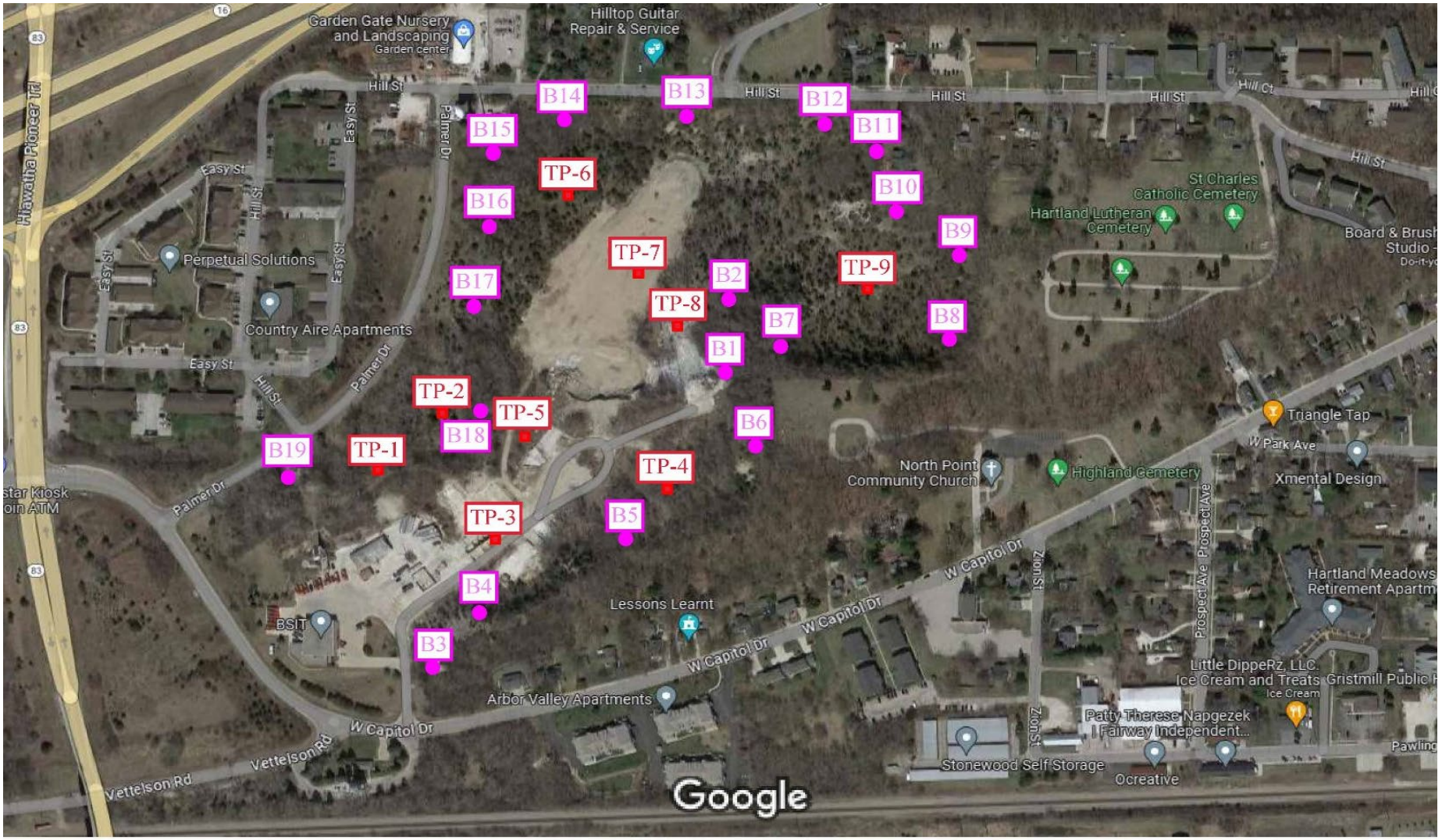
700WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 04/12/2023	Figure 1
REVIEWED BY: RAC	PROJECT NO: 843-001-001	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-001\FIG 01_843-001-001_Location Map.dwg



■ Test Pit Locations

● Bluff Samples

GeoTest

Project Name:	Hartland Quarry Apartments	**Project No.:**	7708
Project Location:	700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Date:**	4/29/23
		Drawn By:	MDF
		Scale:	NTS

FIGURE 4
Sampling Location Diagram

TABLES

Table A.2.a
Soil Analytical Results - VOCs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

VOCs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Sample ID, Date of Collection, Soil Type, Relative Water Content									
				TP-1 Composite 4/17/2023 Native Unsaturated	**TP-2** Composite 4/17/2023 Native Unsaturated	**TP-3** Composite 4/17/2023 Native Unsaturated	**TP-4** Composite 4/17/2023 Fill Unsaturated	**TP-5** Composite 4/17/2023 Fill Unsaturated	**TP-6** Composite 4/17/2023 Native Unsaturated	**TP-7A** Composite 4/17/2023 Fill Unsaturated	**TP-7B** Composite 4/17/2023 Native Unsaturated	**TP-8** Composite 4/17/2023 Native Unsaturated	**TP-9** Composite 4/17/2023 Native Unsaturated
Benzene	**7.07**	1.6	*0.0051*	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Bromobenzene	**679**	342	-----	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	**1.83**	0.418	*0.0003*	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
Bromoform	**113**	25.4	*0.0023*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
tert-Butylbenzene	**183**	183	-----	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
sec-Butylbenzene	**145**	145	-----	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
n-Butylbenzene	**108**	108	-----	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029
Carbon Tetrachloride	**4.03**	0.916	*0.0039*	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
Chlorobenzene	**761**	370	-----	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
Chloroethane	**2,120**	2,120	*0.2266*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	**1.98**	0.454	*0.0033*	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
Chloromethane	**669**	159	*0.0155*	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064
2-Chlorotoluene	**907**	907	-----	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034
4-Chlorotoluene	**253**	253	-----	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
1,2-Dibromo-3-chloropropane	**0.092**	0.008	*0.0002*	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055
Dibromodichloromethane	**530**	126	*0.032*	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038
1,4-Dichlorobenzene	**16.4**	3.74	*0.144*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
1,3-Dichlorobenzene	**297**	297	*1.1528*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
1,2-Dichlorobenzene	**376**	376	*1.168*	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Dichlorodifluoromethane	**530**	126	*3.0863*	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
1,2-Dichloroethane	**2.87**	0.652	*0.0028*	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
1,1-Dichloroethane	**22.2**	5.06	*0.4834*	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
1,1-Dichloroethene	**1,190**	320	*0.005*	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049
cis-1,2-Dichloroethene	**2,340**	156	*0.0412*	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
trans-1,2-Dichloroethene	**1,850**	1,560	*0.0626*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,2-Dichloropropane	**15**	3.4	*0.0033*	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,3-Dichloropropane	**1,490**	1,490	-----	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
trans-1,3-Dichloropropene	**1,510**	1,510	*0.0003*	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
cis-1,3-Dichloropropene	**1,210**	1,210	*0.0003*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Di-isopropyl ether	**2,260**	2,260	-----	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028
1,2-Dibromoethane (EDB)	**0.221**	0.05	-----	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Ethylbenzene	**35.4**	8.02	*1.57*	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Hexachlorobutadiene	**7.19**	1.63	-----	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	**268**	268	-----	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
p-Isopropyltoluene	**162**	162	-----	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methylene Chloride	**1,150**	61.8	*0.0026*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl-tert-butyl-ether (MTBE)	**282**	63.8	*0.027*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
Naphthalene	**24.1**	5.52	*0.6582*	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
n-Propylbenzene	**264**	264	-----	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	**3.6**	0.810	*0.0002*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1,2-Tetrachloroethane	**12.3**	2.78	*0.0534*	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041
Tetrachloroethene (PCE)	**145**	33	*0.0045*	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
Toluene	**818**	818	*1.1072*	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
1,2,4-Trichlorobenzene	**113**	24	*0.408*	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
1,2,3-Trichlorobenzene	**934**	62.6	-----	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
1,1,1-Trichloroethane	**640**	640	*0.1402*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,2-Trichloroethane	**7.01**	1.59	*0.0032*	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037
Trichloroethene (TCE)	**8.41**	1.3	*0.0036*	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
Trichlorofluoromethane	**1,230**	1,230	-----	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066
1,2,4-Trimethylbenzene	**219**	219	*0.6890*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
1,3,5-Trimethylbenzene	**182**	182		<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Vinyl Chloride	**2.08**	0.067	*0.0001*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
m&p-Xylene	**260**	260	*3.96*	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062
o-Xylene				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

1) VOC - Volatile Organic Compound
2) mg/kg - milligrams per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established

Table A.2.b
Soil Analytical Results - PAHs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PAHs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Sample ID, Date of Collection, Soil Type, Relative Water Content									
				TP-1 Composite 4/17/23 Native Unsaturated	**TP-2** Composite 4/17/23 Native Unsaturated	**TP-3** Composite 4/17/23 Native Unsaturated	**TP-4** Composite 4/17/23 Fill Unsaturated	**TP-5** Composite 4/17/23 Fill Unsaturated	**TP-6** Composite 4/17/23 Native Unsaturated	**TP-7A** Composite 4/17/23 Fill Unsaturated	**TP-7B** Composite 4/17/23 Native Unsaturated	**TP-8** Composite 4/17/23 Native Unsaturated	**TP-9** Composite 4/17/23 Native Unsaturated
Acenaphthene	**45,200**	3,590	-----	<0.0118	<0.0118	<0.0118	<0.0118	<0.0118	<0.0118	0.012 "J"	<0.0118	<0.0118	<0.0118
Acenaphthylene	-----	-----	-----	<0.0149	<0.0149	<0.0149	<0.0149	<0.0149	<0.0149	0.083	<0.0149	<0.0149	<0.0149
Anthracene	**100,000**	17,900	*196.9492*	<0.0105	<0.0105	<0.0105	0.02 "J"	<0.0105	<0.0105	0.049	<0.0105	<0.0105	<0.0105
Benzo(a)anthracene	**20.8**	1.14	-----	<0.0164	<0.0164	<0.0164	0.083	<0.0164	<0.0164	0.241	<0.0164	<0.0164	<0.0164
Benzo(a)pyrene	**2.11**	0.115	*0.47*	<0.0137	<0.0137	<0.0137	0.064	<0.0137	<0.0137	0.34	<0.0137	<0.0137	<0.0137
Benzo(b)fluoranthene	**21.1**	1.15	*0.2390*	<0.0144	<0.0144	<0.0144	0.121	<0.0144	<0.0144	*0.43*	<0.0144	<0.0144	<0.0144
Benzo(g,h,i)perylene	-----	-----	-----	<0.0151	<0.0151	<0.0151	0.109	<0.0151	<0.0151	0.42	<0.0151	<0.0151	<0.0151
Benzo(k)fluoranthene	**211**	11.5	-----	<0.0199	<0.0199	<0.0199	0.055 "J"	<0.0199	<0.0199	0.194	<0.0199	<0.0199	<0.0199
Chrysene	**2,110**	115	*0.0721*	<0.0162	<0.0162	<0.0162	*0.101*	<0.0162	<0.0162	*0.283*	<0.0162	<0.0162	<0.0162
Dibenzo(a,h)anthracene	**2.11**	0.115	-----	<0.0151	<0.0151	<0.0151	<0.0151	<0.0151	<0.0151	0.063	<0.0151	<0.0151	<0.0151
Fluoranthene	**30,100**	2,390	*88.8778*	<0.013	<0.013	<0.013	0.138	<0.013	<0.013	0.205	<0.013	<0.013	<0.013
Fluorene	**30,100**	2,390	*14.8299*	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136
Indeno(1,2,3-cd)pyrene	**21.10**	1.15	-----	<0.0163	<0.0163	<0.0163	0.075	<0.0163	<0.0163	0.304	<0.0163	<0.0163	<0.0163
1-Methyl naphthalene	**72.7**	17.6	-----	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096
2-Methyl naphthalene	**3,010**	239	-----	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193
Naphthalene	**24.1**	5.52	*0.6582*	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219
Phenanthrene	-----	-----	-----	<0.0124	<0.0124	<0.0124	0.065	<0.0124	<0.0124	0.065	<0.0124	<0.0124	<0.0124
Pyrene	**22,600**	1,790	*54.5455*	<0.0135	<0.0135	<0.0135	0.11	<0.0135	<0.0135	0.215	<0.0135	<0.0135	<0.0135

1) PAHs - Polycyclic Aromatic Hydrocarbons
2) mg/kg - milligrams per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established
5) "J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)
6) Italicized result indicates Soil-to-Groundwater Pathway RCL exceedance
7) Orange highlighted result indicates Soil-to-Groundwater Pathway RCL exceedance

TABLE A.2.c
Soil Analytical Table - Metals
644, 700 & 701 West Capitol Drive
Hartland , Wisconsin

Metals (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Background Threshold Value	Sample ID, Date of Collection, Soil Type, Relative Water Content									
					TP-1 Composite Unsaturated 4/17/2023 Native	**TP-2** Composite Unsaturated 4/17/2023 Native	**TP-3** Composite Unsaturated 4/17/2023 Native	**TP-4** Composite Unsaturated 4/17/2023 Fill	**TP-5** Composite Unsaturated 4/17/2023 Fill	**TP-6** Composite Unsaturated 4/17/2023 Native	**TP-7A** Composite Unsaturated 4/17/2023 Fill	**TP-7B** Composite Unsaturated 4/17/2023 Native	**TP-8** Composite Unsaturated 4/17/2023 Native	**TP-9** Composite Unsaturated 4/17/2023 Native
Arsenic	**3**	0.677	*0.584*	8	1.32 "J"	<1.08	<1.08	1.43 "J"	<1.08	<1.08	<1.08	**6.39**	**6.98**	<1.08
Barium	**100,000**	15,300	*164.8*	364	53.8	43.2	12.8	47.8	7.73	11.4	37.9	32.7	41.8	3.93 "J"
Cadmium	**985**	71.1	*0.752*	1	*1.08*	*1.03*	0.559	0.678	0.405	0.456	*0.831*	*2.08*	*2.47*	0.215 "J"
Chromium, total	-----	-----	*360,000*	44	9.30	8.53	3.72	5.47	2.59	4.21	7.24	7.74	9.85	2.32
Lead	**800**	400	*27*	52	4.82	4.18	2.32	17.2	1.11 "J"	1.32 "J"	6.20	12.1	15.3	0.925 "J"
Mercury	**3.13**	3.13	*0.208*	-----	0.0775 "J"	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426
Selenium	**5,840**	391	*0.52*	-----	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29
Silver	**5,840**	391	*0.8491*	-----	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112

1) mg/kg - milligrams per kilogram
2) RCL - Residual Contaminant Level
3) ----- - Standard not established
4) "J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)
5) Bold result indicates a Industrial Direct Contact RCL exceedance
6) Underlined result indicates Non-Industrial Direct Contact RCL exceedance
7) Italicized result indicates Soil-to-Groundwater Pathway RCL exceedance
8) Gray shaded result indicates background threshold exceedance

TABLE A.2.d
Soil Analytical Results - PCBs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PCBs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Background Threshold Value	Sample ID, Date of Collection, Soil Type, Relative Water Content									
					TP-1 Composite Unsaturated Native 4/17/23	**TP-2** Composite Unsaturated Native 4/17/23	**TP-3** Composite Unsaturated Native 4/17/23	**TP-4** Composite Unsaturated Fill 4/17/23	**TP-5** Composite Unsaturated Fill 4/17/23	**TP-6** Composite Unsaturated Native 4/17/23	**TP-7A** Composite Unsaturated Fill 4/17/23	**TP-7B** Composite Unsaturated Native 4/17/23	**TP-8** Composite Unsaturated Native 4/17/23	**TP-9** Composite Unsaturated Native 4/17/23
Aroclor 1016	*28*	4.11	**0.0094**	-----	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Aroclor 1221	*0.883*	0.213	**0.0094**	-----	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Aroclor 1232	*0.792*	0.19	**0.0094**	-----	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Aroclor 1242	*0.972*	0.235	**0.0094**	-----	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Aroclor 1248	*0.975*	0.236	**0.0094**	-----	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Aroclor 1254	*0.988*	0.239	**0.0094**	-----	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
Aroclor 1260	*1*	0.243	**0.0094**	-----	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007

mg/kg - milligrams per kilogram
PCBs - Polychlorinated biphenyls
RCL - Residual Contaminant Level
----- - Standard not established
"J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)

APPENDIX A

ANALYTICAL RESULTS

CHAIN-OF-CUSTODY

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

TRAVIS MANSER
ENDPOINT SOLUTIONS
6871 SOUTH LOVER'S LANE
FRANKLIN, WI 53132

Report Date *04-May-23*

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	81.6	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	1.32 "J"	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	53.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	1.08	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	9.30	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	4.82	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	0.0775 "J"	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281B
Sample ID TP-2
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	43.2	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	1.03	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	8.53	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	4.18	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281B
Sample ID TP-2
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	99	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	90	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281C
Sample ID TP-3
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.1	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	12.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.559	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	3.72	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	2.32	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281C
Sample ID TP-3
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281D
Sample ID TP-4
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.8	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	1.43 "J"	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	47.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.678	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	5.47	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	17.2	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	0.02 "J"	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	0.083	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	0.064	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	0.121	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	0.109	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	0.055 "J"	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	0.101	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	0.138	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	0.075	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	0.065	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	0.11	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281D
Sample ID TP-4
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281E
Sample ID TP-5
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	7.73	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.405	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	2.59	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	1.11 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281E
Sample ID TP-5
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281F
Sample ID TP-6
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	11.4	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.456	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	4.21	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	1.32 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281F
Sample ID TP-6
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281G
Sample ID TP-7A
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	37.9	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.831	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	7.24	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	6.20	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	0.012 "J"	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	0.083	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	0.049	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	0.241	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	0.34	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	0.43	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	0.42	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	0.194	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	0.283	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	0.063	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	0.205	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	0.304	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	0.065	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	0.215	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281G
Sample ID TP-7A
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	93	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281H
Sample ID TP-7B
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.8	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	6.39	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	32.7	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	2.08	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	7.74	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	12.1	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	3
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281H
Sample ID TP-7B
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	96	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	102	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	102	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281I
Sample ID TP-8
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	6.98	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	41.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	2.47	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	9.85	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	15.3	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281I
Sample ID TP-8
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281J
Sample ID TP-9
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	96.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	3.93 "J"	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.215 "J"	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	2.32	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	0.925 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281J
Sample ID TP-9
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	96	Rec %			1	8260B		4/21/2023	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
3	The matrix spike not within established limits.

SL denotes sub contract lab - Certification #399089350

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, LLC

www.synergy-lab.net
1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • mrsynergy@wi.twcbc.com

Chain # 45974
Page 1 of 1

Sample Handling Request
___ Rush Analysis Date Required: _____
(Rushes accepted only with prior authorization)
✓ Normal Turn Around

Lab I.D. #
QUOTE # :
Project #: TBD "843"
Sampler: (signature)
Project (Name / Location): Hartland Quarry // 644, 700 & 701 W. Capitol Drive, Hartland, WI

Reports To: Travis Manser	Invoice To:
Company Endpoint Solutions Corp.	Company
Address 6871 South Lovers Lane	Address SAME
City State Zip Franklin, WI	City State Zip
Phone 414-858-2265	Phone
Email travis@endpointcorporation.com	Email

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
504228 1 A	TP-1	4/17	0845	N	4	Soil	MeOH / none
B	TP-2		0915				
C	TP-3		0920				
D	TP-4		1000				
E	TP-5		1100				
F	TP-6		1115				
G	TP-7A		1130				
H	TP-7B		1130				
I	TP-8		1200				
J	TP-9		1230				

Analysis Requested / **Other Analysis**

DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-RCRA METALS	PID/FID
					X	X						X		X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: CS
Temp. of Temp. Blank: ____ °C On Ice: Y
Cooler seal intact upon receipt: Y Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0826	4-18-23			

Received in Laboratory By: Time: 915a Date: 04.19.23

Endpoint Solutions
6871 South Lover's Lane
Franklin, WI 53132
Telephone: (414) 427-1200
Fax: (414) 427-1259
www.endpointcorporation.com

Mr. Greg Moll
Regional Waste Program Manager
Wisconsin Department of Natural Resources
1027 West St. Paul Avenue
Milwaukee, WI 53233

September 9, 2023

Subject: **Summary of Existing Site Conditions**
Application for Exemption to Construct on a Historic Fill Site
Hartland Quarry Apartments
644, 700 & 701 West Capitol Drive, Hartland, Wisconsin

Dear Greg:

This information is being presented in support of an *Application for Exemption to Construct on a Historic Fill Site (Application for Exemption)* for the property located at 644, 700 & 701 West Capitol Drive, in the Village of Hartland, Waukesha County, Wisconsin (the "Site" or "subject property"), as depicted on the attached **Figure 1**. The bounds of the Site are depicted on **Figure 2**.

BACKGROUND

QUARRYING OPERATIONS

The subject property is the former location of the Hartland Quarry, as well as the Tews and LaFarge concrete batch plants. Palmer Sand & Gravel reportedly mined sand and gravel for use as road gravel from the subject property from the 1930s to the 1960s. Once the easily accessible deposits of road gravel were removed, operation of the subject property transitioned to use as a concrete batch plant. Based on a review of historic aerial photographs obtained from the Waukesha County Interactive Mapping Site (www.waukeshacounty.gov/interactivemap), quarrying operations appeared to extend across the entire subject property, as well as onto the adjoining property to the west of the subject property, currently being considered for development by Kwik Trip. Observations on the historic aerial photographs indicate fill materials have been accepted and placed on the subject property since the 1970s. Reportedly, the fill materials deposited on the Site consisted primarily of soil and concrete from local roadway construction projects. A significant stockpile of concrete slabs and concrete truck washout residuals are observed to the north of the former batch plant location. The extent of quarrying operations is depicted on the 1941, 1950 and 1963 aerial photographs presented as **Figures 3, 4** and **5**, respectively.

PAST ENVIRONMENTAL RELEASE LISTINGS

The subject property is identified on the Wisconsin Department of Natural Resources (WDNR) Bureau for Remediation and Redevelopment Tracking System (BRRTS) database as being the location of two (2) closed leaking underground storage tank (LUST) cases (BRRTS Nos. 03-68-001111 and 03-68-205411) and one (1) closed environmental repair program (ERP) case (BRRTS No. 02-68-118316). A summary of the closed LUST and ERP cases is provided below.

BRRTS No. 03-68-001111 – Closed LUST Case

This LUST case was opened on October 26, 1990, following the removal of one (1) 10,000-gallon diesel fuel UST. According to documentation included in the WDNR case file, the 10,000-gallon diesel UST was located to

the west of the cement silo in the southwest portion of the subject property. Obvious indications of contamination were noted during the UST removal and contaminated soils were excavated from the area surrounding the former UST and stockpiled for future disposal. Confirmation samples collected from the excavation sidewalls and base did not contain any detectable concentrations of petroleum constituents. Therefore, on April 14, 1992, the WDNR indicated that no further investigation or remedial action was necessary.

BRRTS No. 02-68-118316 – Closed ERP Case

On September 9, 1996, the WDNR opened an ERP case due to a release of approximately 700-gallons of "Daraset" (a calcium nitrate mixture) to an unpaved surface on the subject property. Based on a review of the photographs contained within the ERP case file, the spill occurred in the southwest portion of the subject property adjacent to the cement silo. The subject property owner contracted with an emergency response contractor to recover the released product and any impacted runoff. In addition, the subject property owner excavated the soil impacted by the release for offsite disposal. On January 6, 1998, the WDNR indicated the response to the release was adequate, all contaminated material had been addressed and no further remediation was necessary.

BRRTS No. 03-68-205411 – Closed LUST Case

On October 18, 1998, the WDNR opened a LUST case due to the discovery of obvious petroleum contamination in soil on the subject property during the installation of an underground water supply pipe. It was assumed the petroleum contamination was released from a 3,000-gallon diesel UST, two (2) 275-gallon fuel oil aboveground storage tanks (ASTs) or a railroad tanker car that was utilized to store fuel oil at the subject property. It should be noted, the location of the contamination discovered in 1998 was also in close proximity to the contamination associated with the removal of the 10,000-gallon diesel UST discovered in 1990.

In response to the discovery of petroleum contamination during the installation of the water supply pipe, ten (10) soil probes (P-1 through P-10) and eight (8) soil borings (B-1 through B-8) were advanced, and seven (7) groundwater monitoring wells (MW-2 through MW-8) were constructed. Soil samples were screened in the field for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID) and selected samples were submitted for laboratory analysis diesel range organics (DRO), petroleum VOCs (PVOCs) and polycyclic aromatic hydrocarbons (PAHs). In addition, groundwater samples from two (2) probe locations (P-7 and P-10) and five (5) monitoring wells (MW-3 through MW-6) were also submitted for laboratory VOC and PAH analysis.

Elevated concentrations of DRO, VOC constituents and PAH constituents were detected in samples collected from the following locations:

- Six (6) to eight (8)-feet below the ground surface (ft bgs) at the probe P-1 location;
- Eight (8) to ten (10)-feet bgs and 16 to 18-feet bgs at the probe P-3 location;
- Six (6) to eight (8)-feet bgs at the probe P-4 location;
- Six (6) to eight (8)-feet bgs and ten (10) to 12-feet bgs at the probe P-5 location;
- Eight (8) to ten (10)-feet bgs at the probe P-6 location;
- Six (6) to eight (8)-feet bgs and 14 to 16-feet bgs at the probe P-10 location; and,
- Six (6) to seven and one-half (7.5)-feet bgs and 11 to 12.5-feet bgs at the boring B-5 location.

The groundwater analytical results indicated an elevated concentration of naphthalene which exceeded its Wisconsin Administrative Code (WAC) Chapter NR 140 preventive action limit (PAL) in the grab sample collected from the probe P-10 location. Additionally, the concentrations of benzo(b)fluoranthene and benzo(g,h,i)perylene exceeded their respective WAC Chapter NR 140 enforcement standards (ES), while the concentration of benzo(k)fluoranthene exceeded its PAL, in the sample collected from monitoring well MW-5.

In November 1999, the WDNR approved the closure of the LUST case following the filing of a groundwater use restriction with the Waukesha County Register of Deeds and the abandonment of all of the groundwater monitoring wells. No remediation was required to address the residually contaminated soil discovered during the investigation activities.

A figure depicting the locations of the closed ERP and LUST cases is attached as **Figure 6**.

EXISTING SITE CONDITIONS

The subject property currently consists of offices and shop buildings located in the southwest portion of the Site currently utilized by BSIT, a bulk aggregate transportation company. The central portion of the subject property consists of a former aggregate pit which has been partially reclaimed with concrete slabs, concrete washout and soils reportedly transported from Village of Hartland roadway projects. The perimeter portions of the subject property generally consist of undeveloped natural areas which generally slope up to the pre-quarry ground surface on the adjoining properties. The current conditions on the subject property are depicted on the attached **Figure 6**.

PROPOSED DEVELOPMENT SUMMARY

Three Leaf Partners is proposing to redevelop the subject property with a total of ten (10) stacked flats (SF) apartment buildings containing 24 units in each, ten (10) detached garages, three (3) townhouse (TH) buildings with nine (9) units in each, a club house with a pool and five (5) stormwater control ponds. All of the townhouse and stacked flat buildings are designed as slab-on-grade structures with integrated attached garage spaces for two (2) vehicles per townhouse unit and one (1) vehicle for ten (10) of the 24 units in each of the stacked flat buildings. Each stacked flat building will also include a detached garage with room for 14 vehicles. The proposed redevelopment will also include paved parking and drive areas, as well as landscaped areas between the structures.

The proposed layout of the development contains a main arterial which extends to the north-northeast from the intersection with Capitol Drive on the southern portion of the Site. The arterial acts as the “spine” of the development completed as a cul-de-sac at the northeastern extent. The three (3) townhouse buildings (TH1, TH2 and TH3) and the Clubhouse are located at the southern extent of the Site with TH1, TH2 and the Clubhouse located to the west of the main arterial and TH3 located to the east of the main arterial. Six (6) of the ten (10) stacked flat units are located on the east and west sides of the main arterial. Buildings SF1, SF2 and SF3 are located on the west side of the main arterial, while buildings SF8, SF9 and SF10 are located on the east side of the main arterial. The remaining four (4) stacked flat buildings (SF4, SF5, SF6 and SF7) are located to the north of the terminal cul-de-sac of the main arterial. The proposed redevelopment plan is depicted on the attached **Figure 7**.

Overall, the grading plan for the proposed redevelopment generally involves significant material movement to create a developable site. Generally, the majority of cuts are located in the southwestern portion of the Site with the majority of fills located in the northeastern portion of the Site. Maximum cuts and fills within the buildable portions of the Site generally range between approximately 42-feet of cuts to approximately 28-feet of fills. A Cut/Fill map is attached as **Figure 8**.

Due to the overall size of the Site and the proposed mass grading activities resulting in significant cuts and fills across the Site, we have provided a breakdown of the grading plan by individual building in the table below.

Building	Grading Plan
TH1	12 to 33-ft cuts
TH2	9-ft cut at the southwest corner to 8-ft fill at the northeast corner
Clubhouse	Approximately 1-ft fill across the pad
TH3	At grade at the north end to 10-ft fill at the south end
SF1	1-ft fill at the southeast corner to 41-ft cut at the northwest corner
SF2	12-ft fill at the northeast corner to 42-ft cut at the southwest corner
SF3	10 to 18-ft fill
SF4	15 to 21-ft fill
SF5	14 to 19-ft fill
SF6	20-ft fill in the west central portion of the pad to 3-ft cut at the southeast corner
SF7	16 to 28-ft fill
SF8	27-ft fill in the northeast corner to 14-ft cut in the southeast corner
SF9	9 to 14-ft cut
SF10	5 to 16-ft cut

The main arterial extends approximately 1,550-ft from the centerline of Capitol Drive to the terminus of the cul-de-sac in the northern portion of the Site. The grading necessary to prepare for the proposed roadway profile along the 1,550-ft length can be subdivided into six (6) main areas.

- The first approximately 300-ft from the Capitol Drive centerline requires minimal fills to approximately 6.5-ft cuts.
- The next approximately 300-ft long interval (300 to 600-ft from the Capitol Drive centerline) requires minimal grading with no cuts to approximately 0.4-ft fills.
- The next approximately 200-ft long interval (600 to 800-ft from the Capitol Drive centerline) requires fills ranging between approximately 6.3 to 20.4-ft.
- The next approximately 200-ft long interval (800 to 1,000-ft from the Capitol Drive centerline) requires minimal grading with no cuts to approximately 2.4-ft fills.
- The next approximately 150-ft long interval (1,000 to 1,150-ft from the Capitol Drive centerline) requires fills ranging between approximately 3 to 9-ft.
- The final approximately 400-ft long interval (1,150 to 1,550-ft from the Capitol Drive centerline) requires fills between approximately 15 to 19-ft.

As previously discussed, the soil fill materials and area of runoff sedimentation illustrated as the yellow and magenta on **Figure 6** will be excavated to native, processed to remove large inclusions, evaluated for suitability for use as engineered fill, placed and compacted. Investigative activities have indicated the fill soils depicted in the yellow area approach approximately ten (10) feet in thickness. In addition, the construction debris consisting of concrete and asphalt as depicted in the red area on **Figure 6** will be excavated and crushed onsite for use as engineered fill. The construction debris will be evaluated during processing to remove unsuitable materials (reinforcing rods, contamination, organic debris, etc.) prior to crushing to an appropriate gradation for use as general engineered fill on the Site. The remainder of the cut areas to be used

for engineered fill will consist of native soils primarily located along the west edge of the Site as well as from beneath the pavements in the developed southern portion of the Site.

SITE EVALUATION ACTIVITIES

In April 2023, Three Leaf Partners retained Endpoint to assist with environmental due diligence as part of potentially purchasing and redeveloping the subject property. Subsequently, the following scope-of-work was performed to further evaluate the subsurface conditions on the subject property in the interest of redevelopment.

TEST PITS – APRIL 2023

Based on the physical conditions of the subject property, as well as the need to evaluate the physical properties of the soils for foundation support, GeoTest, Inc. (GeoTest) was retained by Three Leaf Partners. To further evaluate the subsurface conditions on the subject property, GeoTest proposed to excavate a series of nine (9) test pits (TP-1 through TP-9) through the apparent fill materials which were placed on the subject property following the quarrying operations. Besides providing an opportunity to evaluate the physical characteristics of the fill materials, the test pits also allowed measurements of the general thickness of the fill materials to be performed.

On April 17, 2023, Endpoint accompanied GeoTest during the test pit exploration process to visually evaluate the soils, as well as collect representative samples of the materials from each test pit location for laboratory testing for VOCs, PAHs, metals and polychlorinated biphenyls (PCBs). During these assessment activities, a total of ten (10) composite samples were submitted for analysis.

According to the descriptions of the soils encountered at each test pit location prepared by a geotechnical engineer, no fill materials were encountered at the test pit TP-1, TP-2, TP-3, TP-6, TP-8 and TP-9 locations. A description of the fill materials encountered at the remaining test pit locations is provided below.

- Concrete and asphalt rubble with some metal, along with trace amounts of wood, brick, sand and gravel soil were encountered to a depth of at least 11.3 feet bgs at the TP-4 location.
- Approximately three (3) feet of concrete fragments in a sand and gravel matrix were encountered at the TP-5 location.
- At least eight (8) feet of fill comprised of gravel (61.8%), sand (35.3%) and silt with occasional cobbles and boulders was encountered at the TP-6 location.
- Approximately nine (9) feet of fine to coarse sand with some gravel fill, likely from local roadway projects, was encountered at the TP-7 location.
- Approximately five and one-half (5.5) feet of clayey silt runoff deposits from the adjacent bluff and concrete fill area were encountered at the TP-8 location.

During these assessment activities, a total of ten (10) composite samples consisting of the surficial fill or native soils at each test pit location were submitted for analysis. Additionally, a sample of the underlying native soils from test pit TP-7 was also submitted for laboratory analysis. The sample of the fill materials from test pit TP-7 was identified as sample TP-7A, while the sample of the underlying native soil was identified as sample TP-7B. The locations of the test pits are depicted on the attached **Figures 9 and 10**. The *Geotechnical Subsurface Investigation Report* (GeoTest, May 4, 2023) is attached as **Appendix A**.

RESULTS

Soil Conditions

The nine (9) test pits were excavated to depths ranging between approximately five and one-half (5.5) to approximately 11-feet bgs. In general, fill materials encountered during the test pit activities consisted of fine sand, fine to coarse sand and gravel, as well as rubble consisting of concrete and asphalt with minor and sporadic inclusions of wood and metal within the sand & gravel matrix. Native soils encountered beneath the fill materials consisted of fine to coarse sand, fine to coarse sand and gravel, as well as fine to coarse gravel and clayey silt.

VOC Results

- No VOC constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis.

PAH Results

- No PAH constituents were detected in eight (8) of the ten (10) composite samples submitted for analysis. These samples included the native soils from the TP-1, TP-2, TP-3, TP-6 TP-7, TP-8 and TP-9 locations and the fill sample from the TP-5 location. Numerous PAH constituents were detected in the sample of fill materials submitted from the TP-4 location. The concentration of chrysene reported in this sample exceeded its soil-to-groundwater exposure pathway residual contaminant level (RCL) established by the WDNR. Numerous PAH constituents were also detected in the sample of fill materials submitted from the TP-7 location. The concentrations of benzo(b)fluoranthene and chrysene reported in this sample exceeded their respective soil-to-groundwater exposure pathway RCLs established by the WDNR.

Metals Results

All of the samples submitted for metals analysis contained detectable concentrations of several metals. Six (6) of the ten (10) samples submitted reported concentrations which exceeded soil-to-groundwater pathway, non-industrial direct contact and industrial direct contact RCLs and background threshold values (BTVs) established by the WDNR. A description of each test pit sample in which a regulatory standard for metals was exceeded is presented below.

- The sample of the native soil submitted from TP-1 contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV, and cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.

- The sample of the native soil from the TP-2 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.

- The sample of the fill material submitted from the TP-4 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs, but below its BTV.

- The sample of fill material submitted from the TP-7 location (sample TP-7A) contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and BTV.

- The sample of native soil underlying the fill materials at the TP-7 location (sample TP-7B) contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.

- The sample of native soil submitted from the TP-8 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.

PCB Results

- No PCB constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis.

Results of the samples submitted from the test pit evaluation are summarized in **Tables A.2.a, A.2.b, A.2.c** and **A.2.d** included in the *Report of Results for the Site-Wide Fill Test Pit Sampling and Analysis* (Endpoint, May 12, 2023) is attached in **Appendix B**.

PHASE II EA – FORMER LUST CASE AREA – AUGUST 2023

As part of the redevelopment activities, it is anticipated that mass grading activities will be required. Additionally, it was determined that development of one (1) of the townhouse buildings (TH2) and the clubhouse will be located in close proximity to the extent of residual petroleum contamination at the time the LUST case was closed in 1999. Therefore, further assessment was recommended in the former LUST case areas to ensure future residents of the subject property will be adequately protected from direct-contact exposures with contaminated soils and/or from the migration of contaminated vapors into the indoor air of the buildings, as well as to provide direction to the earthwork contractor ultimately responsible for mass grading activities to ensure contaminated materials are being managed properly.

On August 18, 2023, Endpoint advanced six (6) soil borings (SB-1 through SB-6) to further evaluate the residual impacts allowed to remain in-place as part of the former LUST cases. The SB-1, SB-4, SB-5 and SB-6 soil borings were advanced along the outer extents of the soil and groundwater contamination plumes, while the SB-2 and SB-3 soil borings were advanced within the center of the contaminant plumes. The locations of the soil borings are presented on the attached **Figure 11**.

Soil borings SB-3, SB-4, SB-5 and SB-6 were advanced with a direct-push drill rig to the termination depths of the borings, ranging from approximately 15 to 20-feet bgs. In order to provide additional geotechnical information in the vicinity of the proposed town homes, soil borings SB-1 and SB-2 were advanced using dual-tube methods with spilt spoon samples collected following Standard Penetration Testing methods. During the advancement of the soil borings, two (2) soil samples were collected from each boring. The soil samples were collected and submitted for laboratory analysis of petroleum VOCs and naphthalene (PVOC+N) constituents.

Geologic Profile

In general, fill materials were encountered in all six (6) borings advanced in the former LUST area from the ground surface to depths ranging from approximately eight (8) to 17-feet bgs. The fill materials generally

consisted of light brown, medium grained silty sand with a trace of gravel. Native soils were encountered beneath the fill materials and consisted of gray, medium grained sand.

Following the advancement of the soil borings, temporary groundwater monitoring well screens were installed in soil borings SB-2, SB-4, SB-5 and SB-6 in an attempt to collect grab groundwater samples. While the soil profile at each of the soil boring locations included water bearing seams, none of the soil borings equipped with temporary well screens produced sufficient groundwater for sampling after 48 hours. Subsequently, the well casings were removed, and the boreholes were properly backfilled with bentonite chips and patched with either asphalt or concrete. Soil Boring Logs and Borehole Abandonment Forms are included in **Appendix C**.

Laboratory Analytical Results

- No PVOC+N constituents were detected above standard laboratory detection limits in either of the soil samples submitted for analysis from the SB-1, SB-3, SB-4, SB-5 and SB-6 soil boring locations and in the sample submitted from the one (1) to two and one-half (2.5)-foot bgs interval at the SB-2 location.

- Multiple PVOC+N constituents were detected in the soil sample collected from six (6) to seven and one-half (7.5)-foot bgs interval at the soil boring SB-2 location. Specifically, naphthalene was detected at a concentration that exceeds its non-industrial direct contact RCL, while 1,2,4-trimethylbenzene was reported at a concentration that exceeds its soil-to-groundwater pathway RCL. All other detected constituents were present at concentrations below their applicable RCLs.

The tabulated results from the former LUST case area investigation activities are summarized on **Table – A.1.a**. Copies of the analytical results and chain-of-custody are included in **Appendix D**.

DISCUSSION

TEST PITS

Overall, results of the analyses performed on the composite samples submitted from the test pits indicate a lack of widespread significant contamination. None of the samples contained detectable concentrations of any VOC or PCB constituents, and eight (8) of the ten (10) samples submitted did not contain any detectable concentrations of PAH constituents. Detected concentrations of contaminants above published RCLs were limited to metals (arsenic and/or cadmium) in the samples submitted from TP-1, TP-2, the native soils at TP-7 (sample TP-7B) and TP-8, but no results exceeded the arsenic BTV. The samples submitted from TP-4 and the fill soils at TP-7 (sample TP-7A) contained concentrations of chrysene and/or benzo(b)fluoranthene in excess of their respective RCLs. It should be noted that only the concentrations of cadmium reported in the samples collected from TP-1, TP-2 the native soils at TP-7 (sample TP-7B) and TP-8 exceeded the established BTV for cadmium.

Based on these results, as well as the historical use of the Site as a concrete batch plant which accepted fill materials from local road construction projects, and the likelihood of those fill materials to contain small inclusions of asphalt pavement and/or millings, it is our opinion that the elevated PAH constituent concentrations are isolated random detections and are not specifically indicative of a release of contaminants at these locations. Based on the relatively low concentrations of PAH constituents and metals detected, active remediation of the contaminated soils is not recommended. However, soils containing elevated concentrations above RCLs and BTVs will require proper management on-Site during redevelopment. Specifically, the four (4) samples which contained detections of arsenic were the only samples that exceeded

direct contact RCLs; however, none of these concentrations exceeded the established BTV for arsenic; therefore, it may be necessary to place these soils beneath an exposure barrier.

FORMER LUST CASE INVESTIGATION

Based on the results from the investigation activities completed in the former LUST case areas in the southwest portion of the subject property, residual contamination is present in the Site soils at concentrations that exceed RCLs. Specifically, PVOC+N constituents were detected at the SB-2 boring location from the six (6) to seven and one-half (7.5)-foot bgs interval at concentrations that exceeded their industrial direct-contact and soil-to-groundwater pathway RCLs. However, it is important to note that PVOC+N constituents were not detected in the soil samples collected from any other boring locations at concentrations above standard laboratory detection limits. Based on these results, the residual soil contamination associated with the former LUST cases is minimal and will not impact the proposed redevelopment activities.

The area of residual soil contamination in association with the closed LUST case is located in the northeastern portion of the TH2 footprint and extends into the landscaped area with sidewalks and a paved driveway to the surface parking lot for the Clubhouse located southeast of TH2. The delineated extent of residual soil contamination extends approximately 141-feet to the southwest from the northeast corner of the TH2 footprint and approximately 42-feet northwest from the northeast corner of the TH2 footprint. The yard grade (YG) for TH2 has been set at 978-ft above mean sea level (amsl). The extent of the area of residual soil contamination is located within the portion of the TH2 footprint that will require fill to establish the proposed yard grade. The depth to obvious contamination in the soil borings completed historically and recently was consistently six (6) ft bgs and deeper. The ground surface elevation at the soil boring locations impacted by the petroleum contamination is approximately 971 ft amsl, as such, the top of the residually contaminated soils are located below 965 ft amsl approximately.

Assuming the footings for all of the buildings at the Site will be established four (4) ft below the proposed yard grade, the footing subgrade elevation for TH2 is assumed to be 974 ft amsl. Based on the discussion above, we expect approximately nine (9)-ft of separation between the top of the residual petroleum contamination and the bottom of the footings and approximately 13-ft of separation between the residual petroleum contamination and the bottom of the floor slab.

Utilities within the area of residual contamination include a storm water pipe which conveys surface runoff from inlets in the parking lot to the north of TH2, in the driveway to the parking lot to the north of TH2, in the driveway to the parking lot for the Clubhouse to the south of TH2 and two (2) inlets within the Clubhouse parking lot to the south of TH2, as well as a branch water main that supplies TH1, TH2, SF1 and a fire hydrant located north of TH2. The storm water captured by the five (5) inlets discharges to the storm water pond located to the south of the Clubhouse. Per the civil engineer, the inverts for the storm sewer conveyance pipe through the area of residual contamination will range between 969.36 ft amsl and 971.08 ft amsl, a minimum of approximately 4.36-ft above the residual contamination.

The proposed water supply lines will be installed a minimum of four (4)-ft below the final finished grade. The water supply lateral is proposed to enter the north side of TH2 near the northeast corner of the building, with the lateral also extending to the north side of TH1 to the west of TH2. Invert elevations provided for the water supply pipes on the north side of TH2 range between approximately 968 ft amsl and 969.5 ft amsl. As such the water supply lines near the area of the residual contamination will be a minimum of approximately three (3) feet above the residually contaminated soils.

Sanitary sewer laterals associated with TH1 and TH2 are proposed to exit the south ends of the building directly to the municipal main located in West Capitol Drive. As such, the sanitary sewer laterals will not be

impacted by the residually contaminated soils associated with the former LUST case. The underground utilities in the vicinity of the residual contamination associated with the former LUST case are depicted on **Figure 12**.

MATERIAL MANAGEMENT PLAN

It is our understanding that as part of the redevelopment activities on the subject property, the fill materials which are present will be excavated, processed to remove large inclusions and to homogenize the materials, placed and compacted as engineered fill. Geotechnical investigation activities have indicated fills on the Site include a large volume of construction debris, including concrete and asphalt rubble in an approximate area as depicted in orange on **Figure 6** and an approximate area of compacted soil fill, depicted in yellow on **Figure 6**, that was reportedly imported from local right-of-way construction projects. Based on a review of the *Geotechnical Subsurface Investigation Report* prepared by GeoTest, the on-site soil and fill materials are suitable for reuse as engineered fill, assuming the processed materials do not exceed three (3)-inches in size and are placed in eight (8) to ten (10)-inch loose lifts and compacted.

An experienced environmental professional will be onsite throughout the earthwork activities to evaluate the character of fill materials excavated for processing, as well as the native soils in the cut areas for any obvious indications of contamination. It is estimated that 400,000 cubic yards (cy) of fill soil, and native soils will be handled during Site grading activities. In addition, it is estimated 55,000 to 60,000 cy of construction debris will be processed (crushed) for reuse as engineered fill. Additionally, it is estimated approximately 21,000 cy of usable fill material will be generated by crushing the existing pavements for reuse.

Per Wisconsin Administrative Code (WAC) Chapter NR 718.12(1), the WDNR provides the following sampling frequency as a guideline: one (1) sample for the first 600 cy with an additional sample for each additional 300 cy. Based on the estimated 400,000 cy of soils to be moved on the Site in preparation for redevelopment, this would result in the need to collect and analyze approximately 1,333 individual samples. However, of the 400,000 cy of soil that requires to be moved to establish the proposed Site grades, approximately 50,000 cy consists of the fill materials from local construction projects within the road rights-of-ways, as depicted in yellow on **Figure 6**, which results in approximately 166 samples to be collected and analyzed. As the sampling performed to-date indicates the fill soils placed within the yellow area on **Figure 6** were relatively consistent in character and did not contain any significant concentrations of contaminants, we propose the sample frequency be revised at the Site to one (1) sample per every 1,000 cy of fill materials within the yellow area outlined on **Figure 6**. This will result in approximately 50 samples being collected and submitted for analysis for PAHs and the eight (8) RCRA metals from this area.

We do not expect the required excavations for Townhome Building #2 (TH2) to extend deep enough to encounter the residual petroleum contaminated soils; however, it should be noted that a total of 43 soil samples (31 in 1999 and 12 in 2023) have been submitted for analysis from the former LUST area. Based on the sampling frequency described in WAC Chapter NR 718.12(1), up to approximately 37,000 cy could be managed within the former LUST area. However, even if the entire area of residual petroleum contaminated soils were excavated to a depth of 20 ft bgs, only approximately 12,000 cy would be affected; therefore, it is our opinion sufficient sampling has been performed within the former LUST area per WAC Chapter NR 718.12(1).

Based on the discussions provided in the previous sections, a summary of the material management tasks proposed at the Site includes the following.

- Based on the known depths of residual contamination within the former LUST area and the proposed Site plan, petroleum impacted soils will not be excavated or moved on or off the Site.

- Historically placed fill materials identified within the yellow shaded area on **Figure 6** will be excavated, processed and reused as compacted engineered fill on the Site. However, as these fill materials are currently located within one (1) of the areas on the Site that require the most engineered fill, the historic fill materials will not be placed at a depth greater than they were excavated from. **Figure 13** provides an overlay of the various existing material types on the proposed cut/fill plan.
- Additionally, as the area where the historical fill soils will be reused as engineered fill will require significant additional fill material to establish the proposed site grades, the historic fill materials will not be relocated within the upper four (4) ft direct contact zone.
- An experienced environmental professional will utilize visual and olfactory observations during earthwork activities to identify potentially contaminated materials and undesirable fill materials.
- Roll-off dumpsters and stockpiles will be utilized as necessary to segregate potentially contaminated materials and undesirable fill materials to allow for proper characterization and disposal to occur.
- If areas of contamination are identified during earthwork activities, besides segregating the materials for proper characterization and disposal, the location of the source area of the contaminated materials will be recorded via survey equipment and depending on the size and relative concentration of the contamination, appropriate sidewall and base confirmation samples may be collected to document residual conditions.

OTHER CONSIDERATIONS

METHANE GAS

Soil borings and test pits advanced throughout the Site did not identify significant quantities of buried organic matter (natural or anthropogenic) which could act as a source of methane during decomposition. While minor inclusions of lumber were observed within the construction debris deposits, the Site preparation activities will include excavation, sorting and crushing of the construction debris for use as engineered fill. During this process, inclusions of organic materials such as wood, etc. will be removed and segregated for offsite disposal. Therefore, based on the results of the assessment activities completed to date and the proposed processing plan for the construction debris, the generation of methane in the subsurface is not considered an issue of concern for the proposed redevelopment at the Site.

CONTAMINATED VAPORS

Based on the results of the test pit activities, no VOC constituents were detected in any of the soil samples submitted for analysis from the Site-wide historic fill or native soils. Therefore, based on available data, it is not anticipated that adverse subsurface vapors are present in the former quarry area and no further assessment of the vapor migration pathway is recommended.

Based on our review of the design for the proposed redevelopment, a portion of the TH2 building will overlie the area of residual contamination associated with the former LUST case. According to WDNR RR-800 vapor intrusion guidance document, vapor investigations are recommended if a building structure has less than five (5)-feet of separation (vertical or horizontal) from residual petroleum contaminated soil that has the potential for off-gassing. The residual petroleum contaminated soil was consistently encountered at an elevation of approximately 965 ft amsl. The yard grade for building TH2 has been established at elevation 978 ft amsl; therefore, the residual contaminated soils will be located approximately 13-feet below the finished floor slab elevation in TH2. Samples of soils collected from the existing ground surface to six (6) ft bgs did not detect any VOC constituents and the northern portion of the TH2 building pad will require the

placement of up to nine (9) feet of fill sourced from other portions of the Site where VOC constituents have never been detected. Based on the nine (9) to 13-feet of separation between the residual contaminated soil and the footing subgrade elevations and the finished floor elevation, respectively, it is our opinion the potential for vapor intrusion associated with petroleum constituents will not exist post-development. As such, additional assessment of the vapor intrusion pathway and vapor intrusion mitigation measures are not required in the area of the former LUST case, specifically in building TH2.

Utility Lines Acting as Conduits

Underground utilities including a looped water main, water main laterals, a sanitary sewer main and laterals and storm sewer conveyance piping will be installed at the Site. The water main and sanitary sewer will connect to municipal mains located within the Capitol Drive right-of-way. Storm sewers will discharge to a series of infiltration basins, as well as two (2) detention ponds in the southern portion of the Site which will discharge a limited flow to a municipal main within the Capitol Drive right-of-way.

Proposed underground utilities bisecting the area of residual petroleum contamination associated with the former LUST case are limited to storm sewer piping and water supply laterals. Based on our review of the civil engineering design drawings, neither the storm sewer conveyance piping or the water laterals will be installed within the contaminated soils. While the bottom of the storm sewer conveyance piping will be located within four (4) vertical feet of the residually contaminated soils, the storm sewer conveyance piping does not enter into any structures. The storm sewer conveyance piping simply conveys storm water from inlet structures within paved areas to an open pond. Furthermore, while groundwater was not encountered within the recent soil borings advanced in the LUST area, historically groundwater was encountered between 15 to 20 ft bgs, which is well below the proposed invert elevations for the storm water conveyance piping and the proposed bottom of manhole structures. Therefore, it is our opinion the storm sewer conveyance piping proposed to bisect the residual petroleum contamination in the former LUST area will not act as a preferential pathway for the migration of contaminated groundwater or the migration of petroleum vapors into structures.

While the water lateral associated with TH2 will also enter into TH1 and SF1, the water laterals will be located at least three (3) feet above the residual contaminated soil. The service entrance will occur through the foundation wall beneath the slab-on-grade with seals installed between the water service pipe and the concrete foundation wall and slab-on-grade, thereby providing a double seal between the exterior and the building interior.

Dewatering

Based on the results from the test pits, as well as the soil borings advanced within the former LUST case areas, shallow groundwater was not encountered within 20-feet bgs. Therefore, it is not anticipated that groundwater will be encountered during construction.

Worker Exposure

Based on the results of the investigation activities completed to date, contaminant concentrations of significant concern have not been identified. Therefore, assuming proper precautions are exercised during earthwork activities, it is not anticipated that additional protection beyond Level D personal protective equipment (PPE) will be required.

Settlement Problems

It is our understanding that the fill materials which are present on the subject property will be picked-up, processed, re-placed and compacted as engineered fill. Based on a review of the *Geotechnical Subsurface*

Investigation Report (GeoTest), the on-site soil and fill materials are suitable for re-use as engineered fill, assuming the processed materials do not exceed three (3)-inches in size and are placed in eight (8) to ten (10)-inch loose lifts, compacted and field density tested. Additionally, it is our understanding that the proposed buildings can be supported by conventional, shallow spread footings. Therefore, potential settlement issues have not been identified based on the information to date.

WATER SUPPLY WELLS

The Site is located within the Village of Hartland Water Utility area of service. According to the Village of Hartland Waterworks 2022 Consumer Confidence Report, the Village obtains its drinking water from five (5) potable water wells. Therefore, potable water on the subject property will be provided from the local municipality. As the proposed redevelopment of the subject property will utilize municipally supplied water, ingestion of any residual contaminants is not a complete exposure pathway and therefore will not impact the future occupants of the subject property.

CLOSING

We trust the information contained in this summary along with the attachments is sufficient for the WDNR to approve the *Application for Exemption to Construct on a Historic Fill Site*. A completed Form 4400-226 is attached in **Appendix E**. If you have any questions regarding this submission, please do not hesitate to contact me at 414-858-1202.

CERTIFICATION

I, Robert A. Cigale, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Sincerely,

Endpoint Solutions

Robert A. Cigale, P.G.
Principal Consultant

Travis J. Manser
Associate Consultant

cc: John Ford – Three Leaf Partners
David Hanson – WDNR

ATTACHMENTS
Figures
Tables
Appendix A
Appendix B
Appendix C
Appendix D
Appendix E

FIGURES

N

0 2000' 4000'

SOURCE: USGS

LOCATION MAP

700WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/06/2023	Figure 1
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 01_843-001-007_Location Map.dwg

SUBJECT PROPERTY

HISTORIC SAMPLE LOCATIONS

N

0 200' 400'

SITE PLAN

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

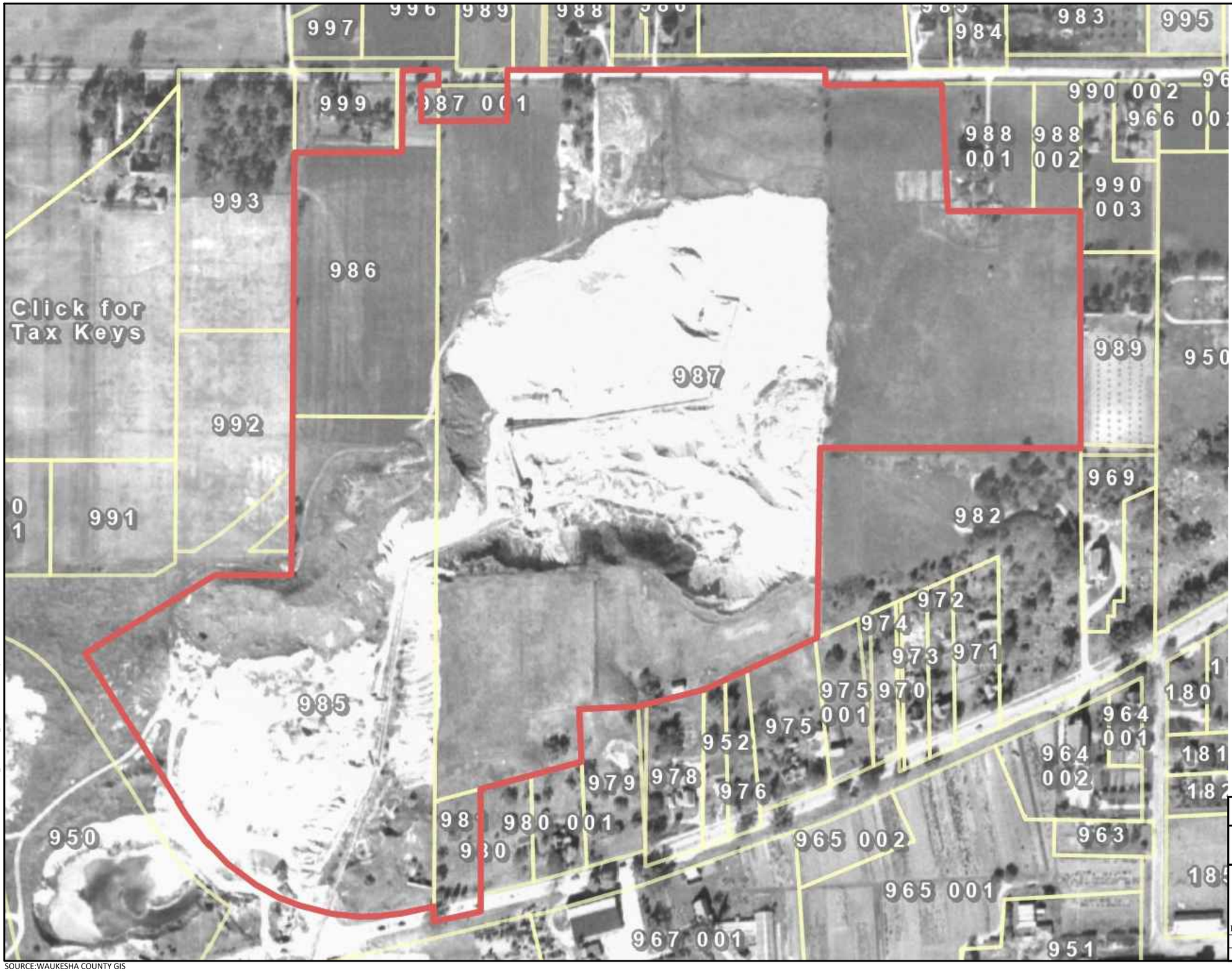
6871 S. Lovers Lane
Franklin, WI 53132

Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/06/2023	Figure 2
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 02_843-001-007_Site Plan.dwg

SOURCE:WAUKESHA COUNTY GIS



SUBJECT PROPERTY

N

0 200' 400'

1941 AERIAL PHOTO

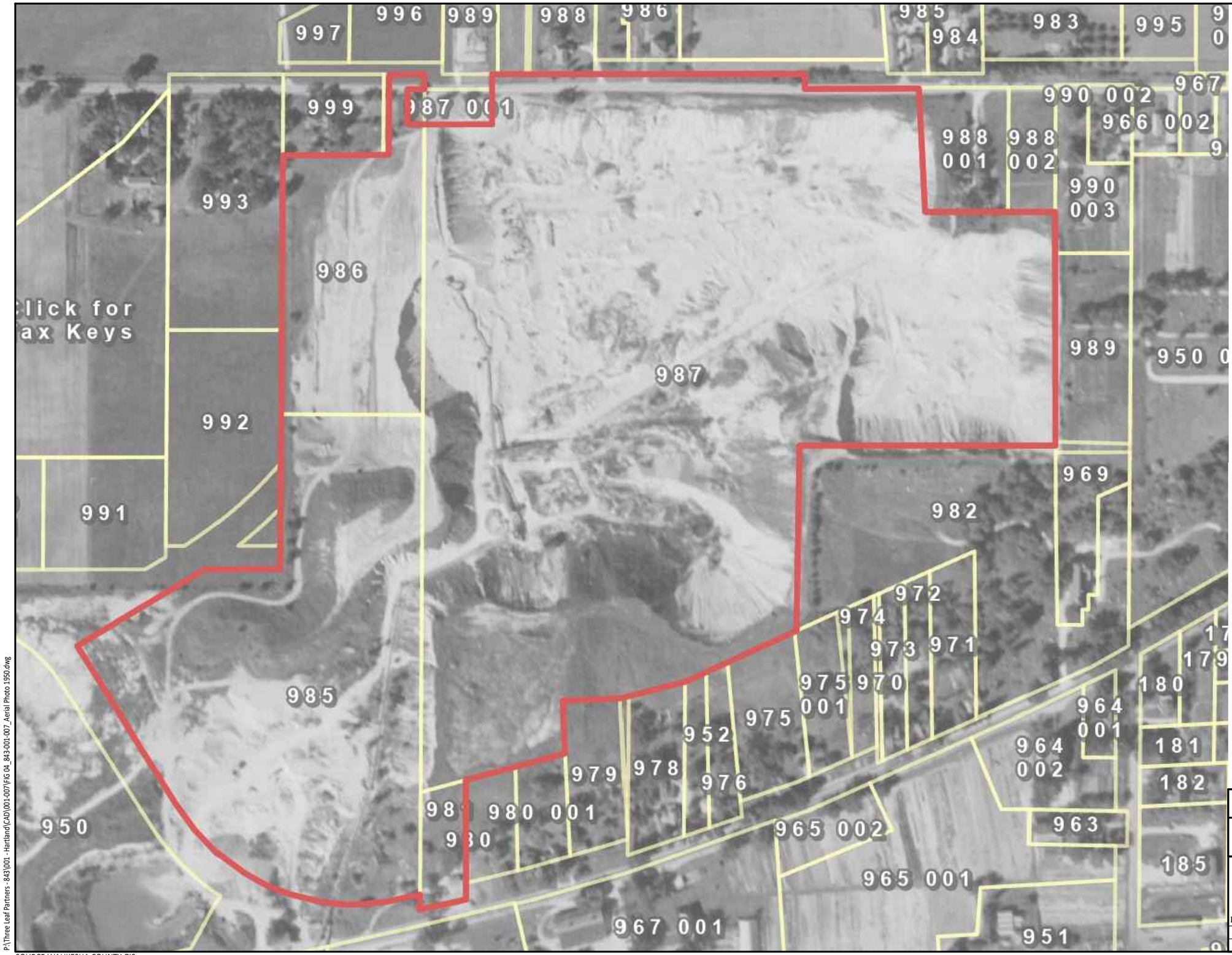
700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/06/2023	Figure 3
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 03_843-001-007_Aerial Photo 1941.dwg

SOURCE:WAUKESHA COUNTY GIS



1950 AERIAL PHOTO

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

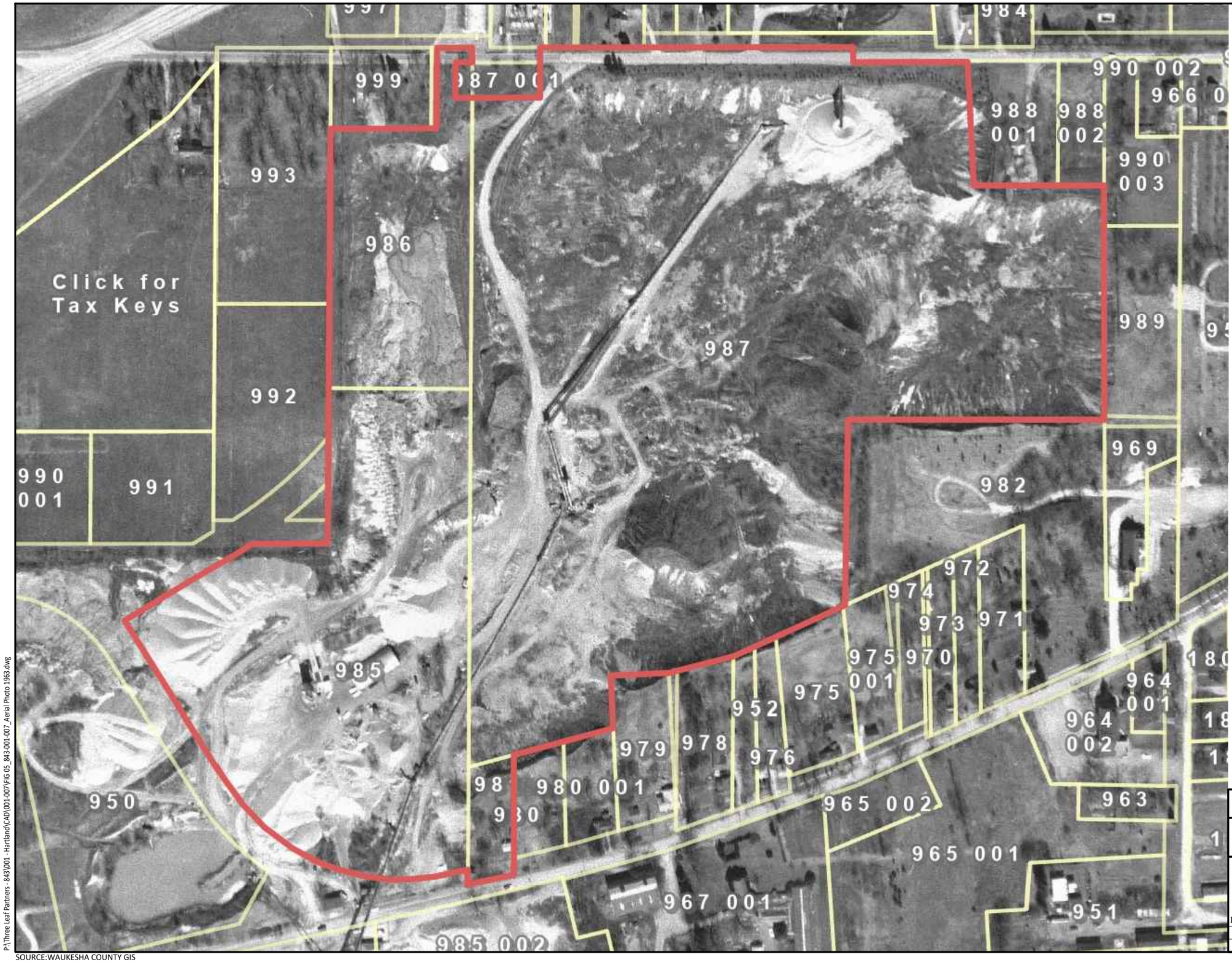
6871 S. Lovers Lane
Franklin, WI 53132

Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/06/2023	Figure 4
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 04_843-001-007_Aerial Photo 1950.dwg

SOURCE:WAUKESHA COUNTY GIS



SUBJECT PROPERTY

N

0 200' 400'

1963 AERIAL PHOTO

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

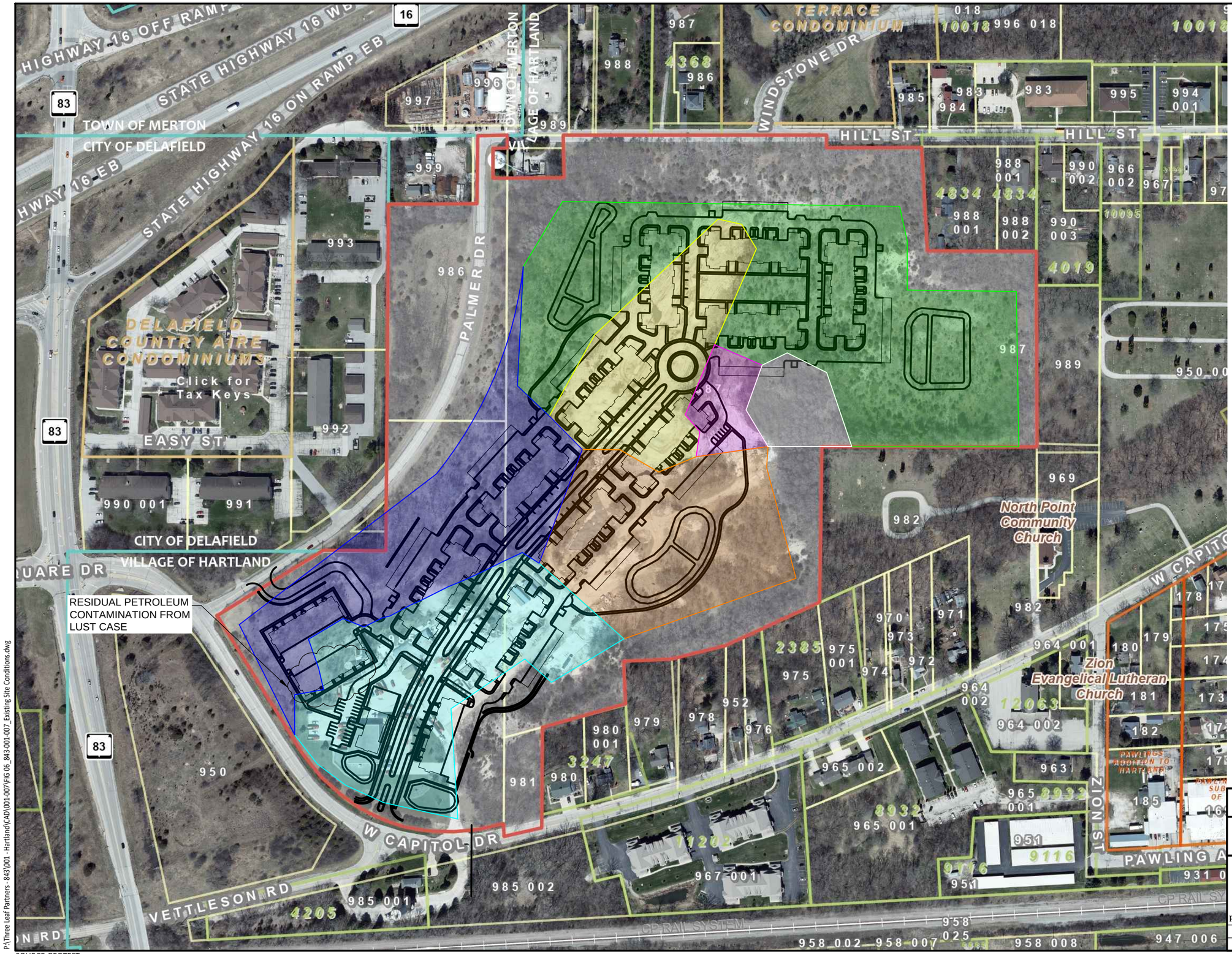
6871 S. Lovers Lane
Franklin, WI 53132

Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/06/2023	Figure 5
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 05_843-001-007_Aerial Photo 1963.dwg

SOURCE:WAUKESHA COUNTY GIS



P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 06_843-001-007_Existing Site Conditions.dwg

SOURCE:GEOTEST

EXISTING SITE CONDITIONS

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 6
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

'SUMMARY'

STACKED FLATS (2 STORIES) =	240 UNITS
COVERED PARKING =	240 STALLS
DRIVEWAY PARKING =	240 STALLS
STREET PARKING =	48 STALLS
TOWNHOMES (2 STORIES) =	
27 UNITS	
COVERED PARKING =	54 STALLS
DRIVEWAY PARKING=	54 STALLS
SURFACE PARKING =	6 STALLS
CLUBHOUSE	
VISITOR PARKING=	19 STALLS
TOTAL UNITS =	267 UNITS

N

NOT TO SCALE

PROPOSED REDEVELOPMENT PLAN

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

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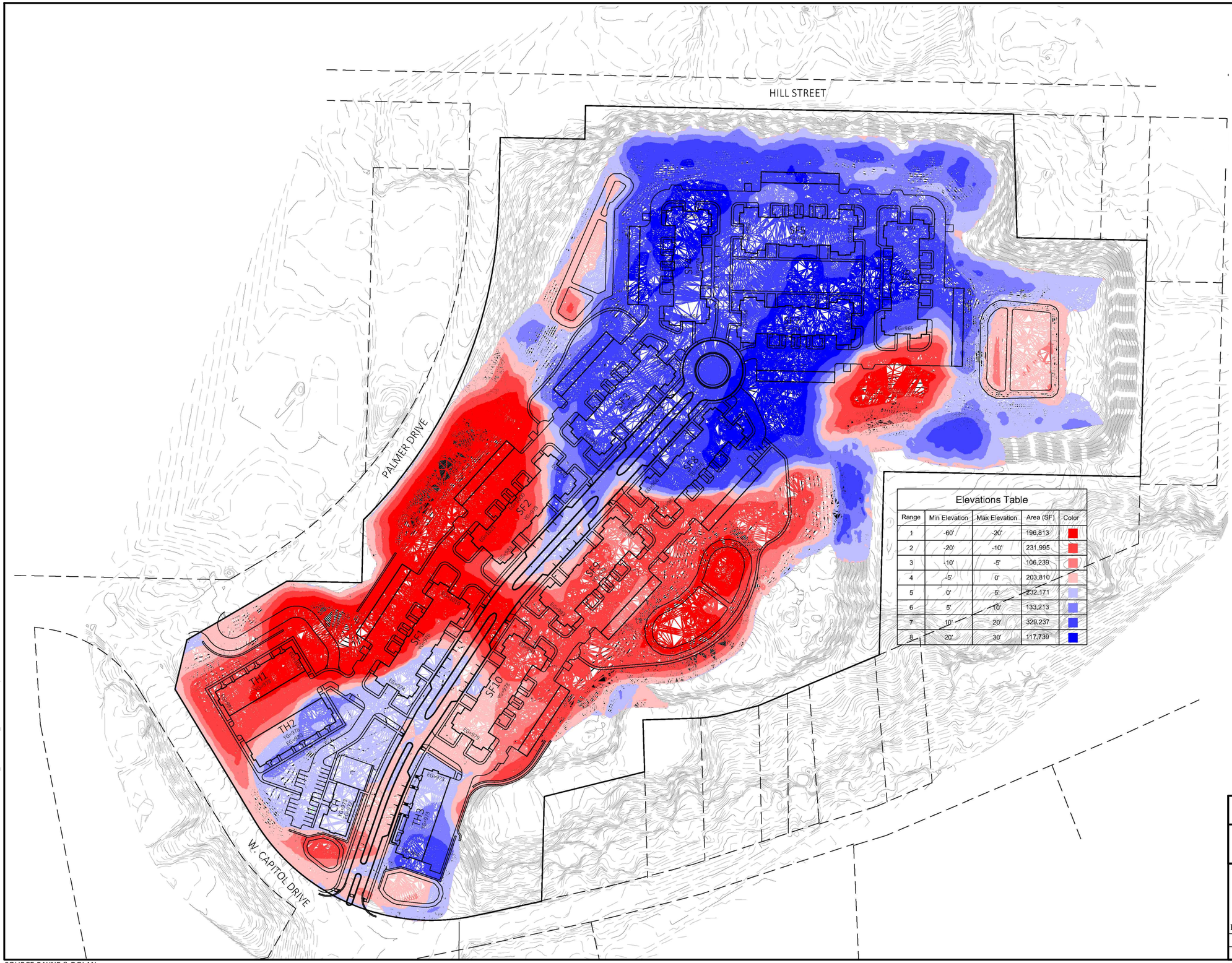
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 7
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 07_843-001-007_Proposed Redevelopment Plan.dwg

SOURCE:GEOTEST



BLDG	CUT/FILL (FT)
TH1	12-33
TH2	9-8
TH3	0-10
CLUBHOUSE	0-1
SF1	41-1
SF2	42-12
SF3	10-18
SF4	15-21
SF5	14-19
SF6	3-20
SF7	16-28
SF8	14-27
SF9	9-14
SF10	5-16

Elevations Table

Range	Min Elevation	Max Elevation	Area (SF)	Color
1	-60'	-20'	196,813	
2	-20'	-10'	231,995	
3	-10'	-5'	106,239	
4	-5'	0'	203,810	
5	0'	5'	232,171	
6	5'	10'	133,213	
7	10'	20'	329,237	
8	20'	30'	117,739	

N

0 200' 400'

CUT/FILL PLAN

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 8
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 08_843-001-007_Cut Fill Plan.dwg

SOURCE:PAYNE & DOLAN

N

0 100' 200'

SOUTH TEST PIT LOCATIONS

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 9
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 09_843-001-007_South Test Pit Locations.dwg

SOURCE:PAYNE & DOLAN

N

0 100' 200'

NORTH TEST PIT LOCATIONS

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

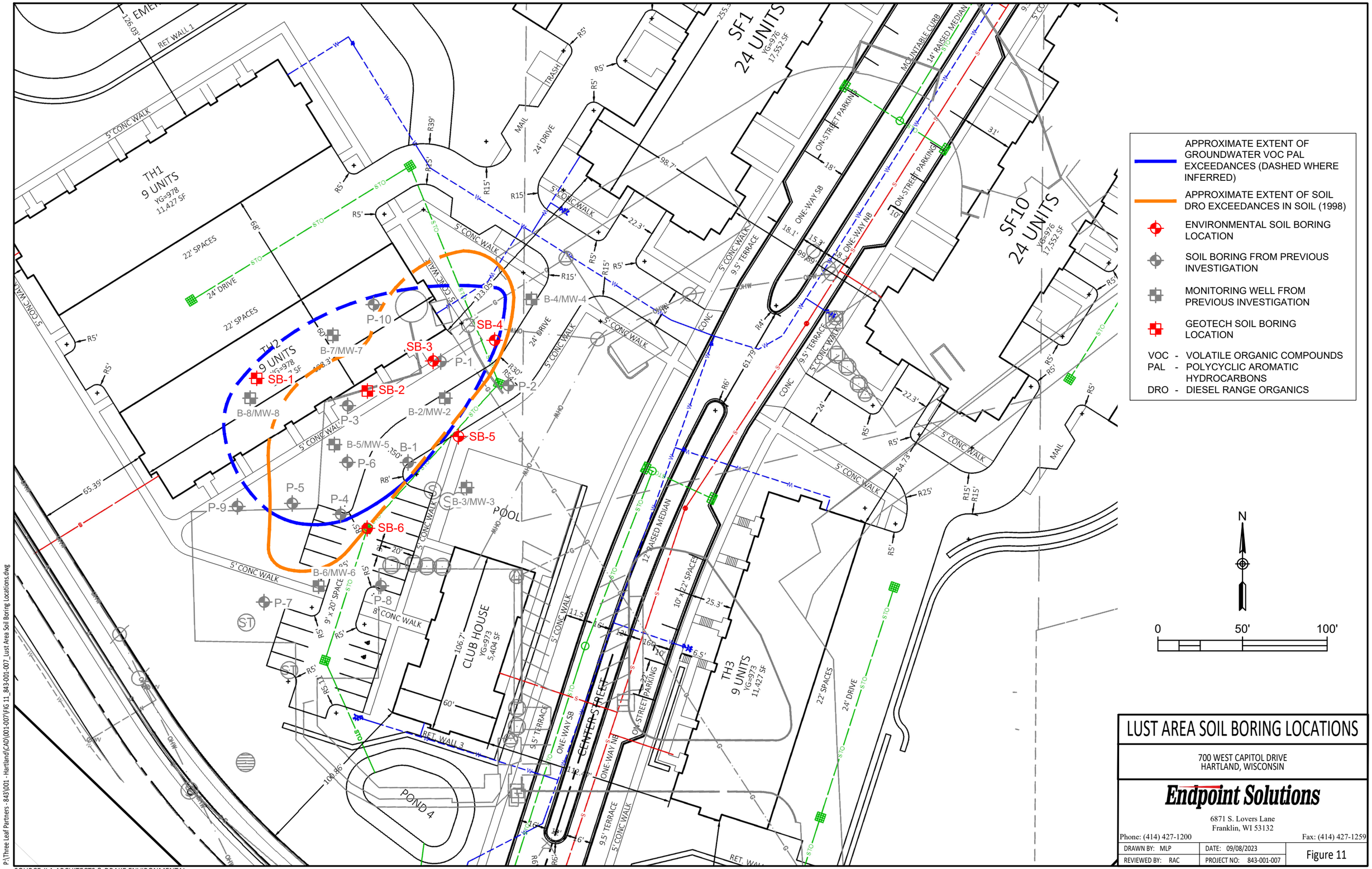
6871 S. Lovers Lane
Franklin, WI 53132

Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 10
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 10_843-001-007_North Test Pit Locations.dwg

SOURCE:PAYNE & DOLAN



LUST AREA SOIL BORING LOCATIONS

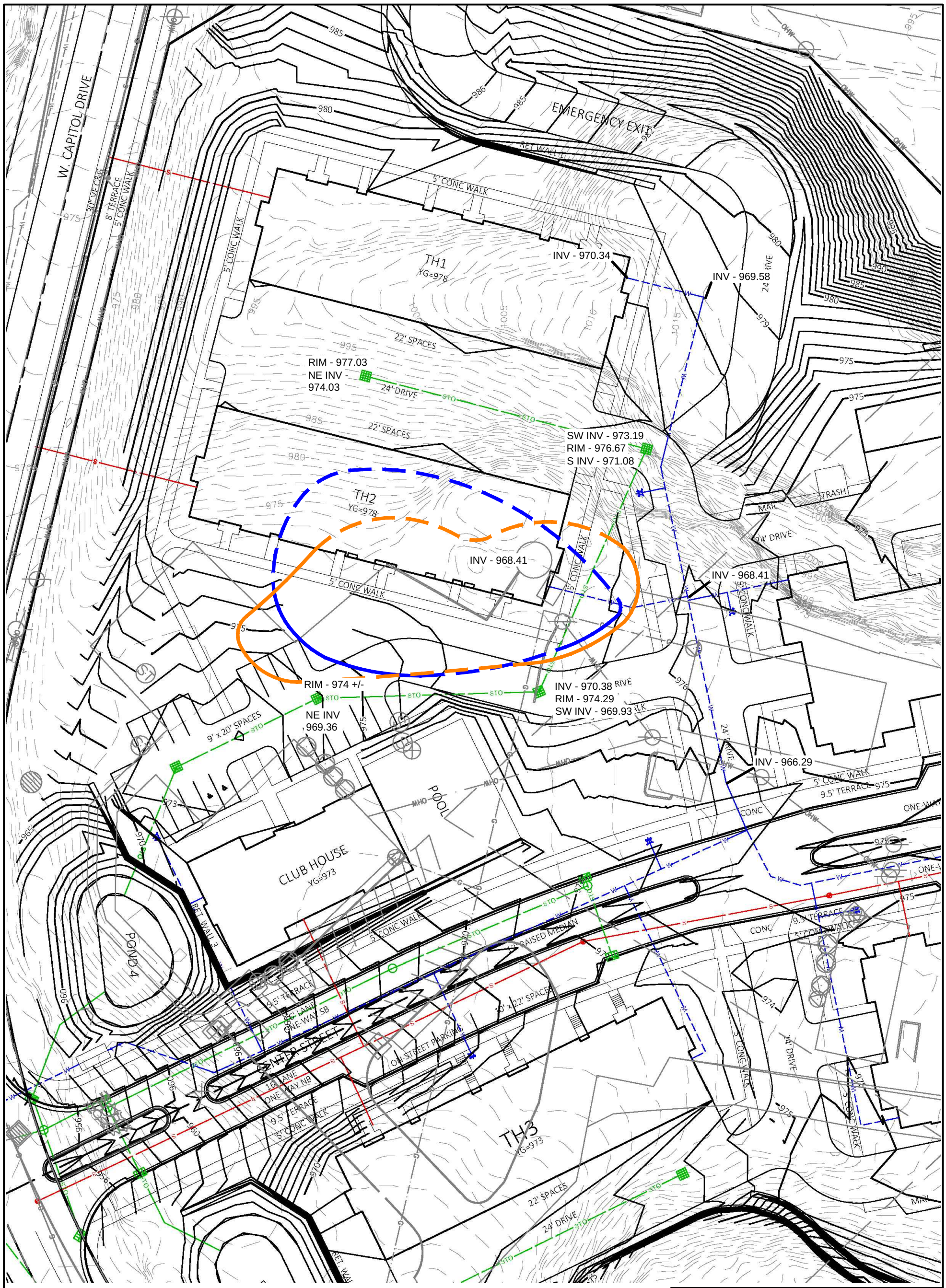
700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 11
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

SOURCE:JLA ARCHITECTS & DRAKE ENVIRONMENTAL

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 11_843-001-007_Lust Area Soil Boring Locations.dwg



0 50' 100'

UNDERGROUND UTILITIES IN FORMER LUST AREA

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 12
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 12_843-001-007_Underground Utilities in Former Lust Area.dwg

SOURCE:PAYNE & DOLAN

Elevations Table

Range	Min Elevation	Max Elevation	Area (SF)	Color
1	-60'	-20'	196,813	
2	-20'	-10'	231,995	
3	-10'	-5'	106,239	
4	-5'	0'	203,810	
5	0'	5'	232,171	
6	5'	10'	133,213	
7	10'	20'	329,237	
8	20'	30'	117,739	

MATERIAL TYPES ON CUT/FILL

700 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 09/08/2023	Figure 13
REVIEWED BY: RAC	PROJECT NO: 843-001-007	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-007\FIG 13_843-001-007_Existing Material Types on Cut Fill.dwg

SOURCE:PAYNE & DOLAN

TABLES

TABLE A.1.A - LUST AREA SOIL PVOC+N RESULTS

Table A.1.a
Soil Analytical Results - PVOCs and Naphthalene

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PVOCs (ug/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Boring ID, Sample Depth, Date of Advancement, Saturation											
				SB-1		SB-2		SB-3		SB-4		SB-5		SB-6	
				3-5.5' 8/18/2023 Unsaturated	8-10' 8/18/2023 Unsaturated	1-2.5' 8/18/2023 Unsaturated	6-7.5' 8/18/2023 Unsaturated	2' 8/18/2023 Unsaturated	10' 8/18/2023 Unsaturated	2' 8/18/2023 Unsaturated	7' 8/18/2023 Unsaturated	2' 8/18/2023 Unsaturated	7' 8/18/2023 Unsaturated	2' 8/18/2023 Unsaturated	10' 8/18/2023 Unsaturated
Benzene	**7,070**	1,600	*5.1*	<12.3	<13.4	<14.5	<177	<13.2	<14.1	<13.2	<14.1	<12.6	<14.1	<12.8	<13.7
Ethylbenzene	**35,400**	8,020	*1,570*	<12.3	<13.4	<14.5	1,210	<13.2	<14.1	<13.2	<14.1	<12.6	<14.1	<12.8	<13.7
Methyl-tert-butyl-ether (MTBE)	**282,000**	63,800	*27*	<15.2	<16.6	<17.9	<218	<16.3	<17.4	<16.4	<17.5	<15.6	<17.4	<15.8	<16.9
Naphthalene	**24,100**	5,520	*658.2*	<16.1	<17.6	<19.0	**27,900**	<17.3	<18.5	<17.4	<18.5	<16.5	<18.5	<16.8	<17.9
Toluene	**818,000**	818,000	*1,107.2*	<13.0	<14.2	<15.3	<187	<13.9	<15.0	<14.0	<15.0	<13.4	<14.9	<13.5	<14.5
1,2,4-Trichlorobenzene	**113,000**	24,000	*408*	<15.4	<16.8	<18.1	*13,600*	<16.5	<17.7	<16.6	<17.7	<15.8	<17.6	<16.0	<17.1
1,2,3-Trichlorobenzene	**934,000**	62,600	-----	<16.6	<18.2	<19.6	515 "J"	<17.8	<19.1	<17.9	<19.1	<17.1	<19.0	<17.3	<18.5
Xylene (Total)	**260,000**	260,000	*3,960*	<37.3	<40.8	<43.9	1,040 "J"	<40.0	<42.8	<40.2	<42.9	<38.3	<42.7	<38.8	<41.4

1) PVOC - Petroleum Volatile Organic Compound
2) ug/kg - micrograms per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established
5) J - Estimated concentration at or above the limit of detection (LOD) and below the limit of quantitation (LOQ).
6) Italicized result indicates a Soil-to-Groundwater Pathway RCL exceedance
7) Underlined result indicates a Non-Industrial Direct Contact RCL exceedance
8) Bold result indicates a Industrial Direct Contact RCL exceedance

APPENDIX A

GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT

2135 South 116th Street
West Allis, WI 53227

May 4, 2023

John Ford
President
Three Leaf Partners
504 W. Juneau Avenue
Milwaukee WI, 53203

Subject: Geotechnical Subsurface Investigation
Hartland Quarry Apartments
700/701 W. Capitol Drive, Hartland, Wisconsin

Dear Mr. Ford:

GeoTest, Inc. (GeoTest) has prepared this geotechnical engineering report related to the above-referenced project. This report describes the subsurface exploration and laboratory testing programs and presents recommendations regarding foundation support of the proposed structures, construction of floor slabs, pavements, and stormwater management systems, bluff stabilization, and includes other construction considerations. All environmental-related services are being provided by others.

Project Description

Three Leaf Partners is proposing to develop the property located at 700/701 W. Capitol Drive in the Village of Hartland, Wisconsin. The location of the project is illustrated in Figure 1 in Appendix A. The boundaries of the combined 45-acre property are illustrated in Figure 2 in Appendix A.

The proposed development consists of eighteen separate buildings, including a single-story club house, two- and three-story apartment buildings (some slab-on-grade and some with below-grade parking), and single-story garage buildings. The development will also include parking and drive paved areas and multiple stormwater management devises. The proposed development is illustrated in Figure 3 in Appendix A.

Structural loads have not been provided. However, we anticipate that column and wall loads will not exceed 300 kips and 5 kips per linear foot, respectively.

The finished floor elevations for the new buildings have not been provided but are expected to vary across the property. The preliminary civil engineering plans indicate cuts and fills of up to 15 feet are anticipated to achieve the final site grades.

The stormwater management facilities are designed, on a preliminary basis, to consist of four infiltration ponds. The entire development will be internally drained.

The perimeter bluffs currently have slopes steeper than 1h:1v, with many sections close to 0.75h:1v. The proposed development plan assumes the final slopes will be designed for 2h:1v.

Property History

To develop an appropriate geotechnical scope of work for this project, research and a site walk-through were completed. The research included reviewing local well logs (available from Waukesha County), a past environmental investigation report (produced by Drake Environmental, Inc.), and construction materials testing reports (produced by Gestra Engineering, Inc.). The Well logs and Drake and Gestra documents are included in Appendix B.

We interviewed individuals familiar with past activities at the property, including Jason Palmer with Cass Custom Crushing and Ed Troxell with Riv/Crete Ready Mix. We also toured the property with Jason and Ed, along with employees from Walbec Group, the project's civil engineering consultant.

The geologic settling at the property was described as granular (primarily sand and gravel) glacial deposits. The property was mined for road gravel from the 1930's to the 1960's (known as Palmer Sand & Gravel), after which it became a concrete plant under multiple company names. The concrete plant operations were located in the southwest corner of the property but are no longer active.

The property owners began accepting fill materials in the 1970's, which still occurs. Most of the fills appear to consist of soil and concrete wastes, but also occasional inert materials that include asphalt, building materials, wood, and metal. It is currently being used as an operational base for a trucking company and to store construction equipment.

Most of the property perimeter was lined with bluffs formed by past mining operations. Although the property's ground surface was near the adjacent property elevations in the southwest corner, the remaining elevation differences were as high as 85 feet. Therefore, an integral aspect of the development plan includes addressing the substantial perimeter embankments, not only for safety but also to maximize the buildable area.

Two areas that were unusual, with an unknown history, were the apparent overburden stockpiled soils forming the north boundary of the former concrete plant area at the southwest corner of the property, and the bluff peninsula in the east portion of the former pit that extends northward from the south property boundary. It was believed that the overburden stockpiled soils were placed as a buffer between the adjacent residential area to the west and to serve as a ramp for trucks to unload into a crusher. No one had an explanation for why the bluff peninsula was not excavated during the

mining operations, other than maybe they were unsuitable for production. These two areas were identified for evaluation, in addition to the overall pit base and bluffs.

Scope of Work

Geotechnical Subsurface Exploration

The research identified five areas with different soils and materials to be targeted for evaluation. These areas (described below) are illustrated on Figure 4 in Appendix A. This figure does not illustrate the bluff areas, although they also warranted evaluation.

- Industrial Development Area (including the apparent overburden stockpiled soils)
- Construction Debris Fill
- Soft Clay/Silt Sediment
- Compacted Imported Soil Fill
- Native Soils – Pit Base

The following geotechnical exploration program was developed to evaluate these areas:

- Nine test pits were excavated to depths of about 6 to 11 feet.
- Nineteen surface samples were collected from the perimeter bluffs.

The approximate sampling locations are identified on the Sampling Location Diagram (Figure 5) in Appendix A. Representative samples from the test pits and bluffs were collected in buckets and returned to GeoTest for laboratory testing and classification.

The test pit locations, the ground surface elevations at the test pits, and their depths were measured by a Walbec surveyor at the time they were excavated. Their locations and the elevation/depth data are represented on two figures provided by Walbec, which are included in Appendix B.

Laboratory Testing

The laboratory testing program consisted of the following:

- Modified Proctor testing of four samples.
- Grain Size Analyses of twenty-three samples.
- Atterberg Limits testing of one sample.

All laboratory results are presented in reports included in Appendix C.

In addition, a GeoTest geotechnical engineer examined and visually classified each sample, based on texture and plasticity, in accordance with the Unified Soil Classification System (USCS). General notes and a description of the USCS

classification system are included in Appendix C. The soil descriptions are presented in this report.

The recovered soil samples will be retained for 60 days after the date of this report. Unless other instructions as to their disposition are received, they will be discarded at that point.

Soil and Groundwater Conditions

The following narrative is a generalization of the subsurface conditions encountered on the property. Please recognize that the conditions can vary in areas between the sample locations.

Subsurface Conditions

The dominant geology on the property was described as well-grade granular glacial deposits, consisting of sand and gravel with variable percentages of fines (clay and silt), along with occasional cobbles and boulders. Differences from these native deposits included the placement of imported fill soils and man-made materials, primarily concrete in various forms.

The results of the test pit and bluff sampling programs are presented below. Following that information, the five ground surface areas are discussed.

Test Pits - The GeoTest test pit exploration program was designed to evaluate the subsurface conditions at each of the five areas where different soils or materials were expected. The following table summarizes the soils/materials encountered at the test pits.

Test Pit	Depth, ft	Description
TP-1 & TP-2[1]	0-6.4	SC-SM: Fine to coarse sand, some gravel, little clay and silt, occasional cobbles and boulders; brown; moist (32.8% gravel, 43.6% sand, 23.6% fines) – appeared to be native soil deposits.
TP-3[3]	0-5.6	SW-SM: Fine to coarse sand and gravel, few clay and silt, occasional cobbles; brown; moist (43.0% gravel, 46.4% sand, 12.6% fines) – appeared to be native soil deposits.
TP-4[2]	0-11.3	FILL (Rubble): Concrete and asphalt fragments, metal, wood, intermixed sand and gravel.
TP-5[2]	0-3	FILL (Rubble): Concrete fragments intermixed sand and gravel.
TP-5[3]	3-9.1	FILL (SP-SM): Fine sand, little medium to coarse sand, little gravel, few silt; brown; moist (20.7% gravel, 66.9% sand, 12.4% fines) – appeared to be fill soils.
TP-6[4]	8.1	GW: Fine to coarse gravel, some fine to coarse sand, trace silt, occasional cobbles and boulders; brown; moist (61.8% gravel, 35.3% sand, 2.9% fines) – appeared to be native soil deposits.

TP-7[5]	0-9	FILL (SW-SM): Fine to coarse sand, some gravel, few silt; brown; moist – compacted fill (tested by Gestra) that originated from a local utility construction project.
TP-7[4]	9-10.4	GW: Fine to coarse gravel, some fine to coarse sand, trace silt, occasional cobbles and boulders; brown; moist – appeared to be native soil deposits.
TP-8[6]	0-5.5	SEDIMENT (CL-ML): Clayey silt, trace fine sand; orange-brown; saturated; soft – appeared to be sediment run-off from the adjacent bluff peninsula and concrete fill area.
TP-8[4]	5.5-6.2	GW: Fine to coarse gravel, some fine to coarse sand, trace silt, occasional cobbles and boulders; brown; moist – appeared to be native soil deposits.
TP-9	6.6	GW: Fine to coarse gravel, some fine to coarse sand, few silt, occasional cobbles and boulders; brown; moist (56.2% gravel, 37.0% sand, 6.8% fines) – appeared to be native soil deposits.

Notes:

1- The samples from TP-1 and TP-2 were composited because these soils are expected to be excavated and reused as an engineered fill.
2- No sample was collected because these materials will be segregated, and the soil and concrete will be crushed for reuse as an engineered fill.
3- This sample was subjected to the Modified Proctor test because it is projected to be excavated and reused as an engineered fill.
4- This sample was not subjected to the Modified Proctor test because it will not be excavated for reuse as an engineered fill.
5- This sample was not tested because it will not be excavated for reuse as an engineered fill (the Gestra field density test results passed).
6- This sample was not tested because it should be excavated and is not suitable for reuse as an engineered fill.

Bluff Samples - The samples collected from the perimeter bluffs were subjected to Grain Size Analyses (sieve testing) to understand the grain size distribution and determine certain material coefficients that can be used in slope stability analyses. The following table summarizes the distribution of gravel, sand, and fines.

Bluff Sample	Percent Gravel	Percent Sand	Percent Fines	USCS Class
1	54.9	44.0	1.1	GW
2	0.0	3.2	96.8	CL
3	55.1	38.6	6.3	GW-GM
4	56.3	40.6	3.1	GW
5	36.1	57.4	6.5	SW-SM
6	28.5	62.2	9.3	SW-SM
7	8.0	84.3	7.7	SW-SM
8	11.5	57.6	30.9	SM

9	9.4	61.7	28.9	SM
10	42.7	47.9	9.4	SW-SM
11	11.6	61.4	27.0	SM
12	20.1	69.1	10.8	SW-SM
13	54.6	40.9	4.5	GW-GM
14	18.5	45.6	35.9	SM
15	29.5	52.3	18.2	SM
16	13.5	62.1	24.4	SC
17	9.3	67.4	23.3	SC
18	42.4	43.9	13.7	SM
19	42.9	46.2	10.9	SM

In summary, the above results indicate that the bluff soils are almost entirely granular and vary in their fine content. Only one sample was a fine soil (clay), present along the south side of the bluff peninsula in the east portion of the property that extends from the south property boundary. The majority of the bluff soils met the OSHA definition of Type C, which requires a minimum slope of 1.5h:1v. Some areas met Type B, which require a minimum slope of 1h:1v.

Industrial Development Area - The boring logs generated by Drake during their environmental investigation indicated that the soils present in the southwest portion of the property primarily consisted of layered sands, with variable clay, silt, and gravel content. Occasional silt layers were also noted. Most of the soil to depths of 10 to 15 feet was described as fill or possible fill, which could have been placed to facilitate the existing development, including backfill in the former underground storage tank (UST) cavities.

The Drake boring logs indicated the granular soils exhibited very loose to very dense relative densities, with N-values ranging from 1 to 72. The lowest values (less than 5) were located at the former UST cavity. Excluding the UST backfill soils, all N-values (except two) exceeded 10 and averaged 32. The relatively uniform and high N-values suggest most of the soils are likely native deposits and not fills.

Two test pits were excavated (TP-1 and TP-2) and two bluff samples (B18 and B19) were collected to evaluate the nature of the apparent overburden stockpiled soils. The test pit and bluff samples were similar in nature, and all appeared to be native soil. A visual evaluation of the soils making up this area concluded that there is a combination of both native glacial deposits and fills soils that make up this higher ground.

One test pit (TP-3) was excavated to determine if the former concrete plant area is underlain by native or fill soils. This sample appeared to be native and were similar to the samples from TP-1 and TP-2.

Construction Debris Fill Area – Two test pits (TP-4 and TP-5) were excavated in this area. As anticipated, the materials at TP-4 were mostly buried concrete rubble and concrete truck washouts. The profile also included other inert materials, such as asphalt, metal, wood, and intermixed sand and gravel soil. The fill extended deeper than could be excavated. The materials at TP-5 consisted of concrete rubble overlying fine sand fill. The sand fill likely is the remnant of a stockpile created during the past mining and concrete plant operations.

Compacted Soil Fill Area - The soils placed in this area are represented by the Gestra documents and the sample from TP-7. This soil was imported from a local utility construction project by Musson Brothers and described as sandy gravel. We were told that the soil was placed in 1-foot lifts and compacted. Gestra tested them for compaction at three surface locations, which passed the 95% specification. The test pit exposed soils also described as sand and gravel fill to a depth of about 9 feet overlying native sand and gravel. The test pit walls remained vertical, and the soil appeared to be dense and well compacted.

Soft Clay/Silt Sediment – The soils in this area are represented by the sample from TP-8. They appeared to have accumulated as run-off from the adjacent higher finger bluff and concrete rubble fill areas. They were fine grained clay and silt that were saturated. While traversing this area with the backhoe, it sank about 3 feet, prompting the decision to excavate the test pit. The soft, saturated sediments extended to a depth of about 5.5 feet and overlay native sand and gravel soil.

Native Soils – Pit Base Area – Two test pits (TP-6 and TP-9) were excavated in the areas believed to be the final base of the original mining pit. These two samples were similar in nature and both described as mostly well-graded gravel with some sand and trace to few silt fines. These soils were also similar to bluff samples B1, B3, B4, and B13, where the original pit was terminated due to property boundary restrictions.

Groundwater Conditions

Free groundwater was not encountered in any of the test pits. Groundwater was noted in the Drake report at depths of 8 to 10 feet. The nearby potable well reports indicated the depth to groundwater ranged from 55 to 135 feet, from ground surface elevations up to 85 feet above the pit base. Based on this data, the normal groundwater table likely exists at a depth of about 10 to 20 feet below the pit base.

Fluctuations in the groundwater table elevation should be expected with variations in precipitation, evapotranspiration, surface runoff, etc. Also, shallow perched groundwater conditions should be expected where relatively permeable granular soils are underlain by relatively impermeable cohesive soils, especially following precipitation events.

Analysis and Recommendations

There are eight primary issues that should be considered when planning this project.

- Fill materials exist on the property. The fills vary from construction soil placed in the developed area, UST backfill, construction rubble, compacted imported soil, and general grading materials. Other than the compacted imported soil, most other fills are not suitable for support of engineered fill and structural elements.
- Most building foundations will bear upon engineered fill placed to raise low areas of the property. It will be important to plan for sufficient quality-control measures during site grading and construction to ensure competent bearing conditions.
- Saturated clay and silt soils exist in the "Sediment" area, which are highly sensitive to construction activity and are not suitable for the support of engineered fill and structural elements.
- The compacted imported soil area only had three field density tests. Additional testing should be conducted to confirm they are consistent and suitable for the support of engineered fill and structural elements.
- Unexpected materials or items could be buried on the property that would not be suitable for reuse, such as construction equipment, organic material such as timber and vegetation.
- Subsurface elements related to past developments exist, including foundations, slabs, and utilities. These features should be identified and removed within structural areas.
- Although not encountered during this evaluation, it is possible that clay and silt soils could be encountered during the site improvement activities. These soil types are sensitive to moisture variations and could cause construction challenges and schedule delays.
- Although the perimeter bluffs vary in soil type, they should all be uniformly designed for safety and stability.

Foundation Support

Once the property has been properly prepared (described below), the proposed buildings can be supported on conventional, shallow spread footings. The foundations can likely be designed using an allowable bearing capacity value of 3,000 psf to 6,000 psf, depending on the final grades and localized bearing conditions. Properly designed and constructed footings should experience total and differential settlements of less than 1 inch and ¾ inch, respectively.

Traditionally, perimeter footings and interior footings in unheated areas should bear at a depth of at least 48 inches below the final exterior grade to provide adequate frost protection. If desired, exterior footings can bear at shallower depths by following ASCE 32-01 (American Society of Civil Engineers, Design and Construction of Frost-Protected Shallow Foundations, 2001). Interior footings not subject to frost can bear directly beneath the floor slab.

Seismic Design

The soil conditions present at a site are utilized in determining the Seismic Design Category (SDC) for structures. Part of selecting the SDC is determining the Site Class for the soils, which categorizes common soil conditions into broad classes, where typical ground motion attenuation and amplification effects are assigned. Site Class is determined based on the average properties of the soil within 100 feet of the ground surface. Geotechnical engineers use a variety of parameters to characterize the engineering properties of these soils, including general soil classifications (e.g., hard rock, soft clay, etc.), N-values, and laboratory testing.

Site Class A includes hard rock that is typically found only in the eastern United States. The types of rock typically found in the western states include various volcanic deposits, sandstones, shales, and granites that commonly have the characteristic appropriate to either Site Class B or C. Sites with very dense sands and gravels or very stiff to hard clay deposits also may qualify as Site Class C. Sites with relatively stiff cohesive or medium dense non-cohesive soils, including mixtures of clays, silts, and sands, are categorized as Site Class D. Site Class D is the most common site class throughout the United States. Sites along rivers or other waterways underlain by deep soft clay deposits are categorized as Site Class E. Sites where soils are subject to liquefaction or other ground instabilities are categorized as Site Class F and site-specific analyses are required.

Based on the types of soils present at the boring locations at this property, and their apparent engineering properties, Site Class D is assigned to the site, as defined in the International Building Code (2015) Section 1613.

Floor Slab Support

The expected final subgrade soils should be suitable for support of concrete floor slabs. However, the floor slab areas should be proof-rolled and soft areas removed or improved prior to the placement of base course materials. An average subgrade modulus value of 150 pounds per cubic inch (pci) is appropriate.

Below-grade Walls

A coefficient of friction of 0.35 may be used with dead load forces for wall footings that bear on suitable (as defined in the geotechnical report) native soils or engineered fill.

The lateral earth pressure value ranges presented below assume that the walls are vertical, that a clean, free-draining granular fill (P200 <6%) is used as backfill within 2 feet behind the wall, the backfill condition at the ground surface is level, and that adequate drainage is provided to prevent the buildup of hydrostatic pressures.

Retaining Wall Design Parameters	
Soil Unit Weight	140 pcf
Angle of Internal Friction	35°
Soil Cohesion	0 psf
Earth Pressure Coefficient	
At Rest Design Parameters	0.46
Active Design Parameters	0.30
Passive Design Parameters	3.35

We recommend using a minimum safety factor of 2.0 in passive earth pressure calculations, ignoring the upper 2 feet of soil in frost protected areas and 4 feet of soil in other areas. For walls that are free to rotate at least 0.001 times the height of the wall, such as a temporary earth retention system and retaining walls, an active earth pressure condition will develop. For walls that will be restrained, such as permanent below-grade walls, an at-rest condition will develop. For walls that rotate towards the soil, a passive condition will develop. Below-grade and retaining wall design should also consider surface and subgrade surcharge loading.

Special attention should be employed during placement of backfill against below-grade and retaining walls. Inadequate placement and compaction of backfill will result in at-grade structural elements and slab/pavement settlement and distress. To achieve a balance between minimizing excessive pressures against the walls during construction and reducing the settlement of the wall backfill, the granular backfill should be compacted to at least 90 percent of the maximum dry density obtained in accordance with ASTM Specification D1557, Modified Proctor Method. Where backfill supports structural elements, sidewalks, or pavements, the upper 4 feet should be compacted to 95% of the maximum dry density (Modified Proctor). Lifts of 4 to 6 inches can be effective in achieving compaction requirements.

Drainage should be provided behind below-grade walls to prevent the buildup of hydrostatic pressures. We recommend that free-draining granular drainage aggregate be placed within 2 feet behind the back face of the walls.

A relatively impermeable barrier at the ground surface is recommended, such as a minimum 2-foot-thick clay cap or Bituminous or Portland cement concrete (i.e., walkways and drives) to minimize surface water infiltration into backfill against walls. The impermeable barrier should slope away from the structure at a minimum 2 percent grade.

<u>Engineered Fill, Wall, and Utility Trench Backfill</u>
The on-site soil and materials (if processed properly) can be reused as engineered fill. All engineered fill, wall, and utility trench backfill should consist of inorganic materials,

free of debris, not exceed 3 inches in size, and should be placed in 8 to 10-inch loose lifts compacted to a minimum of 95 percent of the maximum dry density (Modified Proctor). If the engineered fills are less than 7 feet in thickness, they should be moisture conditioned to be within +/- 3% of the optimum moisture content. Where engineered fills exceed 7 feet, they should be moisture conditioned to be at the optimum moisture to + 3% above.

Pavement Design

The Wisconsin Asphalt Pavement Association (WAPA) Design Guide should be utilized to design the new asphalt surface parking areas. Traffic Class I was assumed for parking areas that are mainly used by light passenger vehicles and Traffic Class II for medium-loaded drive areas.

The minimum pavement section should consist of the following:

Material	Traffic Class I	Traffic Class II	WisDOT Specification
Asphalt Surface Course	2 inches	2 inches	Section 460
Asphalt Binder Course	2 inches	2.5 inches	Section 460
Dense Graded Base Course	8 inches	10 inches	Section 305

The pavement sections above are not intended to support on-going construction traffic. Also, the pavement sections presented above should not be used for areas that experience heavy truck traffic, equipment or truck parking areas, entrances and exit aprons, or trash-dumpster loading zones. In these areas, a Portland Cement Concrete (PCC) pavement should be used. The PCC layer thickness is recommended to be 7 inches with a minimum of 6-inch-thick crushed stone base course. The reinforcement details for PCC layers and final pavement section should be designed by the project design engineer.

These recommendations assume the subgrade is prepared as described in this report. Additional corrective action may be warranted at the time of construction, depending on the site conditions. If any clay or silt soils exist in pavement areas, it may be beneficial to install a geotextile fabric (e.g., GEOTEX 315) as a separating layer between such a subgrade and the base course after the subgrade has been evaluated by proof-roll testing.

Stormwater Management

Three stormwater management devices are proposed for the development. Based on the soil descriptions at two of those areas (TP-6 and TP-9), the prevailing soils were classified as “Coarse Sand and Gravel”. Consequently, the devices would be exempt from the Wisconsin Department of Natural Resources (WDNR) infiltration requirements. The estimated static infiltration rate based on the Standard 1002 – Table 2 would be 3.60 inches per hour (in/hr).

Bluff Stability

The prevailing soil type making up the perimeter bluffs is described as sand and gravel that meet the OSHA definition for Type C. Some soils meet the Type B description, but they are not consistent. Therefore, the bluffs should be designed for minimum slopes of 1.5h:1v for safety and stability.

Construction Considerations

Because of the presence of undocumented fill on the property, extra caution should be exercised during construction. All poor soil/fills should be stripped from structural and engineered fill areas prior to any construction activities. Additional effort should also be taken to identify the former UST cavities, which were likely backfilled will soils that are not suitable for the support of engineered fill and structural elements. The exposed subgrade soils and all engineered fills should be observed, tested, and documented by a representative of the geotechnical engineer. Large structural areas, such as building footprints and beneath engineered fill and pavements, should be proof-rolled to identify low-strength or disturbed areas that need to be removed or improved.

Footing excavations and all engineered fill subgrade soils should be evaluated to confirm the bearing materials are consistent with those identified in this report and anticipated by the geotechnical and structural engineers. If unanticipated conditions are encountered, the geotechnical and structural engineers should be notified immediately. All footing pads must bear upon suitable native soils or engineered fill soils that have been confirmed in the field by a representative of the geotechnical engineer. Where unsuitable bearing soils, such as organic, disturbed, wet, frozen, or low-strength (less than the design bearing capacity) soils are encountered, the excavation should be extended to competent bearing soil. If extended, the footing pads can be constructed at the base of the excavations, or the excavations can be backfilled with clean, crushed stone or lean concrete.

Buried structural elements from past developments exist. Therefore, efforts should be taken during site grading to identify all existing structural elements and undocumented fills. Existing foundations should be removed to a depth of at least 4 feet below proposed foundations. Existing concrete slabs below a depth of 4 feet should be removed or broken into minimum 1-foot pieces to avoid water pooling. Utilities may also exist that could require abandonment.

It is unlikely that excavations will encounter groundwater. However, if any do or if perched water is encountered, filtered sump pumps and drawing water from sump pits should be adequate to remove water that collects in excavations. Excavated sump pits should be lined with a geotextile and filled with open-graded, free- draining aggregate.

Surface water should not be allowed to be collected in excavations or on prepared subgrades during or after construction. Areas should be sloped to facilitate removal of

collected surface runoff. Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of structures and within pavement areas.

Excavation walls may need to be sloped or braced for stability and safety reasons. The Owner and Contractor should be aware of, and become familiar with, applicable local, state, and federal safety regulations, including current OSHA Excavation and Trench Safety Standards. Construction-site safety generally is the responsibility of the Contractor, who should also be responsible for the means, methods, and sequencing of construction operations.

The Contractor should be aware that slope height, slope inclination, or excavation depths should in no case exceed those specified in local, state, or federal safety regulations, (e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926), or successor regulations. The on-site soils are generally considered Type C soils when applying the OSHA regulations. Such regulations are strictly enforced, and if they are not followed, the Owner, Contractor, and/or earthwork Subcontractor(s) could be liable for substantial penalties.

General Qualifications

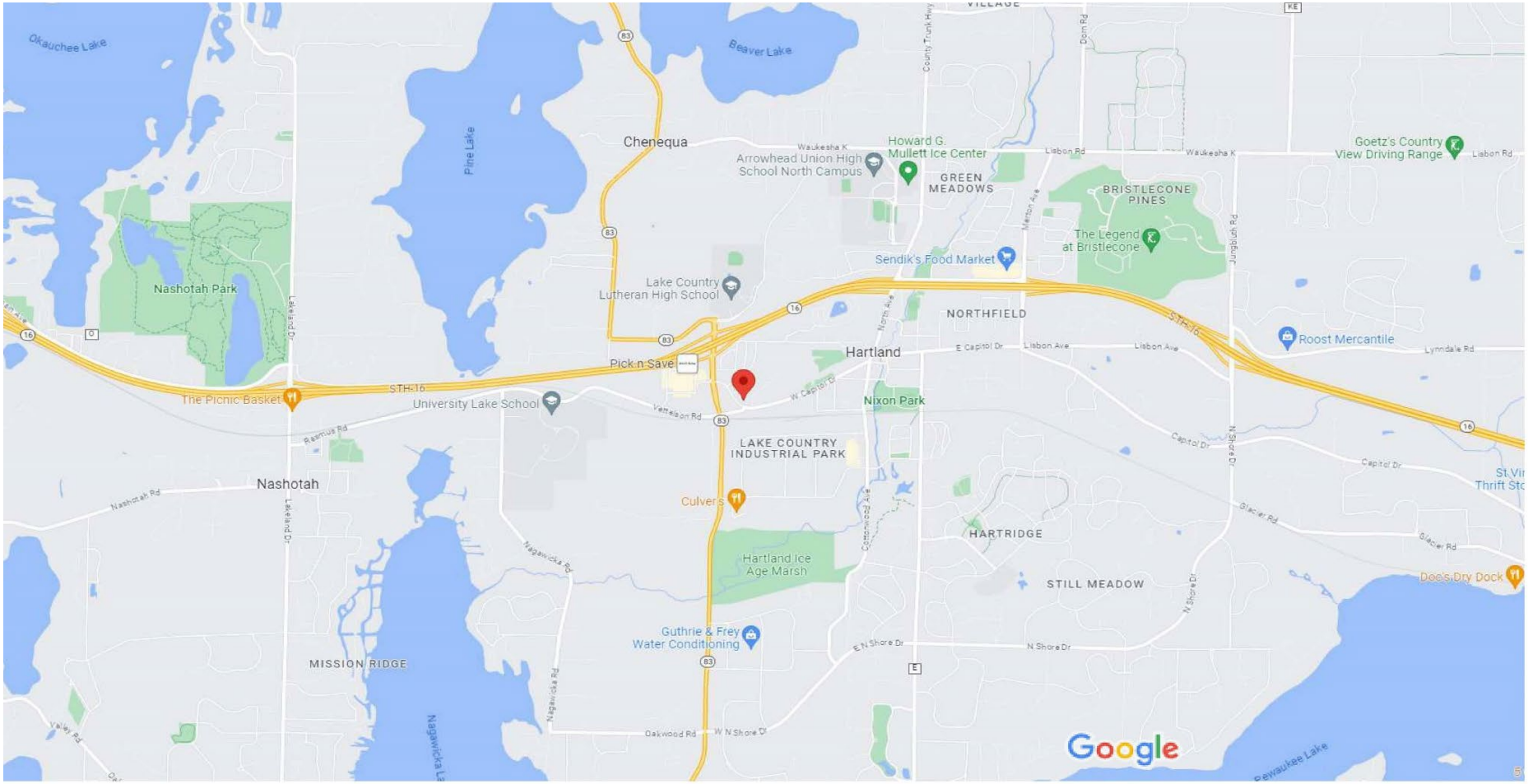
The services provided by GeoTest on this project were performed with the degree of skill and care typically performed by other members of the geotechnical engineering profession, practicing in this locale, at this time. No other warranty, expressed or implied, is given.

We appreciate the opportunity to provide geotechnical engineering services for this project. If you have any questions, or require any further assistance, please feel free to contact us.

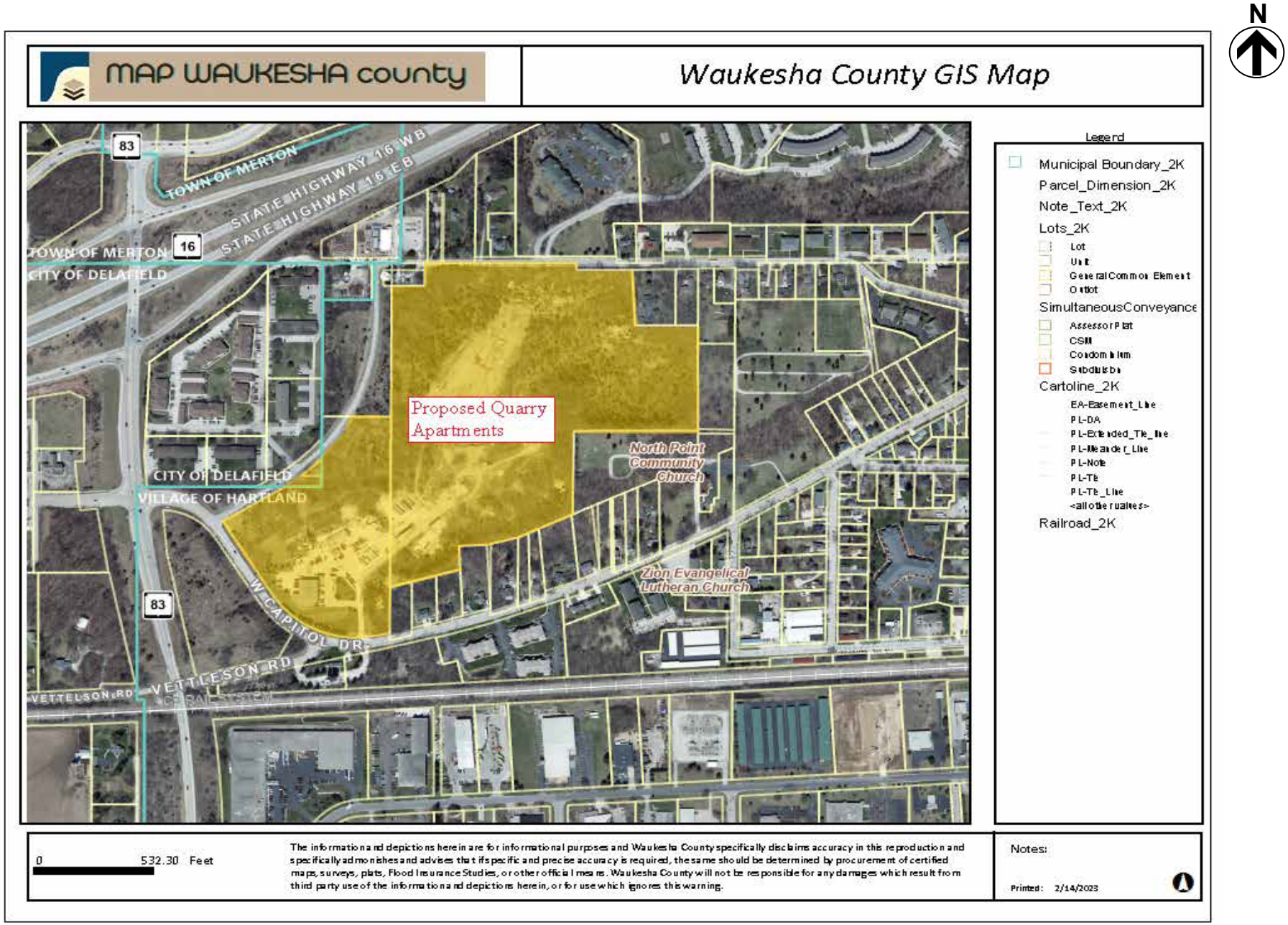
Sincerely,

Michael D. Frede, P.E.
Technical Director/Senior Engineer

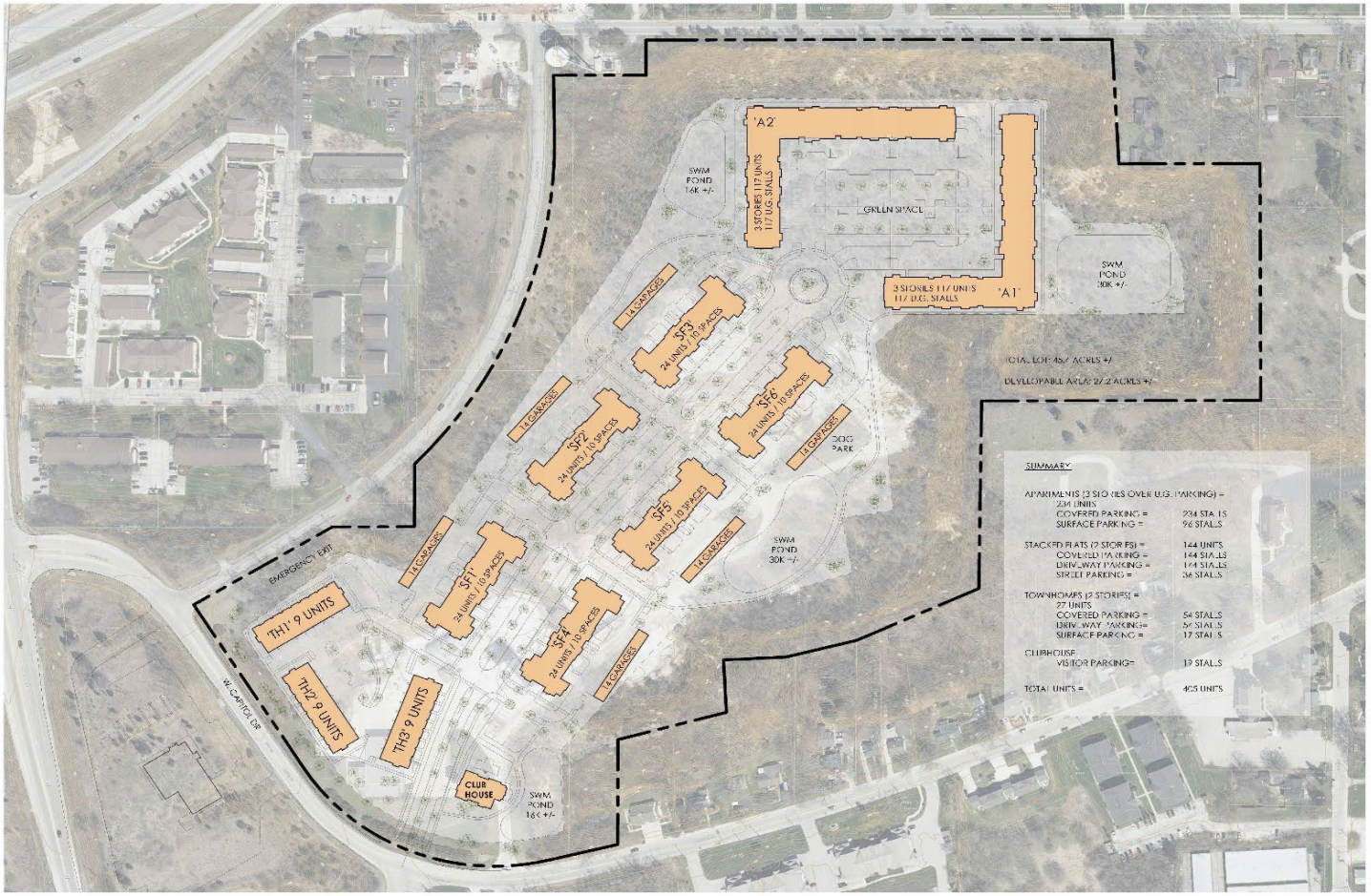
Appendix A



GeoTest	**Project Name:**	Hartland Quarry Apartments	**Project No.:**	7708	**FIGURE 1** **Site Location Diagram**
	Project Location:	700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Date:**	4/29/23	
			Drawn By:	MDF	
			Scale:	NTS	



GeoTest	**Project Name:** Hartland Quarry Apartments **Project Location:** 700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Project No.:** 7708 **Date:** 4/29/23 **Drawn By:** MDF **Scale:** NTS	**FIGURE 2** **Property Boundary Diagram**



1 ARCHITECTURAL SITE PLAN
1" = 100'-0"

N

JLA ARCHITECTS
MADISON | MILWAUKEE | DENVER
JLA-AP.COM

JLA PROJECT NUMBER: 22013

HARTLAND QUARRY APARTMENTS
Plan Commission Submittal

PROGRESS DOCUMENTS

These documents reflect progress and in part one may be relied to change, including additional detail. These are not final construction documents and should not be used for final bidding or construction related purposes.

DATE OF ISSUANCE 3/31/2023

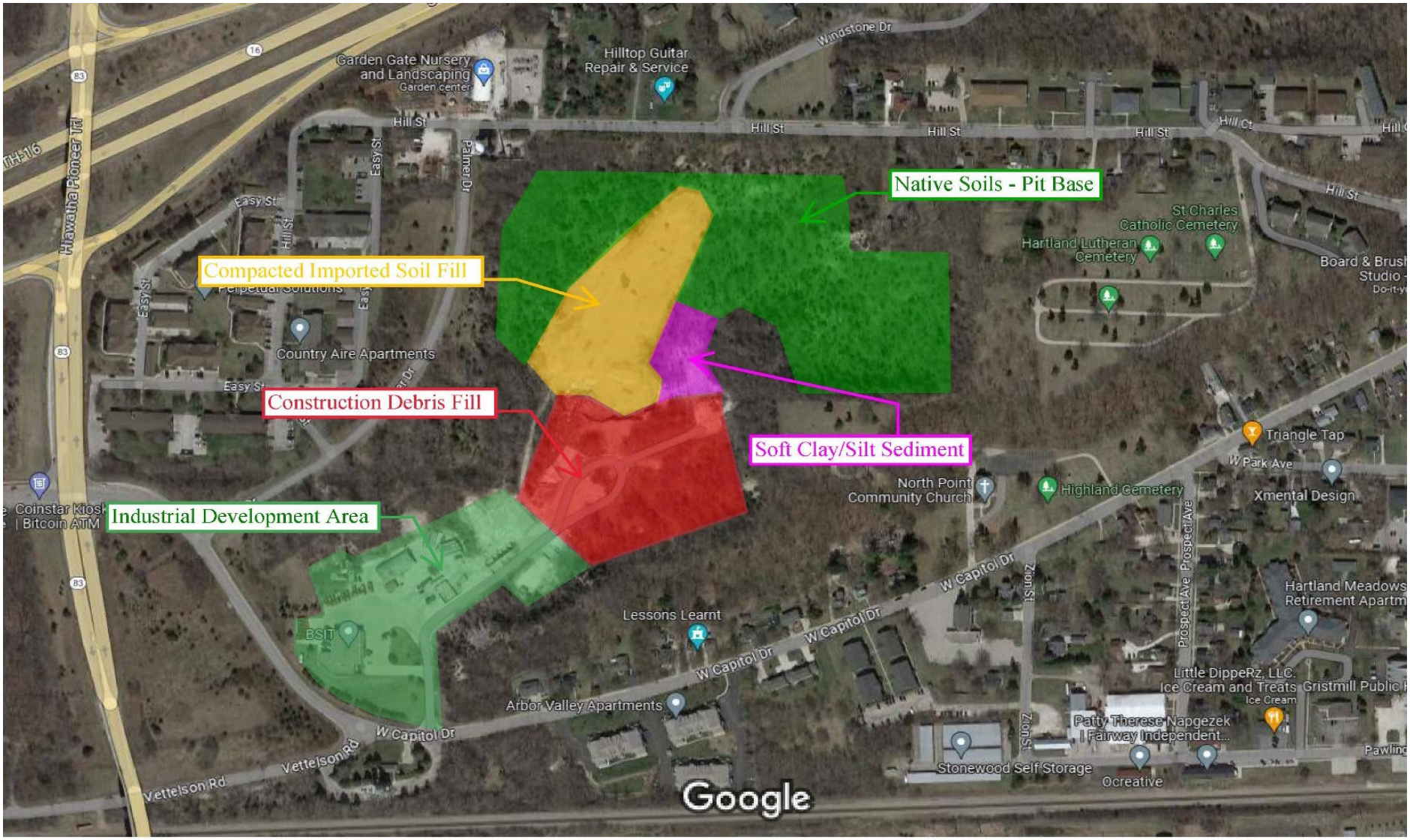
REVISION SCHEDULE

MARK | DESCRIPTION | DATE

SHEET TITLE
ARCHITECTURAL SITE LAYOUT PLAN

SHEET NUMBER
ASP-100

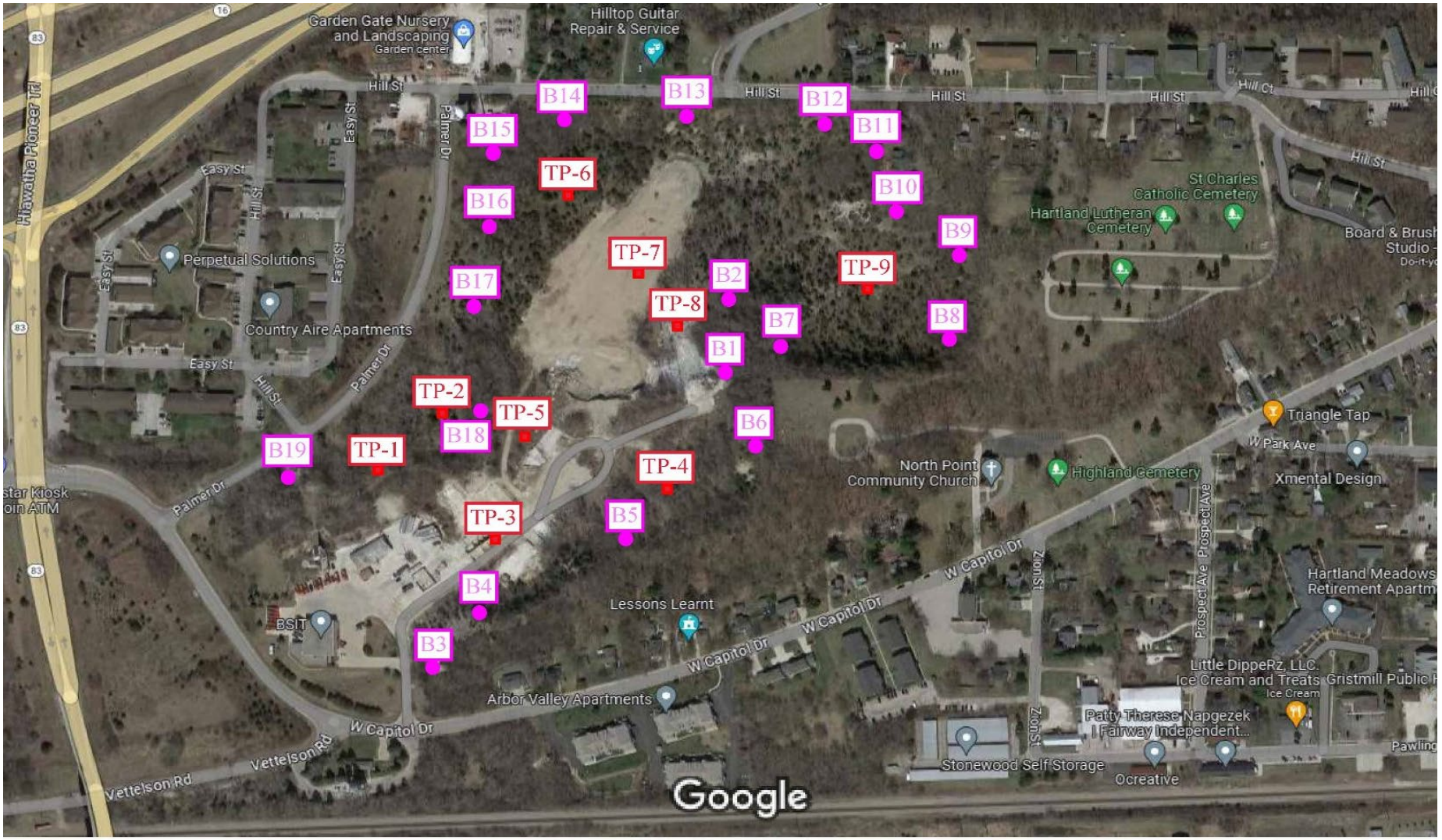
GeoTest	**Project Name:** Hartland Quarry Apartments **Project Location:** 700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Project No.:** 7708 **Date:** 4/29/23 **Drawn By:** MDF **Scale:** NTS	**FIGURE 3** **Proposed Development Diagram**



GeoTest

Project Name:	Hartland Quarry Apartments	**Project No.:**	7708
Project Location:	700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Date:** **Drawn By:** **Scale:**	4/29/23 MDF NTS

FIGURE 4
Geotechnical Areas of Interest Diagram



GeoTest	**Project Name:** Hartland Quarry Apartments **Project Location:** 700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Project No.:** 7708 **Date:** 4/29/23 **Drawn By:** MDF **Scale:** NTS	**FIGURE 5** **Sampling Location Diagram**

Appendix B

Well Logs

- 8KM754_WCR
- 8KM755_WCR
- 8KM756_WCR
- 8NM185_WCR
- 8NN038_WCR
- IJ288_WCR

Drake Environmental Geologic Information

- Diagrams
- Boring Logs

Gestra Laboratory Reports

- Proctor Analysis (D1557)
- Field Density Testing

Walbec Test Pit Survey Diagrams

- Test Pits 1 through 5
- Test Pits 6 through 9

WELL CONSTRUCTOR'S REPORT

WISCONSIN STATE BOARD OF HEALTH

Wel 6

1. COUNTY: Waukesha

CHECK ONE: ☒ Town ☐ Village ☐ City

NAME: Delafield

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available): NW¼ Sec 3 T7N R18E.

RECEIVED

3. OWNER AT TIME OF DRILLING: Robert Steinman

JUN 24 1966

4 OWNER'S COMPLETE MAIL ADDRESS: Hill St Hartland Wisc.

SANITARY ENGINEER

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WATER DRAIN C. I.	WATER DRAIN TILE

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
		60		75					

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for: ~~Home~~ Service Station

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6"	Surface	268			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6"	Standard Steel	Surface	268

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
	Surface	

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Sand & gravel Brown	Surface	190
Gray sand & gravel	190	170
Clay & Sand	170	233
Sand & gravel	233	268

WK 35647

Well construction completed on: May 11 1966

Well is terminated 4 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 12 Hrs. at 12 GPM

Depth from surface to normal water level 120 ft.

Depth to water level when pumping 130 ft.

Water sample sent to Madison laboratory on: May 11 1966

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: R. Bough Registered Well Driller

COMPLETE MAIL ADDRESS: Hartland Wisc

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS	CONFIRMED	REMARKS
				plot 752104

WELL CONSTRUCTOR'S REPORT — **WISCONSIN STATE BOARD OF HEALTH** — Wel 6

1. COUNTY: Waukesha — CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Delafield

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)
Hartland Hy 16 & Hill St. T7NR18E NW¼ Sec 3

3. OWNER AT TIME OF DRILLING
Bob Steinman

4. OWNER'S COMPLETE MAIL ADDRESS
Hartland Wisc

RECEIVED
MAY 11 1966
STATE BOARD OF HEALTH ENG.

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN TILE
10							

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINKHOLE
		60		70					

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for: Service Station

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6	Surface	268			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Standard Steel	Surface	268

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
	Surface	

10. FORMATIONS

Kind	From (ft.)	To (ft.)
	Surface	
Sand & gravel	-	120
Brown Sand & gravel	120	140
Grey Sand & gravel	140	170
Gray clay & sand	170	185
Brown Sand	185	225
Gray Sand & clay	225	233
Brown sand & gravel	233	268

W K 3 5 6 4 8

11. MISCELLANEOUS DATA
Yield test: 6 Hrs. at 20 GPM
Depth from surface to normal water level 104 ft.
Depth to water level when pumping 180 ft.

Well construction completed on April 13 1966
Well is terminated 6 inches ☒ above ☐ below final grade
Well disinfected upon completion ☒ Yes ☐ No
Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison laboratory on: April 13 1966

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: E. Bayer Registered Well Driller

COMPLETE MAIL ADDRESS: Hartland Wisc

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
				plot 762103

NW, Sec 3 T7N R18E

Wel 6

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

1. County Waukesha — Town ☐ Village ☑ Hartland — City ☐ (Check one and give name)

2. Location ~~SW¼ NW¼~~ Sec 3 T7N R18E
(Name of street and number of premise or Section, Town and Range numbers)

3. Owner ☐ or Agent ☐ Hartland Washed Sand & Gravel
(Name of individual, partnership or firm)

4. Mail Address Hartland
(Complete address required)

5. From well to nearest: Building 10 ft; sewer — ft; drain — ft; septic tank — ft; dry well or filter bed — ft; abandoned well — ft.

6. Well is intended to supply water for: Office

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6	0	77			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	Stl Steel	0	78'5"

9. GROUT:

Kind	From (ft.)	To (ft.)

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Gravel	0	77

RECEIVED
NOV 2 1950

Construction of the well was completed on: Dec. 6 19 50

The well is terminated — inches ☑ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes ✓ No —

Was the well sealed watertight upon completion? Yes ✓ No —

11. MISCELLANEOUS DATA:

Yield test: 3 Hrs. at 10 GPM.

Depth from surface to water-level: 55 ft.

Water-level when pumping: 58 ft.

Water sample was sent to the state laboratory at: Madison City on — 19—

Signature — Registered Well Driller

H. A. BUTLER
WELL CONTRACTOR
DELAFIELD, WIS.
Please do not write in space below

Complete Mail Address

Rec'd — No —

Ans'd —

Interpretation —

WK 3 5 6 4 9

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner —

WK-1254-U

WELL CONSTRUCTION REPORT — DEPARTMENT OF [illegible]

1. COUNTY: Waukesha

CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: Delafield

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)
SW, NW, NW ¼ Section 3 T 7N R 18E — PER APPROVAL LETTER — SW, NW, NW, Sec 3

3. OWNER AT TIME OF DRILLING
per USGS: Gyas Construction Co. (W.F. Gyas + Freda D. Gyas Owners)

4. OWNER'S COMPLETE MAIL ADDRESS
Route #1, Box #63, Delafield, Wis

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
18	✓	✓	45	✓	✓	✓	✓	✓

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
✓	✓	306	✓	✓	330	✓	✓	✓	✓ Perm Well #88024

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)
None — Well #3

6. Well is intended to supply water for:
2 Apartment Houses — Misc #26

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
10	Surface	20			
6	20	120			

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
10	ASTM-A53 Grade B	Surface	20
6	ASTM-A53 Grade B	20	106
	.280 P/E		
	welded jts		
6	Silica Brass screen	106	120

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
Cement slurry	Surface	20

10. FORMATIONS

Kind	From (ft.)	To (ft.)
Clay top soil	Surface	8
Gravel	8	104
Gravel + Sand (Water Bg)	104	120
WAS INSTALLED IN 3 SECTIONS WITH 1 FROT PIPE NIPPLES BETWEEN THE 3 SECTIONS. THE LOWER SECTION HAS A 28 THOUSANDTH SLOT, THE MIDDLE SECTION 25 AND THE UPPER SECTION 18.		

WK 3 5 6 5 0

11. MISCELLANEOUS DATA
Yield test: 24 Hrs. at 60 GPM
Depth from surface to normal water level 87 ft.
Depth to water level when pumping 88'-6" ft.

Well construction completed on 10/10 19 68
Well is terminated 20 Inches ☒ above ☐ below final grade
Well disinfected upon completion ☒ Yes ☐ No
Well sealed watertight upon completion ☒ Yes ☐ No

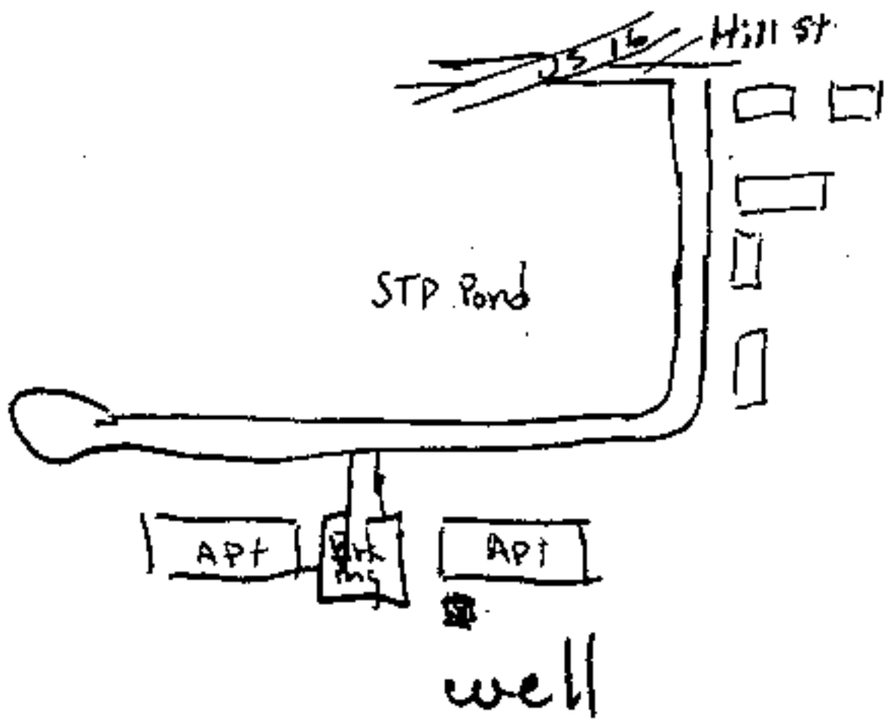
Water sample sent to Madison laboratory on: 10/26 19 68

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, subsurface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Aqua Well Drilling & Pump Co. Inc. — Fred J. Bollhagen, Registered Well Driller
COMPLETE MAIL ADDRESS: Rt. 1, Hartford, Wis.

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
11-Capacity Well. Approved 11-6-68 to: Delafield	11-6-68	SEE OTHER SIDE	plot 702105	re: M.E. Ostrom 12-4-68



8

AIC 934
D 620
C 814
W - 87
847 + 10/68

775

151

WK35650_2

Corrected Report

OCT - 2 1974

WELL CONSTRUCTOR'S REPORT

Wel–6

WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

1 COUNTY: WAUKESHA

CHECK ONE: ☒ Town ☐ Village ☐ City

NAME: MERTON

2. LOCATION (Number and Street or ¼ section, section, township and range. Also give subdivision name, lot and block numbers when available.)
N. 48 W. 30756 HILL ST. TOWN of MERTON. T8N R18E

3. OWNER AT TIME OF DRILLING
WAGEN REALTY CO.

SE, SE, SW, SW, Sec. 34

4. OWNER'S COMPLETE MAIL ADDRESS
318 LAKE Rd, OCONOMOWOC, WIS.

5. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
8	40	—	60	—	—	—	45	—

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
—	—	70	—	—	95	—	—	—	—

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

6. Well is intended to supply water for: FURNITURE STORE

7. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
6	Surface		UNKNOWN		
	Redrill				

8. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	NEW BLK. Steel	Surface	134
	T&C. 0,280		
6	UNKNOWN	134	260

9. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
UNKNOWN	Surface	~~126~~

10. FORMATIONS

Kind	From (ft.)	To (ft.)
UNKNOWN	Surface	126
SAND	126	160
HARDPAN	160	205
GRAVEL	205	260

WK 31760

11. MISCELLANEOUS DATA

Yield test: 8 Hrs. at 10 GPM

Depth from surface to normal water level 135 ft.

Depth to water level when pumping 135 ft.

Well construction completed on Aug 29 1974

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

Water sample sent to Madison, WIS. laboratory on: Sept 16 1974

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Henry Hartman Registered Well Driller

COMPLETE MAIL ADDRESS: 5100 N. 56 ST. MILWAUKEE, WIS.

Please do not write in space below

COLIFORM TEST RESULT	GAS — 24 HRS.	GAS — 48 HRS.	CONFIRMED	REMARKS
See letter	driller's file		9/24/74	plot 782049

REV 11–68

page 2 of 2

SEP 17 1974 OCT 2 1974

WELL CONSTRUCTOR'S REPORT
FORM 3300–15

NOTE
WHITE COPY – DIVISION'S COPY
GREEN COPY – DRILLER'S COPY
YELLOW COPY – OWNER'S COPY

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Box 450
Madison, Wisconsin 53701

1. COUNTY WAUKESHA

CHECK ONE: ☒ Town ☐ Village ☐ City — NAME: MERTON

2. LOCATION – ✓ ¼ Section | Section | Township | Range
SE, SE, SW | SW | 34 | 8N | 18E

OR – Grid or street no. N. 48 W. 30756 — Street name: HILL ST

AND – If available subdivision name, lot & block no.: SE, SE, SW, SW Sec 34

3. OWNER AT TIME OF DRILLING WARREN REALTY CO.

ADDRESS: 318 LAKE Rd.

POST OFFICE: OCONOMOWOC, WIS

4. Distance in feet from well to nearest: (Record answer in appropriate block)

BUILDING	SANITARY SEWER C. I.	SANITARY SEWER TILE	FLOOR DRAIN C. I.	FLOOR DRAIN TILE	FOUNDATION DRAIN SEWER CONNECTED	FOUNDATION DRAIN INDEPENDENT	WASTE WATER DRAIN C. I.	WASTE WATER DRAIN TILE
8	40	—	60	—	—	—	45	—

CLEAR WATER DRAIN C. I.	CLEAR WATER DRAIN TILE	SEPTIC TANK	PRIVY	SEEPAGE PIT	ABSORPTION FIELD	BARN	SILO	ABANDONED WELL	SINK HOLE
—	—	70	—	—	95	—	—	—	—

OTHER POLLUTION SOURCES (Give description such as dump, quarry, drainage well, stream, pond, lake, etc.)

5. Well is intended to supply water for: STORE FURNITURE

6. DRILLHOLE

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
	Surface	REDRILL			

7. CASING, LINER, CURBING, AND SCREEN

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
6	UNKNOWN	Surface	126
6" New, Steel, BLK, THC 0.280		126	260

8. GROUT OR OTHER SEALING MATERIAL

Kind	From (ft.)	To (ft.)
X X	Surface	X

9. FORMATIONS

Kind	From (ft.)	To (ft.)
UNKNOWN	Surface	126
SAND	126	160
HARD PAN	160	205
GRAVEL	205	260

10. TYPE OF DRILLING MACHINE USED

☒ Cable Tool ☐ Direct Rotary ☐ Reverse Rotary
☐ Rotary – air w/drilling mud ☐ Rotary – hammer with drilling mud & air ☐ Jetting with ☐ Air ☐ Water

Well construction completed on aug 27 1974

Well is terminated 8 inches ☒ above ☐ below final grade

Well disinfected upon completion ☒ Yes ☐ No

Well sealed watertight upon completion ☒ Yes ☐ No

11. MISCELLANEOUS DATA

Yield test: 8 Hrs. at 10 GPM

Depth from surface to normal water level 135 ft.

Depth to water level when pumping 135 ft.

Water sample sent to Madison, Wis laboratory on: Sept 16 1974

Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, type of casing joints, method of finishing the well, amount of cement used in grouting, blasting, sub-surface pumprooms, access pits, etc., should be given on reverse side.

SIGNATURE: Henry Kautman Registered Well Driller

COMPLETE MAIL ADDRESS: 5100 N. 56 St. Milw. Wis

Please do not write in space below

COLIFORM TEST RESULT	GAS – 24 HRS.	GAS – 48 HRS.	CONFIRMED	REMARKS
WK 31760-2				

REV. 3–71

Well Construction Report
WISCONSIN UNIQUE WELL NUMBER IJ288

Drinking Water and Groundwater - DG/5
Department of Natural Resources, Box 7921
Madison WI 53707
Form 3300-077A

Property Owner: GARDEN GATE NURSERY			Phone #
Mailing Address: N48 W30756 HILL ST			
City: HARTLAND	State: WI	Zip Code: 53029	
County: Waukesha	Co. Permit #	Notification #	Completed: 06-22-1995

Well Constructor (Business Name): MICHAEL HARTMAN	Lic. #: 436	Facility ID # (Public Wells)	
Address: W82 N28280 MARSHALL HARTLAND WI 53029		Well Plan Approval #	
		Approval Date (mm-dd-yyyy)	
Hicap Permanent Well #	Common Well #	Specific Capacity: 0.8	

3. Well serves 1 # of NURSERY
Non-community
Heat Exchange____# of drillholes

Hicap Well ? No
Hicap Property ? No
Hicap Potable ?

1. Well Location
Town of MERTON

Fire # (if avail.)

Street Address or Road Name and Number: N48 W30756 HILL ST

Subdivision Name	Lot #	Block #

Latitude / Longitude in Decimal Degree (DD)				Method Code
43.1059 °N	-88.3586 °W			GCD013

SW	SW	Section	Township	Range
or Govt Lot #		34	8 N	18 E

2. Well Type Replacement
of previous unique well # constructed in

Reason for replaced or reconstructed well ?
OUT OF WATER

Construction Type: Drilled

4. Potential Contamination Sources - ON REVERSE SIDE

5. Drillhole Dimensions and Construction Method

Dia. (in.)	From (ft.)	To (ft.)
6	Surface	278

Upper Enlarged Drillhole / Lower Open Bedrock

- Rotary - Mud Circulation .....
- Rotary - Air .....
- Rotary - Air & Foam .....
- Drill-Through Casing Hammer
- Reverse Rotary
- Cable-tool Bit ____in. dia...
- Dual Rotary .....
- Temp. Outer Casing ____in. dia
  - Removed? ____depth ft. (If NO explain on back side)

8. Geology

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc...	From (ft.)	To (ft.)
C	CLAY	Surface	10
Y	SAND @ GRAVEL	10	50
P	HARDPAN	50	90
S	SAND	90	125
P	HARDPAN	125	145
Y	SAND @ GRAVEL	145	170
P	HARDPAN	170	250
Y	SAND @ GRAVEL	250	278

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	0 280 A 53 GRB SAWHILL STEEL WELDED	Surface	278
Dia. (in.)	Screen type, material & slot size	From (ft.)	To (ft.)

7. Grout or Other Sealing Material

Method MOUNDED

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
CRUMBLES DRILL	Surface	0	

9. Static Water Level
120 ft. below ground surface

10. Pump Test
Pumping level 180 ft. below surface
Pumping at 50 GP M for 4 Hrs.
Pumping Method ?

11. Well Is
18 in. above grade
Developed ? Yes
Disinfected ? Yes
Capped ? Yes

12. Notified Owner of need to fill & seal ?

Filled & Sealed Well(s) as needed? No
PUMP MAN TO DO

13. Constructor / Supervisory Driller	Lic #	Date Signed
MH		06-26-1995
Drill Rig Operator	**Lic or Reg #**	**Date Signed**
MA		

4a. Potential Contamination Sources Is the well located in floodplain ? No

Type	Qualifier	Distance	Type	Qualifier	Distance
Building Overhang		9	Collector Sewer - San or Storm		90
			Sewer - Building Sanitary		40

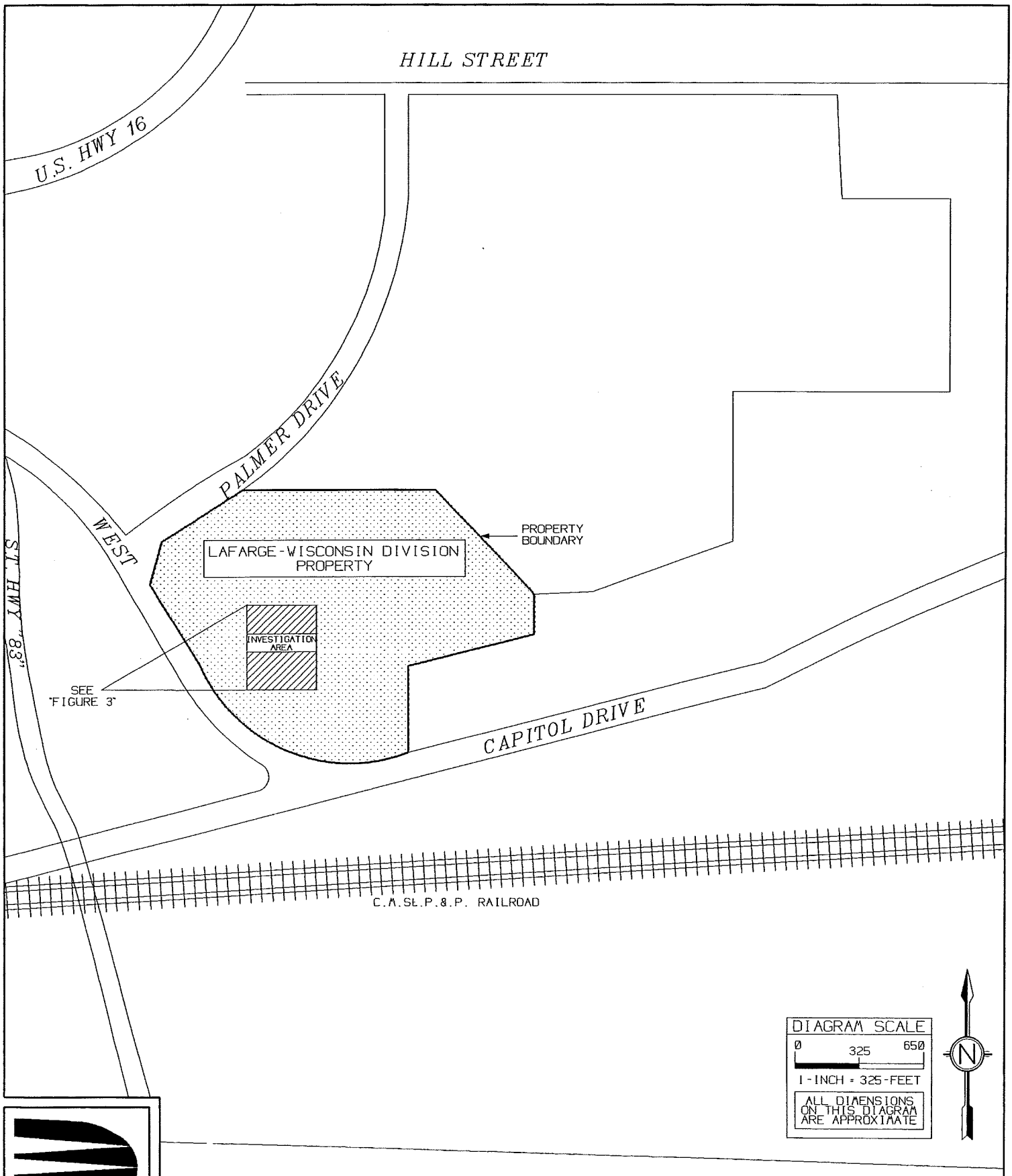
Comment:

Water Quality Text:

Water Quantity Text:

Difficulty Text:

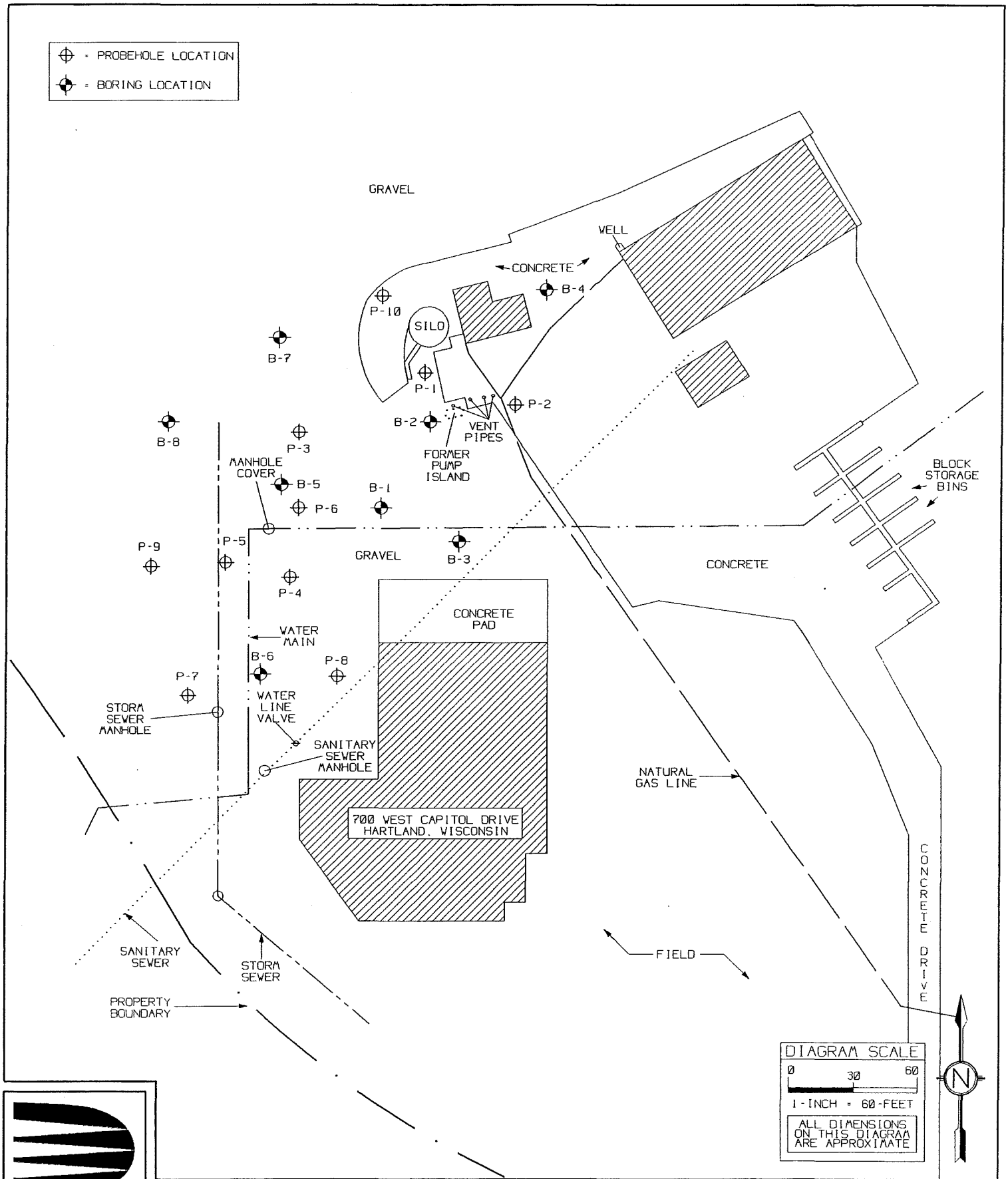
Created On: 10-10-1995 Created by: HFRC LOAD Updated On: 07-12-2019 Updated by: PARCEL_MATCH



DRAKE ENVIRONMENTAL, INC.

LAFARGE - HARTLAND REMEDIAL INVESTIGATION	PROJECT NO. J98109 PM DWF DRAWN BY JAM DATE: 11/18/98 CHKD BY DWF DATE 12-2-98 APRVD BY RKJ DATE 12-4-98	LOCATION DIAGRAM	FIGURE 2

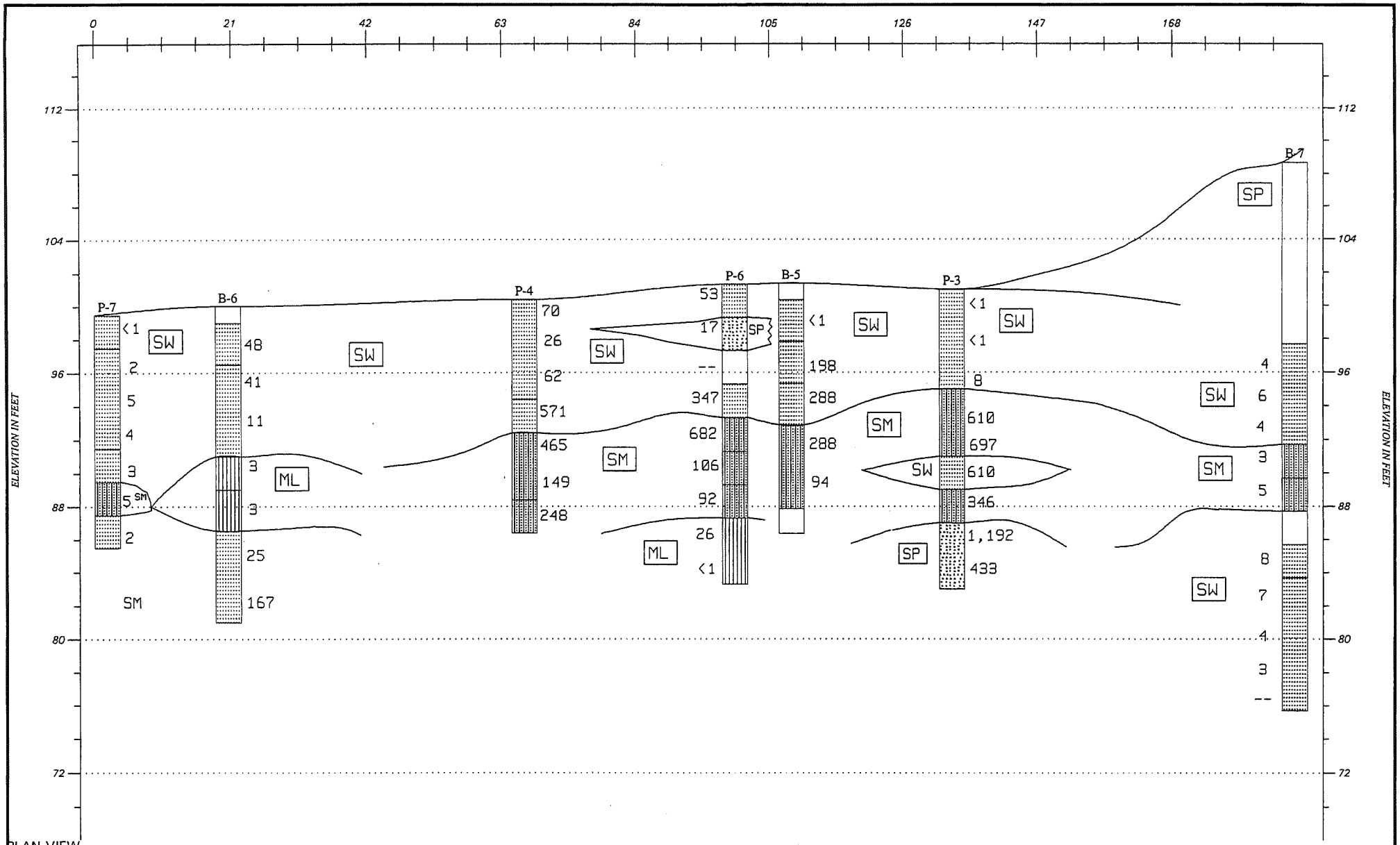
FILE: JB109A(L1)



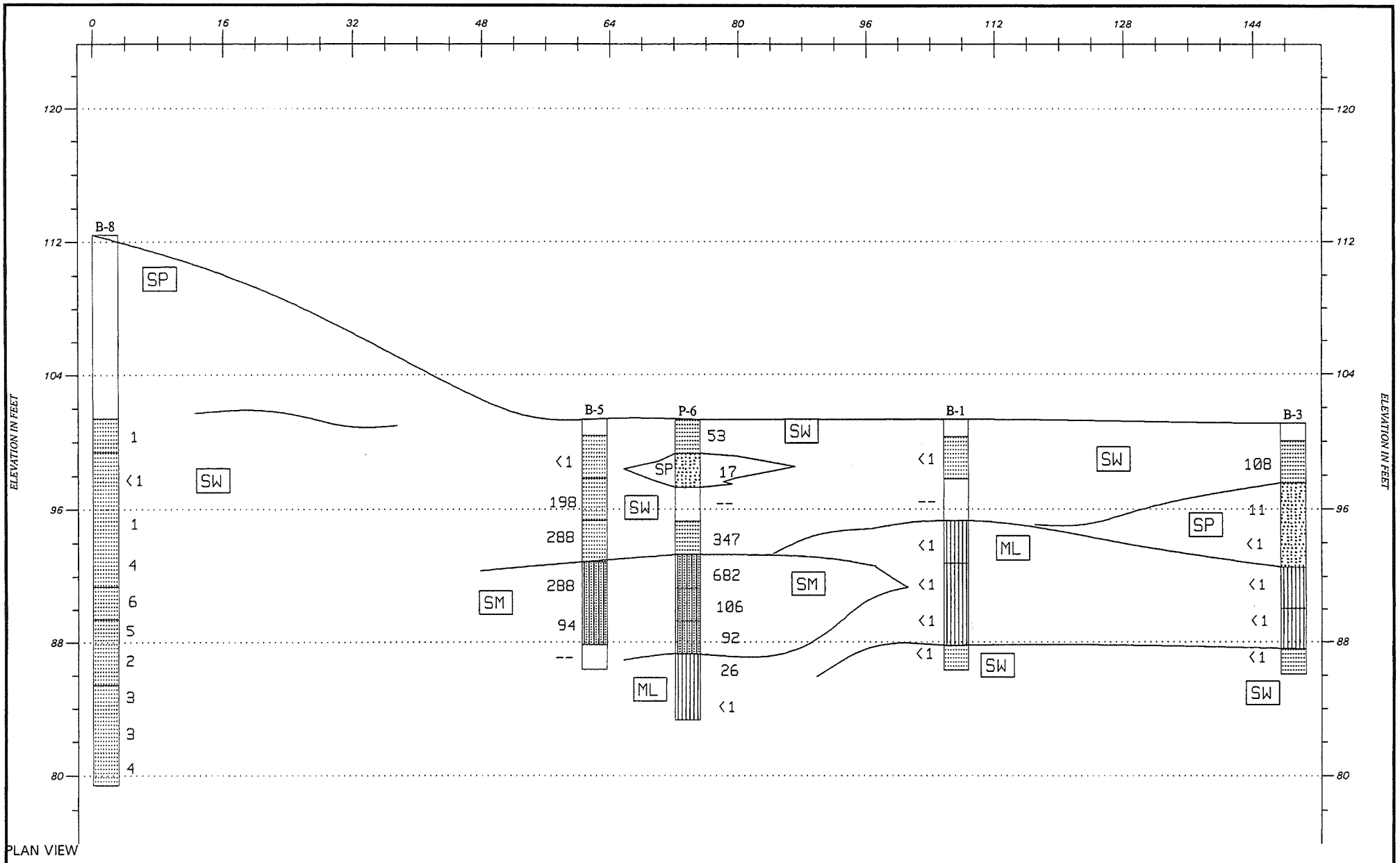
DRAKE ENVIRONMENTAL, INC.

LAFARGE - HARTLAND REMEDIAL INVESTIGATION	PROJECT NO. J98109 PM DWF DRAWN BY JMM DATE: 07/30/99 CHKD BY DWF DATE 7-21-99 APRVD BY TM DATE 9-21-99	PROBEHOLE AND BORING LOCATIONS DIAGRAM	FIGURE 4

FILE: J98109BL1/4/6)



DRAKE ENVIRONMENTAL, INC.		
GEOLOGICAL CROSS SECTION		
HORIZONTAL SCALE: 1"=(proportional)'	FIELD TECHNICIAN	DATE DRAWN
VERTICAL SCALE: 1"=8'	TJO	8/23/1999
LAFARGE - HARTLAND		
PROJECT NUMBER: J98109		FIGURE NUMBER 6



DRAKE ENVIRONMENTAL, INC.

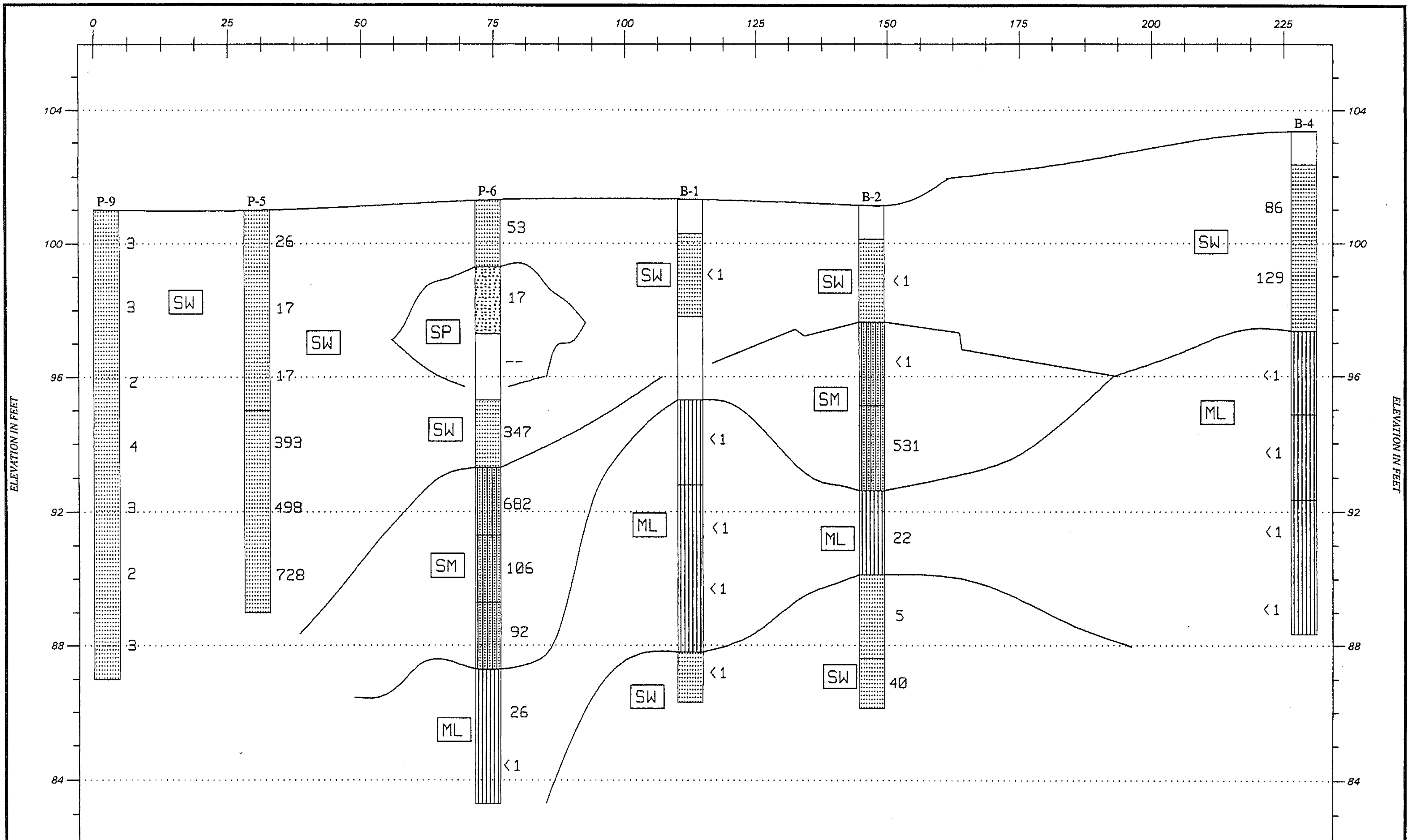
GEOLOGICAL CROSS SECTION

HORIZONTAL SCALE: 1" =(proportional)'	FIELD TECHNICIAN	DATE DRAWN
VERTICAL SCALE: 1" = 8'	TJO	8/23/1999

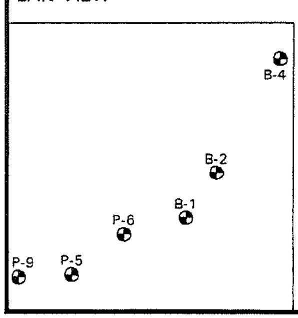
LAFARGE - HARTLAND

PROJECT NUMBER: J98109

FIGURE NUMBER 7



PLAN VIEW



DRAKE ENVIRONMENTAL, INC.

GEOLOGICAL CROSS SECTION

HORIZONTAL SCALE: 1" =(proportional)' / VERTICAL SCALE: 1" =4'	FIELD TECHNICIAN	DATE DRAWN
	TJO	8/22/1999

LAFARGE - HARTLAND

PROJECT NUMBER: J98109

FIGURE NUMBER 8

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-1
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	25 FEET NE OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0–1	1	PR	--	--	MEDIUM TO COARSE SAND WITH SILTY FINE SAND AND FINE TO COARSE GRAVEL, TRACE ROOTS - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SW	<1	
2–3	2	PR	--	--	MEDIUM TO COARSE SAND, WITH FINE SAND; FEW FINE TO COARSE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL), FINE SANDY SILT TO SILTY CLAY; FEW MEDIUM TO COARSE SAND, DAMP TO MOIST (POSSIBLE FILL)	SW	<1	
4–5	3	PR	--	--	SILT, TRACE COARSE SAND TO FINE GRAVEL - DARK YELLOWISH BROWN (10YR 4/6) - DAMP (POSSIBLE FILL)	ML	17	
6–7	4	PR	--	--	SILTY FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - GRAYISH BROWN (10YR 5/2) - DAMP, PETROLEUM ODOR (POSSIBLE FILL)	SM	*2260	
8–9	5	PR	--	--	SILTY FINE TO MEDIUM SAND, TRACE COARSE SAND, TRACE FINE GRAVEL - GRAYISH BROWN (10YR 5/2) - DAMP TO MOIST, PETROLEUM ODOR (POSSIBLE FILL)	SM	1,073	
10–11	6	PR	--	--	SILTY FINE SAND TO FINE SANDY SILT, TRACE COARSE SAND - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET, SLIGHT ODOR	SM	70	
12–13	7	PR	--	--	FINE SANDY SILT, TRACE COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - WET	ML	17	
14–15	8	PR	--	--	SILTY FINE SAND, TRACE MEDIUM AND COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST, PETROLEUM ODOR	SM	*365	
16–21					PROBEHOLE TERMINATED AT 16.0 FEET			

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-25-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX 10' DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-2
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	30 FEET EAST OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1					8 INCHES CONCRETE			
2	1	PR	--	--	SILTY FINE SAND, FEW MEDIUM TO COARSE SND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - DAMP (FILL)	SM	<1	
3								
4	2	PR	--	--	FINE SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/6) - DAMP (FILL)	SW	<1	
5								
6	3	PR	--	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - PALE BROWN (10YR 6/3) - DAMP (FILL)	SM	<1	
7								
8	4	PR	--	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - PALE BROWN (10YR 6/3) - DAMP (FILL), LITTLE RECOVERY	SM	*<1	
9					SILTY FINE SAND, FINE MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - WET, FILL	SM		
10	5	PR	--	--	FINE SANDY SILT, TRACE COARSE SAND - YELLOWISH BROWN (10YR 5/4) - WET	ML	<1	
11					FINE SANDY SILT, TRACE COARSE SAND AND FINE GRAVEL - BROWN (10YR 5/3)	ML		
12	6	PR	--	--	SILTY CLAY, TRACE SILT, TRACE COARSE SAND AND FINE GRAVEL - DARK GRAY (10YR 4/1) - MOIST TO WET	CL	*<1	
13					PROBEHOLE TERMINATED AT 13.0 FEET			
14								
15								
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-25-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX 9' DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	
CLIENT	PROJECT NUMBER		P-3
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	70 FEET WEST OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	MEDIUM TO COARSE SAND WITH SILTY FINE SAND AND FINE TO COARSE GRAVEL, TRACE ROOTS - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SW	<1	
2								
3	2	PR	--	--			<1	
4								
5	3	PR	--	--			8	
6								
7	4	PR	--	--	SILTY FINE SAND WITH MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - GRAY BROWN (10YR 5/2) - WET, PETROLEUM ODOR (FILL)	SM	610	
8								
9	5	PR	--	--			*697	
10								
11	6	PR	--	--	FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - GRAYISH BROWN (10YR 5/2) - WET, PETROLEUM ODOR (FILL)	SW	610	
12								
13	7	PR	--	--	SILTY FINE SAND, FEW MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL, TRACE FINE SANDY SILT - YELLOWISH BROWN (10YR 5/4) - WET, PETROLEUM ODOR (FILL)	SM	346	
14								
15	8	PR	--	--	PEA GRAVEL, TRACE SILTY FINE AND MEDIUM SAND - DARK GRAY TO VERY DARK GRAY (10YR 3.5/1) - WET, PETROLEUM ODOR (FILL)	SP	1,192	
16								
17	9	PR	--	--			*433	
18					PROBEHOLE TERMINATED AT 18.0 FEET			
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-25-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX 7' DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-4
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	100 FEET SW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	MEDIUM TO COARSE SAND WITH SILTY FINE SAND AND FINE TO COARSE GRAVEL, TRACE ROOTS - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SW	70	
2								
3	2	PR	--	--			26	
4								
5	3	PR	--	--			62	
6								
7	4	PR	--	--	FINE SAND WITH MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - GREYISH BROWN (10YR 5/2) - MOIST, PETROLEUM ODOR, WET	SW	*571	
8								
9	5	PR	--	--	SILTY FINE SAND, TRACE COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST, PETROLEUM ODOR (FILL)	SM	465	
10								
11	6	PR	--	--			149	
12								
13	7	PR	--	--	SILTY FINE SAND TO SANDY SILT, TRACE COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST, PETROLEUM ODOR, FILL	SM	*248	
14					PROBEHOLE TERMINATED AT 14.0 FEET			
15								
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-25-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX. DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-5
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	110 FEET SW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	MEDIUM TO COARSE SAND WITH SILTY FINE SAND AND FINE TO COARSE GRAVEL, TRACE ROOTS - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SW	26	
2								
3	2	PR	--	--			17	
4								
5	3	PR	--	--			17	
6								
7	4	PR	--	--	MEDIUM TO COARSE SAND, WITH SILTY FINE SAND AND FINE GRAVEL - GRAYISH BROWN (10YR 5/2) - MOIST TO WET, PETROLEUM ODOR (FILL)	SW	*393	
8								
9	5	PR	--	--			498	
10								
11	6	PR	--	--			*728	
12					PROBEHOLE TERMINATED AT 12.0 FEET			
13								
14								
15								
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-25-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX. DURING DRILLING	

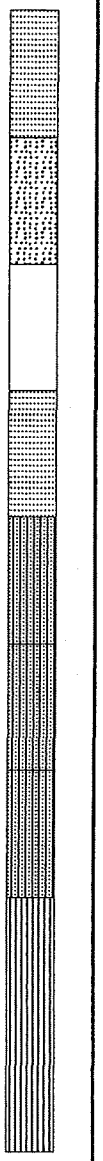
NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-6
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	80 FEET SW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID
0							
1	1	PR	--	--	MEDIUM TO COARSE SAND WITH SILTY FINE SAND AND FINE TO COARSE GRAVEL, TRACE ROOTS - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SW	53
2							
3	2	PR	--	--	FINE GRAVEL, TRACE FINE SAND - YELLOWISH BROWN (10YR 5/4) -DAMP (FILL)	SP	17
4							
5	3	PR	--	--	NO RECOVERY		--
6							
7	4	PR	--	--	FINE TO COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET, PETROLEUM ODOR (FILL)	SW	347
8							
9	5	PR	--	--	SILTY FINE SAND, TRACE MEDIUM AND COARSE SAND - YELLOWISH BROWN (10YR 5/4) - MOIST, PETROLEUM ODOR (FILL)	SM	*682
10							
11	6	PR	--	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - GRAYISH BROWN (10YR 5/2) - WET, PETROLEUM ODOR (FILL)	SM	106
12							
13	7	PR	--	--	SILTY FINE SAND, TRACE FINE SANDY SILT, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - GRAYISH BROWN (10YR 5/2) - WET, PETROLEUM ODOR (FILL)	SM	92
14							
15	8	PR	--	--	FINE SANDY SILT, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - WET	ML	26
16							
17	9	PR	--	--			*<1
18					PROBEHOLE TERMINATED AT 18.0 FEET		
19							
20							
21							



NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-25-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX 10' DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-7
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	170 FEET SW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	MEDIUM TO COARSE SAND, WITH SILTY FINE SAND ND FINE TO COARSE GRAVEL, TRACE ROOTS - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SW	1	
2								
3	2	PR	--	--	FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL)	SW	2	
4								
5	3	PR	--	--			5	
6								
7	4	PR	--	--			*4	
8								
9	5	PR	--	--	FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL, BLACK SILTY SAND LAYER - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL)	SW	3	
10								
11	6	PR	--	--	FINE SILTY SAND, TRACE COARSE SAND AND FINE GRAVEL - LIGHT YELLOWISH BROWN (10YR 6/4) - MOIST (FILL)	SM	5	
12								
13	7	PR	--	--	FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - WET (FILL)	SW	2	
14								
15					PROBEHOLE TERMINATED AT 14.0 FEET			
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-26-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX 12' DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-8
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	130 FEET SW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - DARK YELLOWISH BROWN (10YR 4/4) - MOIST (FILL)	SW	*55	
2								
3	2	PR	--	--	FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL)	SW	8	
4								
5	3	PR	--	--			4	
6								
7	4	PR	--	--	FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL), LITTLE RECOVERY	SW	*4	
8								
9	5	PR	--	--			3	
10								
11	6	PR	--	--	FINE SILTY SAND TO SANDY SILT, TRACE MEDIUM AND COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	SM	2	
12								
13	7	PR	--	--	SILTY FINE TO MEDIUM SAND, TRACE COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - WET, FILL	SM	3	
14					PROBEHOLE TERMINATED AT 14.0 FEET			
15								
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-26-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX 11' DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-9
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	150 FEET SW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - DAMP TO MOIST (FILL)	SW	3	
2								
3	2	PR	--	--			3	
4								
5	3	PR	--	--			2	
6								
7	4	PR	--	--			*4	
8								
9	5	PR	--	--			3	
10								
11	6	PR	--	--			2	
12								
13	7	PR	--	--			3	
14					PROBEHOLE TERMINATED AT 14.0 FEET			
15								
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-26-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX. DURING DRILLING	

NOTES

*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	PROBE NUMBER
LAFARGE - HARTLAND	TJO	DWF	P-10
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	65 FEET NW OF FORMER UST		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	PR	--	--	FINE TO MEDIUM SAND, TRACE COARSE SAND AND FINE GRAVEL - GRAY (10YR 5/1) - WET, CEMENT ODOR (FILL)	SW	351	
2								
3	2	PR	--	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - GRAY (10YR 6/1) - WET, CEMENT ODOR (FILL)	SM	381	
4								
5	3	PR	--	--			483	
6								
7	4	PR	--	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - GRAY (10YR 6/1) - WET, CEMENT AND PETROLEUM ODOR (FILL)	SM	*723	
8								
9	5	PR	--	--	FINE SILTY SAND, FEW MEDIUM TO COARSE SAND AND FINE GRAVEL - VERY DARK GRAYISH BROWN (10YR 3/2) - WET, PETROLEUM ODOR (FILL)	SM	767	
10								
11	6	PR	--	--	FINE TO MEDIUM SILTY SAND, TRACE COARSE SAND - GRAY (10YR 5/1) - WET, PETROLEUM ODOR (FILL)	SM	307	
12								
13	7	PR	--	--			398	
14								
15	8	PR	--	--			*556	
16					PROBEHOLE TERMINATED AT 16.0 FEET			
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 1-26-99	DRILL RIG: Geoprobe Model 5400
DRILLED BY: UNDERGROUND POWER CORP.	
BORING DRILLED WITH GEOPROBE 2' INTERVALS	
PROBEHOLE ABANDONED WITH BENTONITE	
GROUND SURFACE AT 0.0 DURING DRILLING	
GROUNDWATER AT APPROX. DURING DRILLING	

NOTES

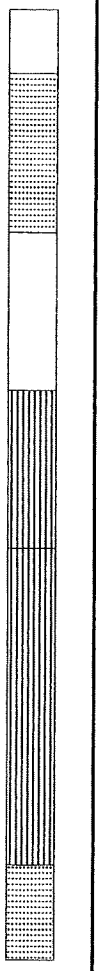
*SUBMITTED FOR LABORATORY ANALYSIS

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	B-1
CLIENT: LAFARGE - WISCONSIN DIVISION	PROJECT NUMBER: J98109		
LOCATION: 700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	LOCATION DESCRIPTION: 75'N, 4'E OF NW CORNER OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID
0							
1							
2	1	SS	22	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL)	SW	<1
3							
4	2	SS	--	--	NO RECOVERY		--
5							
6	3	SS	15	--	FINE SANDY SILT TO SILTY SAND, TRACE MEDIUM SAND, FINE TO MEDIUM GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	ML	*<1
7							
8							
9	4	SS	33	--	FINE SANDY SILT TO SILTY SAND, TRACE MEDIUM SAND, FINE TO MEDIUM GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL)	ML	<1
10							
11	5	SS	31	--			<1
12							
13							
14	6	SS	25	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - MOIST	SW	<1
15					BOREHOLE TERMINATED AT 15.0 FEET		
16							
17							
18							
19							
20							
21							

GRAPHIC



NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-8-99 | DRILL RIG: FOREMOST MOBILE

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

BOREHOLE BACKFILLED WITH BENTONITE

GROUND SURFACE AT 101.30 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	B-2
CLIENT: LAFARGE - WISCONSIN DIVISION	PROJECT NUMBER: J98109		
LOCATION: 700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	LOCATION DESCRIPTION: 105'N, 25'E OF NW CRNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	SS	72	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL)	SW	<1	
2								
3								
4	2	SS	19	--	SILTY FINE SAND TO FINE SANDY SILT, TRACE MEDIUM TO COARSE SAND, TRACE COARSE GRAVEL - YELLOWISH BROWN (10YR 5/4) - DAMP (FILL)	SM	<1	
5								
6	3	SS	20	--	SILTY FINE SAND TO FINE SANDY SILT, TRACE MEDIUM TO COARSE SAND, TRACE COARSE GRAVEL - YELLOWISH BROWN (10YR 5/4) - DAMP (FILL), SLIGHT ODOR, VERY LITTLE RECOVERY	SM	531	
7								
8	4	SS	16	--	FINE SANDY SILT, TRACE MEDIUM TO COARSE SAND - YELLOWISH BROWN (10YR 5/4) - MOIST TO WET (FILL)	ML	*22	
9								
10	5	SS	18	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - WET (FILL)	SW	5	
11								
12								
13	6	SS	16	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - WET (FILL), SLIGHT ODOR	SW	*40	
14								
15					BOREHOLE TERMINATED AT 15.0 FEET			
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-8-99 | DRILL RIG: FOREMOST MOBILE

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

BOREHOLE BACKFILLED WITH BENTONITE

GROUND SURFACE AT 101.13 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 15' WITH 10' SCREEN
DNR UID #JN379

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	B-3
CLIENT: LAFARGE - WISCONSIN DIVISION	PROJECT NUMBER: J98109		
LOCATION: 700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	LOCATION DESCRIPTION: 48'N, 38'E OF NW CORNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1	1	SS	5	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - WET (FILL)	SW	*108	
2								
3								
4	2	SS	1	--	MEDIUM GRAVEL, WET (FILL)	SP	11	
5								
6								
7	3	SS	1	--			<1	
8								
9	4	SS	21	--	FINE SANDY SILT TO SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - DAMP (FILL)	ML	<1	
10								
11								
12	5	SS	41	--	FINE SANDY SILT TO SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE TO COARSE GRAVEL - YELLOWISH BROWN (10YR 5/4) - WET (FILL)	ML	<1	
13								
14	6	SS	41	--	FINE SAND, TRACE MEDIUM TO COARSE GRAVEL, DAMP (FILL)	SW	<1	
15					BOREHOLE TERMINATED AT 15.0 FEET			
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-8-99 | DRILL RIG: FOREMOST MOBILE

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

GROUND SURFACE AT 101.06 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 15' WITH 10' SCREEN
DNR UID #JN378

DRAKE ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	
CLIENT	PROJECT NUMBER		B-4
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	15'N OF NE CORNER OF SILO BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1								
2	1	SS	47	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL), COARSE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST (FILL), CEMENT ODOR	SW	86	
3								
4	2	SS	27	--			*129	
5								
6								
7	3	SS	34	--	FINE SANDY SILT, TRACE SILTY CLAY, TRACE MEDIUM TO COARSE SAND, TRACE FINE TO MEDIUM GRAVEL - BROWN (10YR 5/3) - DAMP (FILL)	ML	<1	
8								
9	4	SS	9	--	FINE SANDY SILT, TRACE SANDY CLAY, TRACE MEDIUM SAND AND FINE GRAVEL - BROWN (10YR 5/3) - WET	ML	<1	
10								
11								
12	5	SS	14	--	FINE SANDY SILT TO SILTY CLAY, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL - BROWN (10YR 5/3) - WET	ML	<1	
13								
14	6	SS	21	--			<1	
15					BOREHOLE TERMINATED AT 15.0 FEET			
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-8-99 | DRILL RIG: FOREMOST MOBILE

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

GROUND SURFACE AT 103.36 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 15' WITH 10' SCREEN
DNR UID #JN377

DRAKE ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	B-5
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	75'N, 45'W OF NW CORNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1								
2	1	SS	38	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - DAMP	SW	<1	
3								
4	2	SS	38	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - MOIST	SW	198	
5								
6	3	SS	9	--	FINE TO COARSE SAND, FINE TO MEDIUM GRAVEL (PEA GRAVEL) - YELLOWISH BROWN (10YR 5/4) - MOIST, ODOR	SW	*288	
7								
8								
9	4	SS	3	--	FINE SILTY SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - BROWN (10YR 5/3) - WET (FILL), ODOR	SM	288	
10								
11	5	SS	28	--			*94	
12								
13								
14	6	SS	22	--	NO RECOVERY		--	
15					BOREHOLE TERMINATED AT 15.0 FEET			
16								
17								
18								
19								
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-8-99 | DRILL RIG: FOREMOST MOBILE

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

GROUND SURFACE AT 101.37 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 15' WITH 10' SCREEN
DNR UID #JK522

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	
CLIENT	PROJECT NUMBER		B-6
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	15'S, 55'W OF NW CORNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0								
1								
2	1	SS	30	--	FINE TO MEDIUM SAND, TRACE COARSE SAND, TRACE FINE GRAVEL - DARK BROWN (10YR 4/3) - DAMP (FILL)	SW	48	
3								
4	2	SS	30	--	FINE TO MEDIUM SAND, TRACE COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - DAMP (FILL)	SW	41	
5								
6	3	SS	51	--			11	
7								
8								
9	4	SS	16	--	FINE SANDY SILT, TRACE COARSE SAND TO FINE GRAVEL - BROWN (10YR 5/3) - MOIST TO WET	ML	*3	
10								
11	5	SS	18	--	FINE SANDY SILT TO SILTY FINE SAND, TRACE COARSE SAND AND FINE GRAVEL - BROWN (10YR 5/3) - 3 INCH SEAM, SILT, TRACE SILTY CLAY - DARK GRAY (10YR 4/1) - MOIST	ML	3	
12								
13								
14	6	SS	28	--	FINE SAND, MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - BROWN (10YR 5/3) - MOIST	SW	25	
15								
16								
17	7	SS	30				*167	
18								
19					BOREHOLE TERMINATED AT 19.0 FEET			
20								
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-26-99 | DRILL RIG: FOREMOST MOBILE

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

GROUND SURFACE AT 100.02 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 19' WITH 10' SCREEN
DNR UID #JK523

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	
CLIENT	PROJECT NUMBER		B-7
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	145'N, 46'W OF NW CRNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0					BLIND DRILLED TO 11.0 FEET			
11	1	SS	9	--	FINE SAND TO SILTY FINE SAND WITH MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST	SW	4	
13	2	SS	10	--			6	
15	3	SS	26	--			4	
17	4	SS	43	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST	SM	3	
19	5	SS	26	--	SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND - PALE BROWN (10YR 6/3) - MOIST	SM	5	
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-26-99 | DRILL RIG: TRACKED ATV

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

GROUND SURFACE AT 108.71 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 33' WITH 15' SCREEN
DNR UID #JK524

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	B-7
CLIENT	PROJECT NUMBER		
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	145'N, 46'W OF NW CRNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
21					NO RECOVERY			
22	6	SS	35	--			--	
23								
24	7	SS	18	--	FINE SAND TO SILTY FINE SAND WITH MEDIUM TO COARSE SAND AND FINE GRAVEL - YELLOWISH BROWN (10YR 5/4) - MOIST	SW	*8	
25								
26	8	SS	32	--	FINE SAND, TRACE MEDIUM TO COARSE SAND, WET	SW	7	
27								
28	9	SS	14	--			4	
29								
30	10	SS	12	--			*3	
31								
32	11	SS	--	--			--	
33					BOREHOLE TERMINATED AT 33.0 FEET			
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	
CLIENT	PROJECT NUMBER		B-8
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	105'N, 98'W OF NW CRNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
0					BLIND DRILLED TO 11.0 FEET			
11	1	SS	57	--	FINE SAND WITH MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - LIGHT GRAY (10YR 7/2) - DAMP	SW	1	
13	2	SS	68	--	FINE SAND TO FINE SILTY SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - BROWN (10YR 5/3) - DAMP	SW	<1	
15	3	SS	53	--			1	
17	4	SS	51	--			4	
19	5	SS	49	--			*6	
21								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

DRILLING DATE: 3-26-99 | DRILL RIG: TRACKED ATV

DRILLED BY: BRIOHN ENVIRONMENTAL CONTRACTORS

BORING DRILLED WITH 4.25 INCH I.D. HSA

GROUND SURFACE AT 112.42 DURING DRILLING

NOTES

*SAMPLE SUBMITTED FOR LABORATORY ANALYSIS
SS = SPLIT SPOON
WELL SET AT 33' WITH 15' SCREEN
DNR UID #JK525

DRAKE
ENVIRONMENTAL, INC.

PROJECT NAME	FIELD TEC	DRAWN BY	BORING NUMBER
LAFARGE - HARTLAND	TJO	DWF	
CLIENT	PROJECT NUMBER		B-8
LAFARGE - WISCONSIN DIVISION	J98109		
LOCATION	LOCATION DESCRIPTION		
700 W CAPITOL DR, HARTLAND, WI NW 1/4 NW 1/4 SEC 3 T7N R18E	105'N, 98'W OF NW CRNR OF BLDG		

DEPTH	SAMPLE	TYPE	N	QP	DESCRIPTION	USCS	PID	GRAPHIC
21								
22	6	SS	50	--	FINE SAND, TRACE MEDIUM TO COARSE SAND, TRACE FINE GRAVEL - BROWN (10YR 5/3) - MOIST, LITTLE RECOVERY	SW	5	
23								
24	7	SS	52	--	FINE TO MEDIUM SAND WITH COARSE SAND, TRACE FINE GRAVEL - BROWN (10YR 5/3) - MOIST	SW	2	
25								
26	8	SS	58	--			3	
27								
28	9	SS	54	--	FINE SAND, TRACE MEDIUM AND COARSE SAND - BROWN (10YR 5/3) - WET	SW	3	
29								
30	10	SS	--	--			*4	
31								
32	11	SS	--	--			--	
33					BOREHOLE TERMINATED AT 33.0 FEET			
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								

NOTE: THE STRATIFICATION LINES ARE APPROXIMATE BOUNDARIES. ACTUAL TRANSITION MAY BE GRADUAL.

GESTRA

191 W. Edgerton Ave
Milwaukee, WI 53207
(414)933-7444

Report On: Proctor

Lab No: 20-06843
Report No: 20-06843
Page 1 of 1

Project No: 20072-40 **Cust No:** 0111

Client: Musson Brothers, Inc.
Bob Draths
1522 Pearl St.
Waukesha, WI 53186

Project: Sunnyslope Dr. Storm Sewer, Sanitary Sewer and Water Main.

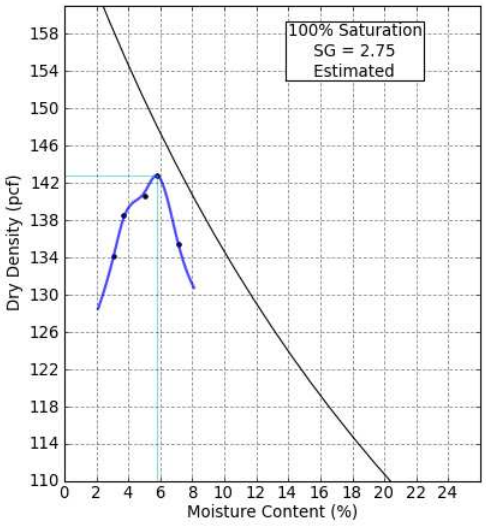
Engineer: Ruekert Mielke

Location: Fill Site

Material: Trench Spoils

Report Date: 08/11/2020

Sample Date: 08/11/2020
Sampled By: Max Piehl



% Moisture		Dry Density Lbs./Cu.Ft.	
3.1		134.1	
3.7		138.6	
5.0		140.6	
5.8		142.8	
7.1		135.5	
5.8	Optimum	142.8	Maximum

Color: Brown
Description: sandy gravel

Desc of Rammer:Mechanical
Preparation Method:Dry
Oversized Material:

Test Method (As Applicable):AASHTO T-180, AASHTO T-99, ASTM D-1557, ASTM D-1559, ASTM D-2041, ASTM D-558, ASTM D-698 Method-C

Orig: Musson Brothers, Inc. Attn: Bob Draths
(1-ec copy)
1-ec Ruekert Mielke Attn: Peter Gesch
1-cc Laboratory

Respectfully Submitted,

Andrew Davis, Project Manager

GESTRA Engineering, Inc.
191 W. Edgerton Avenue
Milwaukee, WI 53207
Phone 414-933-7444
Fax 414-933-7844

FIELD DENSITY REPORT

General Information

Project Name:	Sunnyslope Drive	Report to:	City of Hartland	Page:	1 of 1
Project Number:	20072-40	Contractor:	Musson Brothers	Date:	8/4/2020
Project Location:	Hartland, WI	Technician:	Max Piehl	Total hrs on Job:	1.3
Proctor Type:	Modified ASTM D1557	Time Arrive:	11:45 AM	Travel Time:	1.2
Req.Compaction:	95%	Time Depart:	1:05 PM	Milage (R/T):	64

Test Locations:

Test #	General Test Area	Reference	Distance from Ref (ft) N/S	Distance from Ref (ft) E/W	Elevation (ft)	Rod Depth (in)
1	Fill Site	SW Corner of Site				6
2	Fill Site	NE Corner of Site				6
3	Fill Site	E Side of Site				6

Test Results:

Test #	Proctor Number	Field Moisture (%)	Moisture Difference (%)	Wet Density (lb/ft³)	Dry Density (lb/ft³)	Compaction (%)	Pass / Fail	Retest Number
1	1	8.1	2.3	150.9	139.5	98%	Pass	
2	1	8.8	3.0	148.0	136.0	95%	Pass	
3	1	6.7	0.9	144.2	135.1	95%	Pass	

Nuclear Gauge & Proctor Information

Brand:	CPN	Serial Number:	8972	Standard Density Count:	
Model:	MC1DRP	Test Mode:	Direct	Standard Moisture Count:	

Proctor #	Soil Description	Max Dry Density (lb/ft³)	Gravel Content (%)	Optimum Moisture (%)
1	Spoils from Sunnyslope Dr.	142.8		5.8

Remarks:

SG = Subgrade

Reviewed by: A. Davis

SCALE IN FEET
0 40' 80'

PRELIMINARY NOT FOR CONSTRUCTION

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

NO	REVISION DESCRIPTION	DATE

Payne+Dolan
A WALBEC COMPANY
www.walbecgroup.com
(920) 757-7559

PROJECT
Hartland Apartments
700 W. Capital Drive
Hartland, WI

CLIENT
Three Leaf Partners
504 W. Juneau Ave
Milwaukee, WI 53203

Seal

SHEET TITLE
Soil Testing 1 of 2

Drawing Scale: 1 : 40
Drawn:
Checked:
P&D Project No: 490683
Sheet No.

Apr 28, 2023 – 1:50pm
S:\Design & Construction Services\080-C3D\Mandel Group\Hartland Apartments\10 – SURVEY\Hartland Boring Locations Exhibit.dwg

PRELIMINARY
NOT FOR
CONSTRUCTION

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 250-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

NO	REVISION DESCRIPTION	DATE

Payne+Dolan
A WALBEC COMPANY
www.walbecgroup.com
(920) 757-7559

PROJECT
Hartland Apartments
700 W Capitol Drive
Village of Hartland, WI

CLIENT
Three Leaf Partners
504 W Juneau Ave
Milwaukee, WI 53203

Seal

SHEET TITLE
Soil Testing 2 of 2

Drawing Scale: 1 : 40
Drawn:
Checked:
P&D Project No: 490686
Sheet No.

Apr 28, 2023 - 1:50pm
S:\Design & Construction Services\080-C30\Mandel Group\Hartland Apartments\10 - SURVEY\Hartland Boring Locations Exhibit.dwg

Appendix C

Laboratory Reports

- Modified Proctor (D1557) & Grain Size Analysis (D6913)
  - TP-1/TP-2 - composite
  - TP-3
  - TP-5
  - B6/B7 - composite (Grain Size Analysis below)
- Grain Size Analysis (D6913)
  - TP-6
  - TP-9
  - B1
  - B2 (including Atterberg Limits (D4318)
  - B3
  - B4
  - B5
  - B6
  - B7
  - B8
  - B9
  - B10
  - B11
  - B12
  - B13
  - B14
  - B15
  - B16
  - B17
  - B18
  - B19
- General Notes
- USCS Description

Material Test Report

Report #: CSPL-000001-00

West Allis
2135 S. 116th Street
West Allis, WI 53227
Phone: 888-436-8378
Fax: 414-321-8359

Client:

Three Leaf Partners
504 W Juneau Avenue
Milwaukee, WI 53203

Project:

7708
Hartland Quarry Apartments
700/701 Capitol Drive
Hartland, WI

Sample Information

Sample Date:	04/17/2023
Sample No:	7157
Source:	Jobsite
Supplier:	Client
Sampled By:	Michael Frede
Sample From:	Test Pit
Sampling Method:	Not Provided
Field ID:	TP-1 + TP-2 Combined
Application:	Test Pit
Visual Description:	Light Brown Silty Sand with few Gravel
Specification:	

Sieve Analysis Data

ASTM C136/C117

Sieve Size	% Passing	Upper/Lower Limits
2 in (50 mm)	100.0	
1-1/2 in (37.5 mm)	100.0	
1-1/4 in (31.75 mm)	93.7	
1 in (25 mm)	91.7	
3/4 in (19 mm)	86.4	
1/2 in (12.5 mm)	79.5	
3/8 in (9.5 mm)	75.3	
No 4 (4.75 mm)	67.2	
No 10 (2 mm)	60.9	
No 20 (850 µm)	55.5	
No 40 (425 µm)	47.5	
No 60 (250 µm)	38.1	
No 100 (150 µm)	30.1	
No 140 (106 µm)	26.3	
No 200 (75 µm)	23.6	

Test Completed Date: 04/21/2023

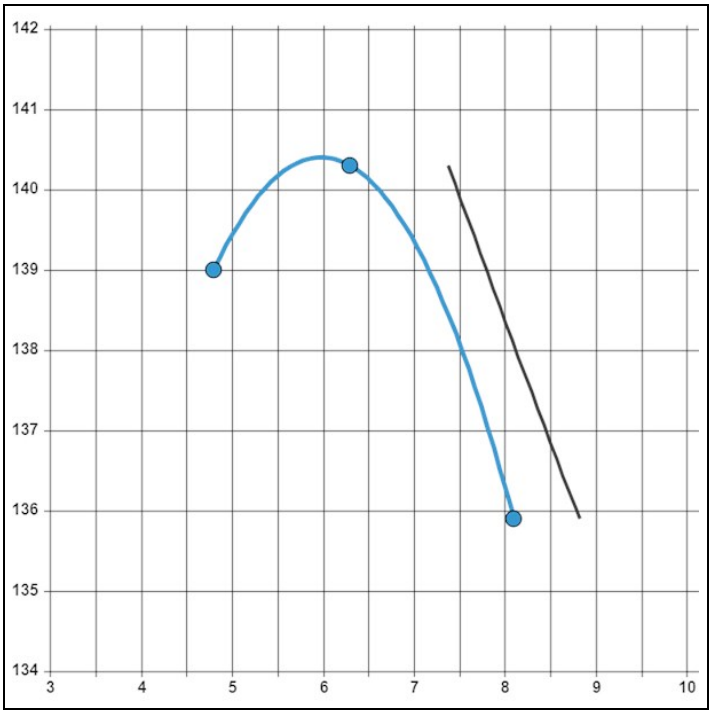
Test Completed By: Abdel Deif

Laboratory Compaction Data (Proctor)

ASTM D1557

Maximum Dry Density (lb/ft³): **140.4**

Optimum Moisture (%): **6.0**



Compaction Method:	B (ASTM D1557)
Type of Rammer:	Manual
Est. Specific Gravity:	2.70
Oversize Correction Needed:	Yes

Plasticity Details

ASTM D4318

Liquid Limit (LL): **Plastic Limit (PL):**

Plasticity Index (PI):

Imtiaz Ahmed, Laboratory Manager
Apr 27, 2023

Material Test Report

Report #: CSPL-000002-00

West Allis
2135 S. 116th Street
West Allis, WI 53227
Phone: 888-436-8378
Fax: 414-321-8359

Client:

Three Leaf Partners
504 W Juneau Avenue
Milwaukee, WI 53203

Project:

7708
Hartland Quarry Apartments
700/701 Capitol Drive
Hartland, WI

Sample Information

Sample Date:	04/17/2023
Sample No:	7158
Source:	Jobsite
Supplier:	Client
Sampled By:	Michael Frede
Sample From:	Test Pit
Sampling Method:	Not Provided
Field ID:	TP-3
Application:	Test Pit
Visual Description:	Brown Sand and Gravel, trace Silt
Specification:	

Sieve Analysis Data

ASTM C136/C117

Sieve Size	% Passing	Upper/Lower Limits
2 in (50 mm)	100.0	
1-1/2 in (37.5 mm)	100.0	
1-1/4 in (31.75 mm)	93.4	
1 in (25 mm)	90.7	
3/4 in (19 mm)	84.0	
1/2 in (12.5 mm)	75.2	
3/8 in (9.5 mm)	69.6	
No 4 (4.75 mm)	57.0	
No 10 (2 mm)	47.6	
No 20 (850 µm)	40.3	
No 40 (425 µm)	32.0	
No 60 (250 µm)	23.0	
No 100 (150 µm)	17.3	
No 140 (106 µm)	14.9	
No 200 (75 µm)	12.6	

Test Completed Date: 04/25/2023

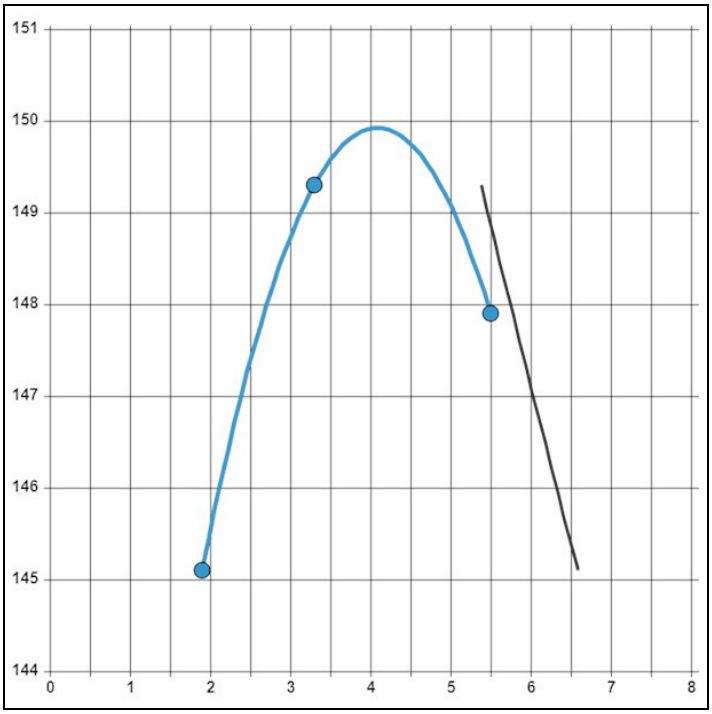
Test Completed By: Abdel Deif

Laboratory Compaction Data (Proctor)

ASTM D1557

Maximum Dry Density (lb/ft³): **150.0**

Optimum Moisture (%): **4.1**



Compaction Method:	C (ASTM D1557)
Type of Rammer:	Manual
Est. Specific Gravity:	2.75
Oversize Correction Needed:	Yes

Plasticity Details

ASTM D4318

Liquid Limit (LL): **Plastic Limit (PL):**

Plasticity Index (PI):

Imtiaz Ahmed, Laboratory Manager
Apr 27, 2023

Material Test Report

Report #: CSPL-000003-00

West Allis
2135 S. 116th Street
West Allis, WI 53227
Phone: 888-436-8378
Fax: 414-321-8359

Client:

Three Leaf Partners
504 W Juneau Avenue
Milwaukee, WI 53203

Project:

7708
Hartland Quarry Apartments
700/701 Capitol Drive
Hartland, WI

Sample Information

Sample Date:	04/17/2023
Sample No:	7159
Source:	Jobsite
Supplier:	Client
Sampled By:	Michael Frede
Sample From:	Test Pit
Sampling Method:	Not Provided
Field ID:	TP-5
Application:	Test Pit
Visual Description:	Brown Silty Sand with few Gravel
Specification:	

Sieve Analysis Data

ASTM C136/C117

Sieve Size	% Passing	Upper/Lower Limits
2 in (50 mm)	100.0	
1-1/2 in (37.5 mm)	100.0	
1-1/4 in (31.75 mm)	97.6	
1 in (25 mm)	95.1	
3/4 in (19 mm)	92.8	
1/2 in (12.5 mm)	88.6	
3/8 in (9.5 mm)	85.6	
No 4 (4.75 mm)	79.3	
No 10 (2 mm)	73.6	
No 20 (850 µm)	68.2	
No 40 (425 µm)	60.0	
No 60 (250 µm)	43.6	
No 100 (150 µm)	24.4	
No 140 (106 µm)	17.0	
No 200 (75 µm)	12.4	

Test Completed Date: 04/24/2023

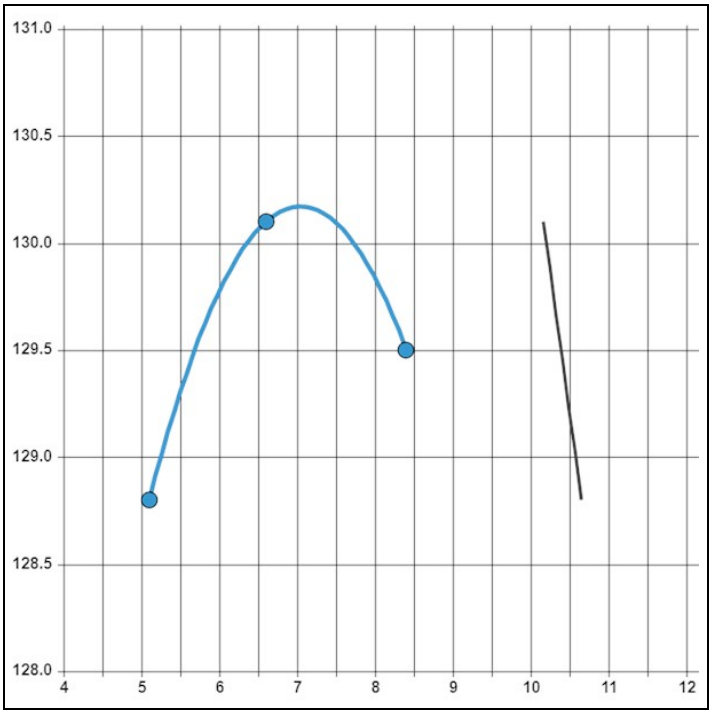
Test Completed By: Abdel Deif

Laboratory Compaction Data (Proctor)

ASTM D1557

Maximum Dry Density (lb/ft³): **130.2**

Optimum Moisture (%): **7.1**



Compaction Method:	A (ASTM D1557)
Type of Rammer:	Manual
Est. Specific Gravity:	2.65
Oversize Correction Needed:	Yes

Plasticity Details

ASTM D4318

Liquid Limit (LL): **Plastic Limit (PL):**

Plasticity Index (PI):

Imtiaz Ahmed, Laboratory Manager
Apr 27, 2023

Laboratory Compaction Report

ASTMD1557/AASHTOT180

Report #: LCR-000001-00

West Allis
2135 S. 116th Street
West Allis, WI 53227
Phone: 888-436-8378
Fax: 414-321-8359

Client:

Three Leaf Partners
504 W Juneau Avenue
Milwaukee, WI 53203

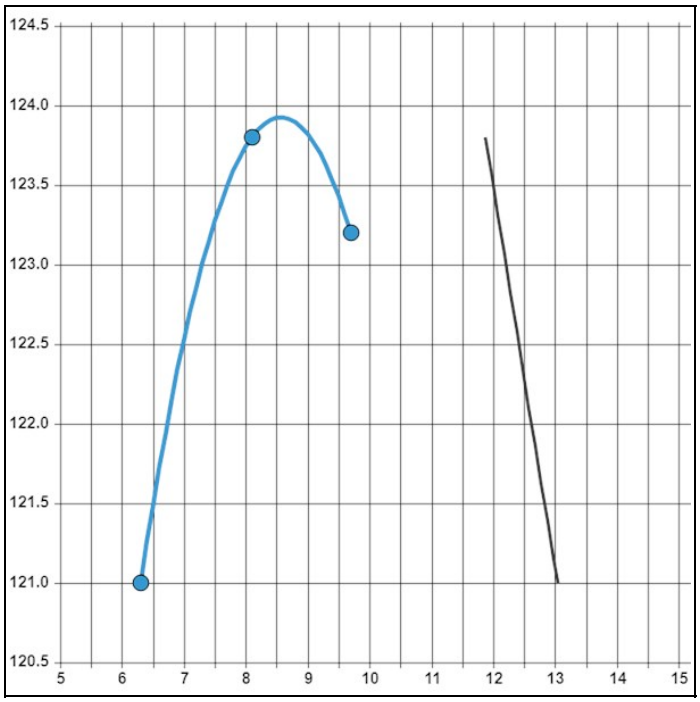
Project:

7708
Hartland Quarry Apartments
700/701 Capitol Drive
Hartland, WI

Sample Information

Sample Date:	04/18/2023	**Sample Number:**	7190
Sample From:	Test Pit	**Field ID:**	Bluff 6 + 7 Combined
Sample Location :	Onsite	**Sampled By:**	Michael Frede

Test Results



Sample Photo

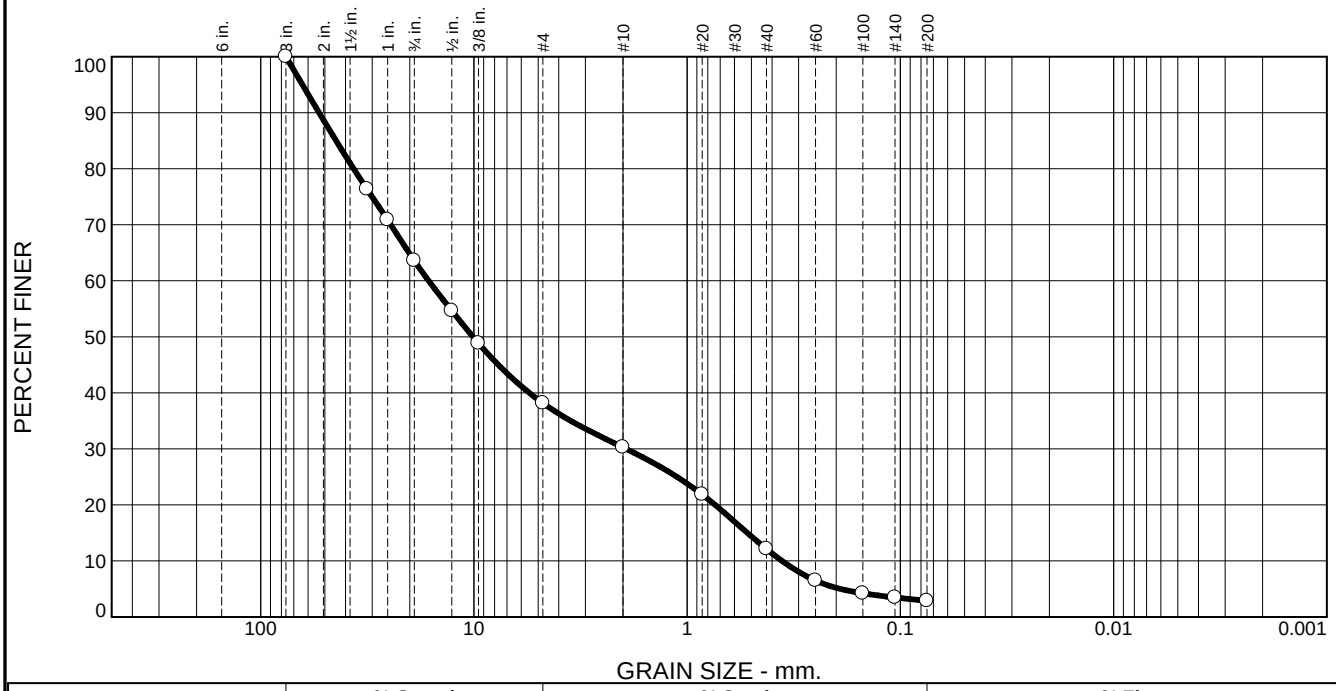
Oversize Correction Needed:	Yes
Maximum Dry Density (lb/ft³):	**123.9**
Optimum Moisture (%):	**8.5**

Visual Description:	Dark Brown Silty Clay with Organic
Compaction Method Used:	A (ASTM D1557)
Type of Rammer Used:	Manual
Sp. Gravity (Est):	2.60

Test Date:	04/25/2023	**Lab Technician:**	Abdel Deif

Imtiaz Ahmed, Laboratory Manager
Apr 27, 2023

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	36.4	25.4	7.9	18.2	9.2	2.9	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	76.4		
1"	70.9		
3/4"	63.6		
1/2"	54.7		
3/8"	48.9		
#4	38.2		
#10	30.3		
#20	21.9		
#40	12.1		
#60	6.5		
#100	4.2		
#140	3.5		
#200	2.9		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 53.2485 D_{85}= 44.3097 D_{60}= 16.3112
D_{50}= 10.1019 D_{30}= 1.9347 D_{15}= 0.5218
D_{10}= 0.3589 C_u= 45.45 C_c= 0.64

Remarks

F.M.=5.82

Date Received: 4/17/23 **Date Tested:** 4/27/23

Tested By: Luke Emery

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: TP **Depth:** Onsite **Date Sampled:** 4/17/23

Sample Number: 6

GeoTest, Inc.

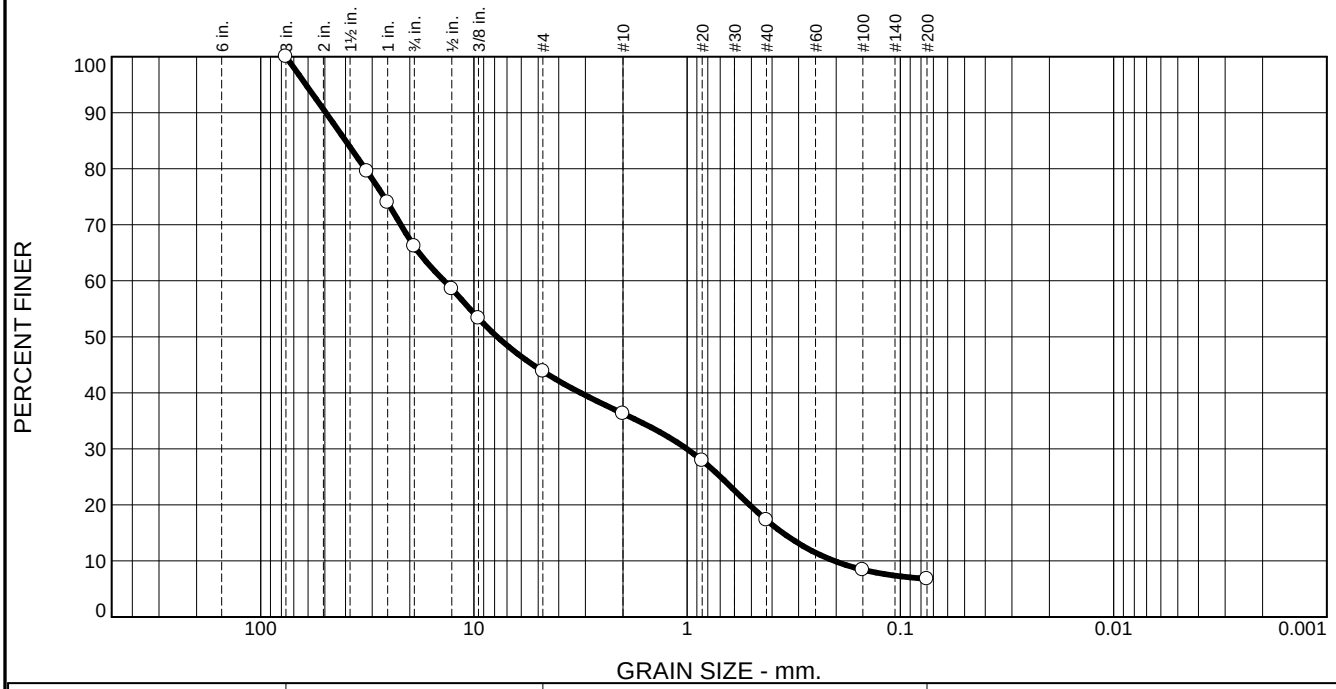
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7160-6836

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	33.8	22.4	7.5	19.0	10.5	6.8	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	79.5		
1"	74.0		
3/4"	66.2		
1/2"	58.6		
3/8"	53.3		
#4	43.8		
#10	36.3		
#20	27.9		
#40	17.3		
#100	8.4		
#200	6.8		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 49.4912 D_{85}= 39.9751 D_{60}= 13.8034
D_{50}= 7.7767 D_{30}= 1.0033 D_{15}= 0.3560
D_{10}= 0.2043 C_u= 67.57 C_c= 0.36

Remarks

F.M.=5.39

Date Received: 4/17/23 **Date Tested:** 4/27/23

Tested By: Luke Emery

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: TP **Depth:** Onsite **Date Sampled:** 4/17/23

Sample Number: 9

GeoTest, Inc.

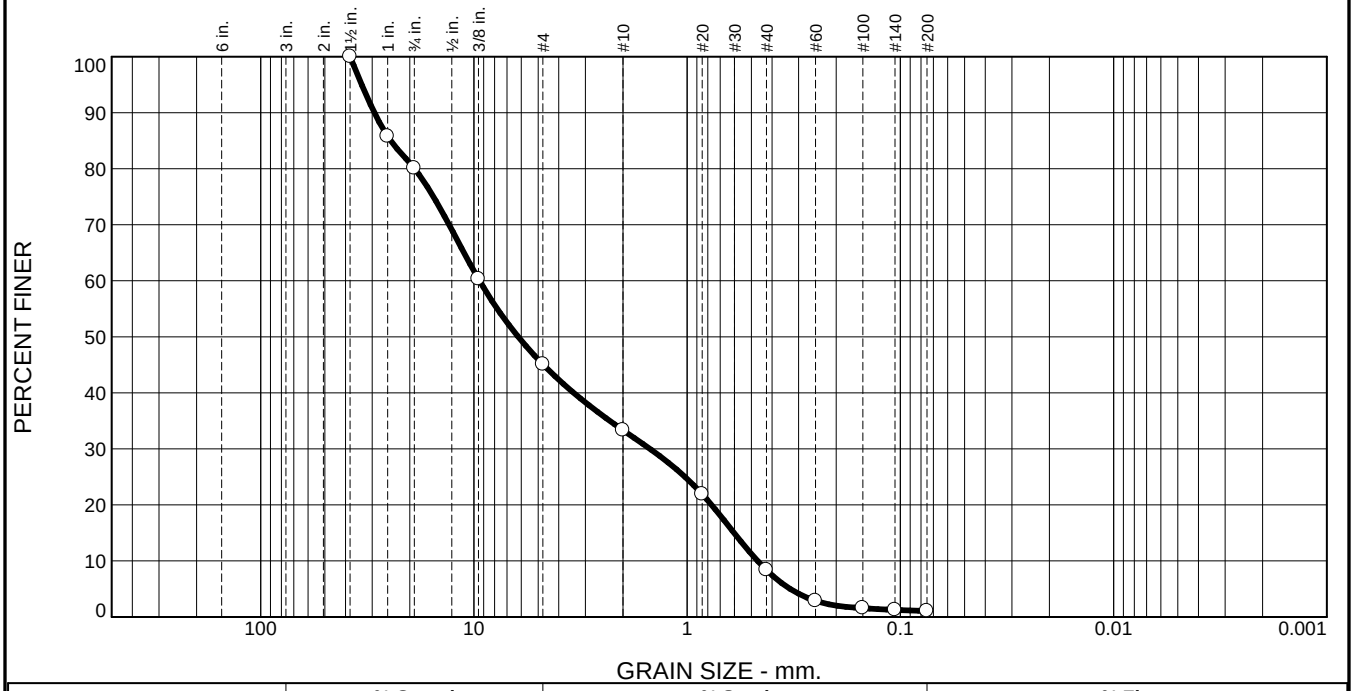
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7162-6838

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	19.9	35.0	11.8	24.9	7.3	1.1	

Test Results (ASTM D6913 & ASTM D1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1-1/2"	100.0		
1"	85.8		
3/4"	80.1		
3/8"	60.3		
#4	45.1		
#10	33.3		
#20	21.9		
#40	8.4		
#60	2.9		
#100	1.6		
#140	1.3		
#200	1.1		

* (no specification provided)

Material Description

Brown f to c sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 29.3003 D_{85}= 24.5860 D_{60}= 9.4124
D_{50}= 6.1982 D_{30}= 1.4946 D_{15}= 0.6023
D_{10}= 0.4674 C_u= 20.14 C_c= 0.51

Remarks

F.M.=5.32

Date Received: 4/17/23 **Date Tested:** 4/19/23

Tested By: Hiten Soni

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/17/23

Sample Number: 1

GeoTest, Inc.

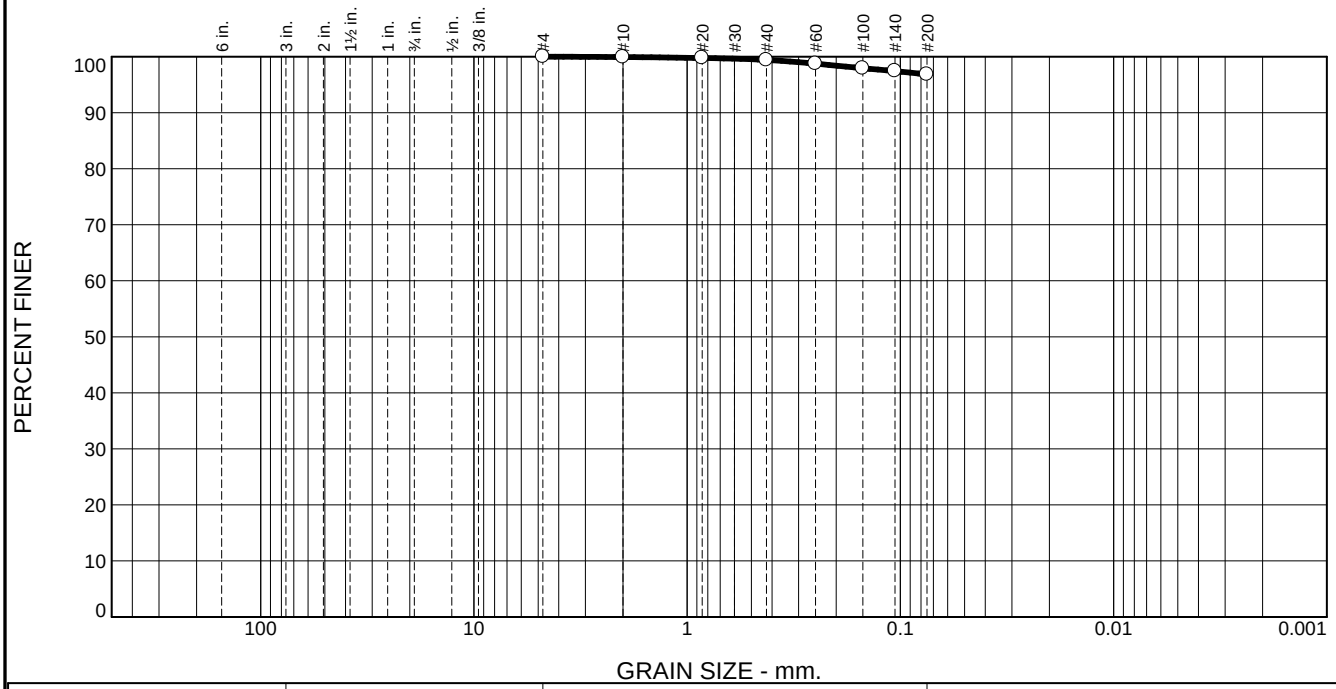
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No**

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	0.5	2.6	96.8	

Test Results (ASTM D6913 & ASTM D1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
#4	100.0		
#10	99.9		
#20	99.8		
#40	99.4		
#60	98.8		
#100	97.9		
#140	97.4		
#200	96.8		

* (no specification provided)

Material Description

Brown lean clay

Atterberg Limits (ASTM D 4318)

PL= 22.5 **LL=** 34.7 **PI=** 12.2

Classification

USCS (D 2487)= CL **AASHTO (M 145)=** A-6(13)

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=0.04

Date Received: 4/17/23 **Date Tested:** 4/19/23

Tested By: Hiten Soni

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/17/23

Sample Number: 2

GeoTest, Inc.

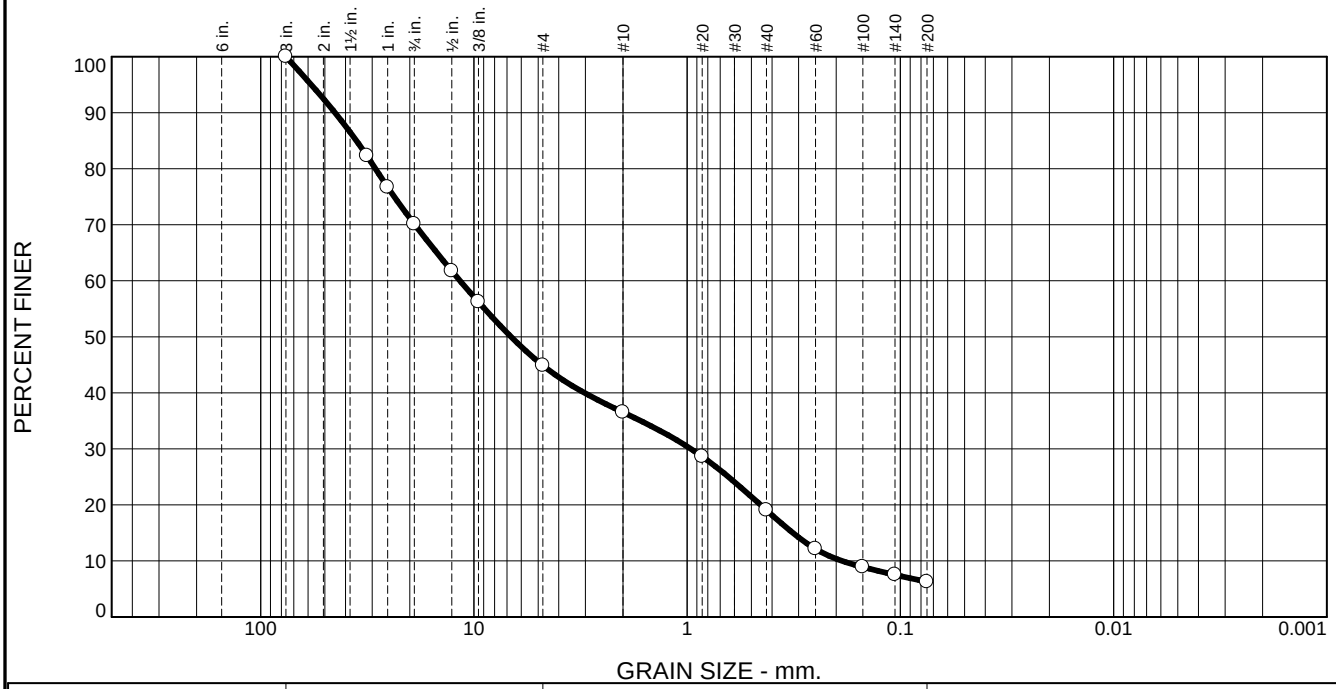
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7164-6840

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	29.9	25.2	8.4	17.4	12.8	6.3	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	82.3		
1"	76.7		
3/4"	70.1		
1/2"	61.7		
3/8"	56.2		
#4	44.9		
#10	36.5		
#20	28.6		
#40	19.1		
#60	12.1		
#100	8.9		
#140	7.5		
#200	6.3		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 44.8239 D_{85}= 35.5744 D_{60}= 11.6219
D_{50}= 6.6981 D_{30}= 0.9602 D_{15}= 0.3195
D_{10}= 0.1880 C_u= 61.82 C_c= 0.42

Remarks

F.M.=5.25

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 3

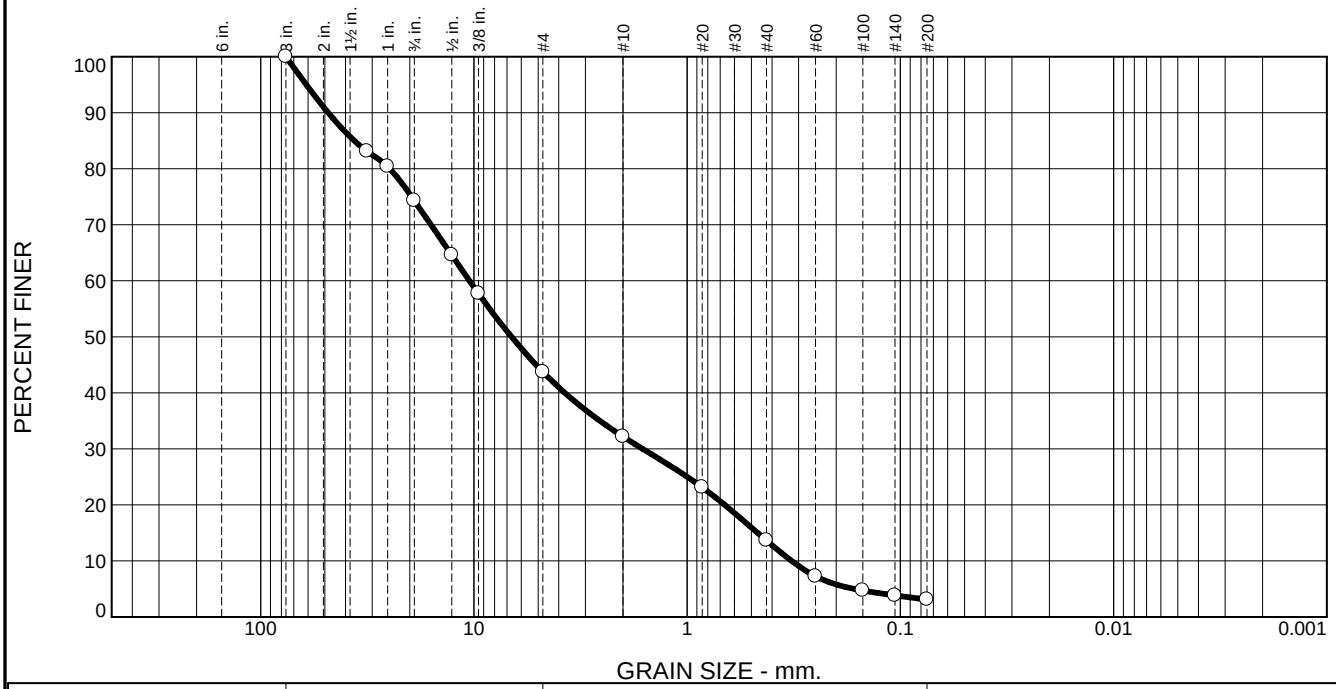
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7173-6848

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	25.7	30.6	11.5	18.5	10.6	3.1	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	83.1		
1"	80.4		
3/4"	74.3		
1/2"	64.6		
3/8"	57.7		
#4	43.7		
#10	32.2		
#20	23.1		
#40	13.7		
#60	7.3		
#100	4.7		
#140	3.8		
#200	3.1		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 48.2763 D_{85}= 36.4131 D_{60}= 10.4876
D_{50}= 6.6655 D_{30}= 1.6184 D_{15}= 0.4670
D_{10}= 0.3238 C_u= 32.39 C_c= 0.77

Remarks

F.M.=5.45

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 4

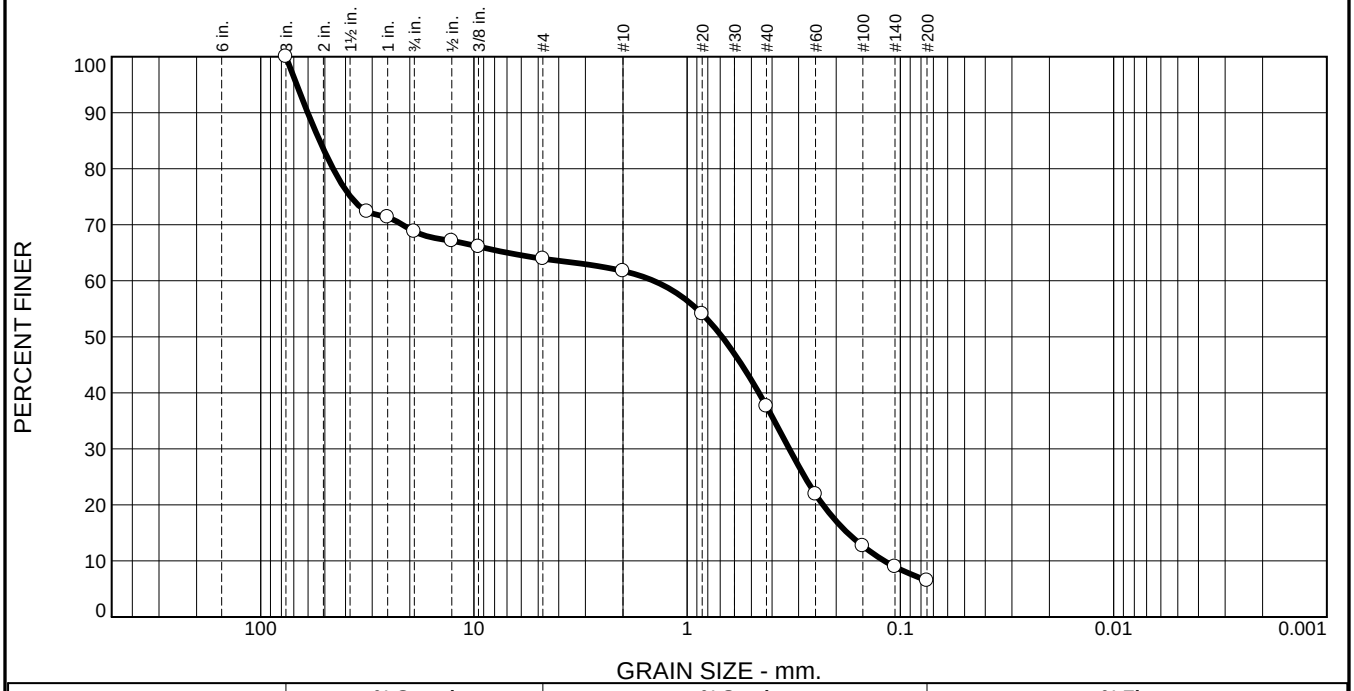
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7174-6849

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	31.2	4.9	2.2	24.1	31.1	6.5	

Test Results (ASTM C136 & ASTM D1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	72.3		
1"	71.3		
3/4"	68.8		
1/2"	67.1		
3/8"	66.1		
#4	63.9		
#10	61.7		
#20	54.1		
#40	37.6		
#60	21.9		
#100	12.7		
#140	8.9		
#200	6.5		

* (no specification provided)

Material Description

Dark Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 60.1653 D_{85}= 52.9287 D_{60}= 1.4365
D_{50}= 0.6859 D_{30}= 0.3320 D_{15}= 0.1768
D_{10}= 0.1188 C_u= 12.09 C_c= 0.65

Remarks

F.M.=4.19

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23

Sample Number: 5

GeoTest, Inc.

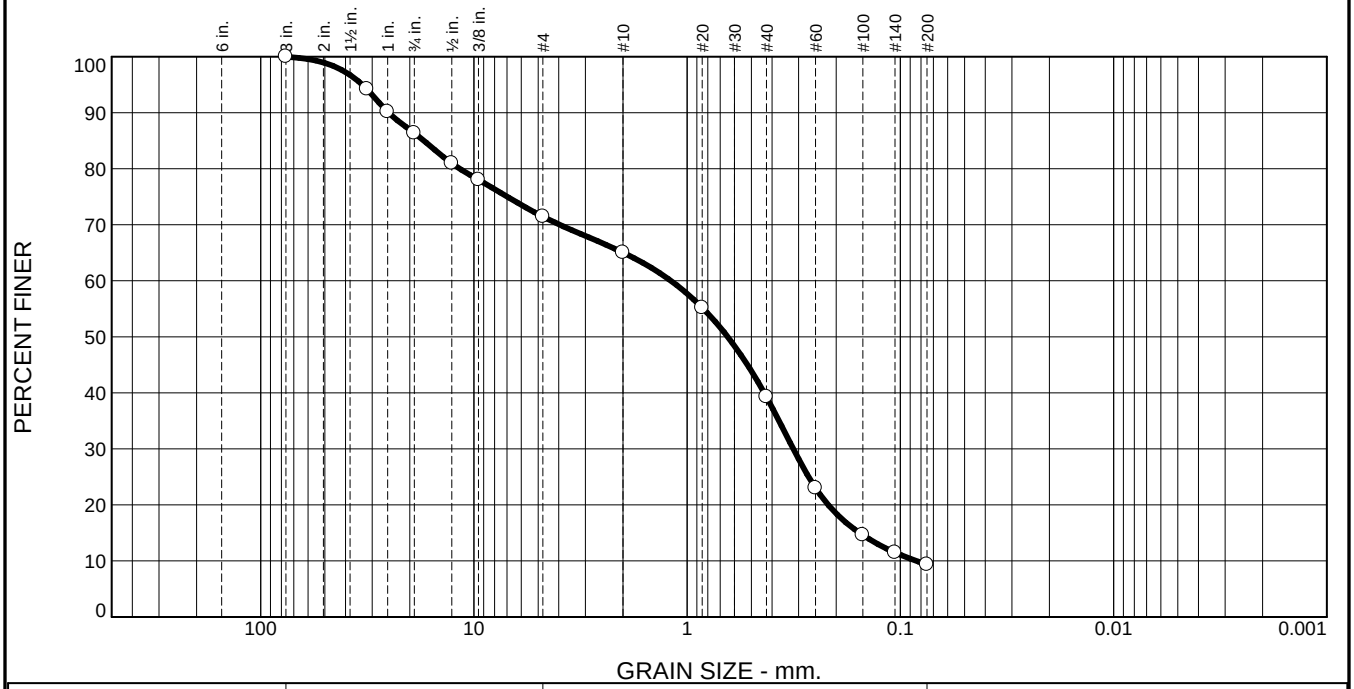
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7175-6850

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.6	14.9	6.5	25.7	30.0	9.3	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	94.2		
1"	90.2		
3/4"	86.4		
1/2"	81.0		
3/8"	78.0		
#4	71.5		
#10	65.0		
#20	55.2		
#40	39.3		
#60	23.0		
#100	14.6		
#140	11.5		
#200	9.3		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 25.1604 D_{85}= 17.1823 D_{60}= 1.1920
D_{50}= 0.6455 D_{30}= 0.3180 D_{15}= 0.1553
D_{10}= 0.0841 C_u= 14.17 C_c= 1.01

Remarks

F.M.=3.50

Date Received: 11/18/23 **Date Tested:** 4/27/23

Tested By: Luke Emery

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 11/18/23
Sample Number: 6

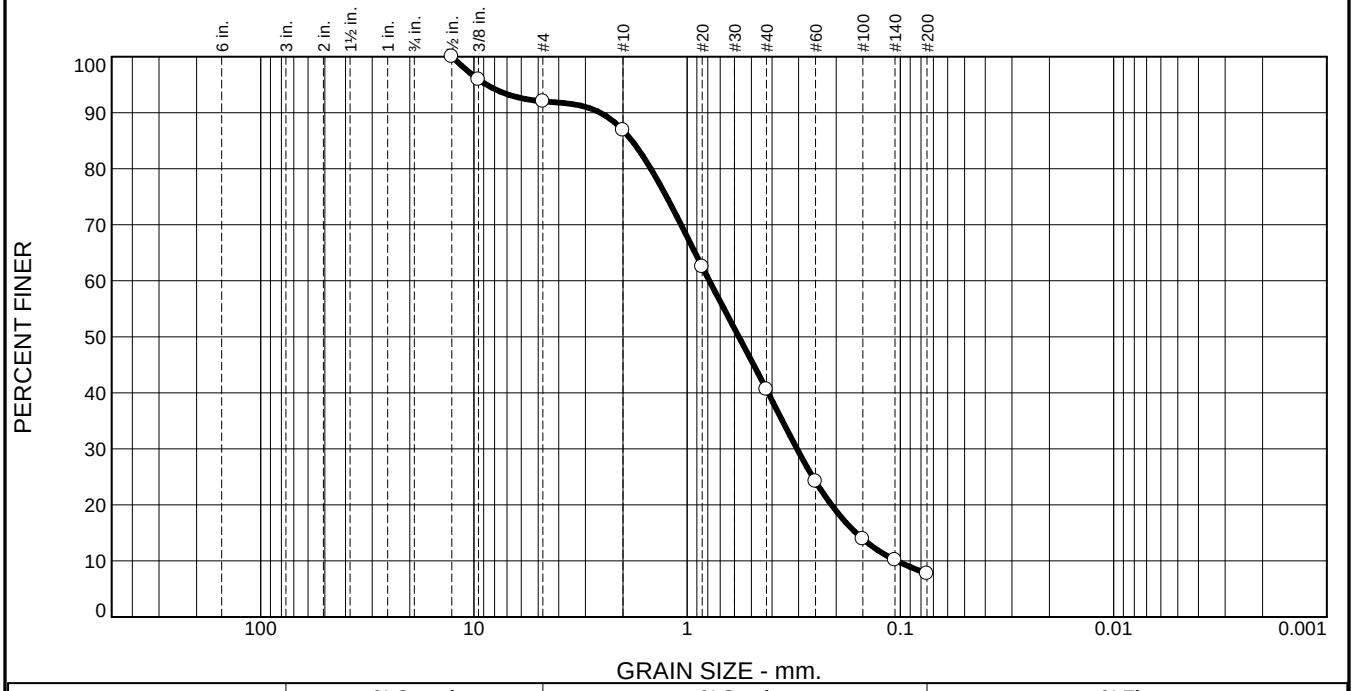
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7176-6851

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	8.0	5.1	46.3	32.9	7.7	

Test Results (ASTM D6913 & ASTM D1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1/2"	100.0		
3/8"	95.9		
#4	92.0		
#10	86.9		
#20	62.5		
#40	40.6		
#60	24.2		
#100	13.9		
#140	10.2		
#200	7.7		

* (no specification provided)

Material Description

Brown f to c sand

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 2.5558 D_{85}= 1.8143 D_{60}= 0.7865
D_{50}= 0.5722 D_{30}= 0.3055 D_{15}= 0.1615
D_{10}= 0.1040 C_u= 7.56 C_c= 1.14

Remarks

F.M.=2.55

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Luke Emery

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23

Sample Number: 7

GeoTest, Inc.

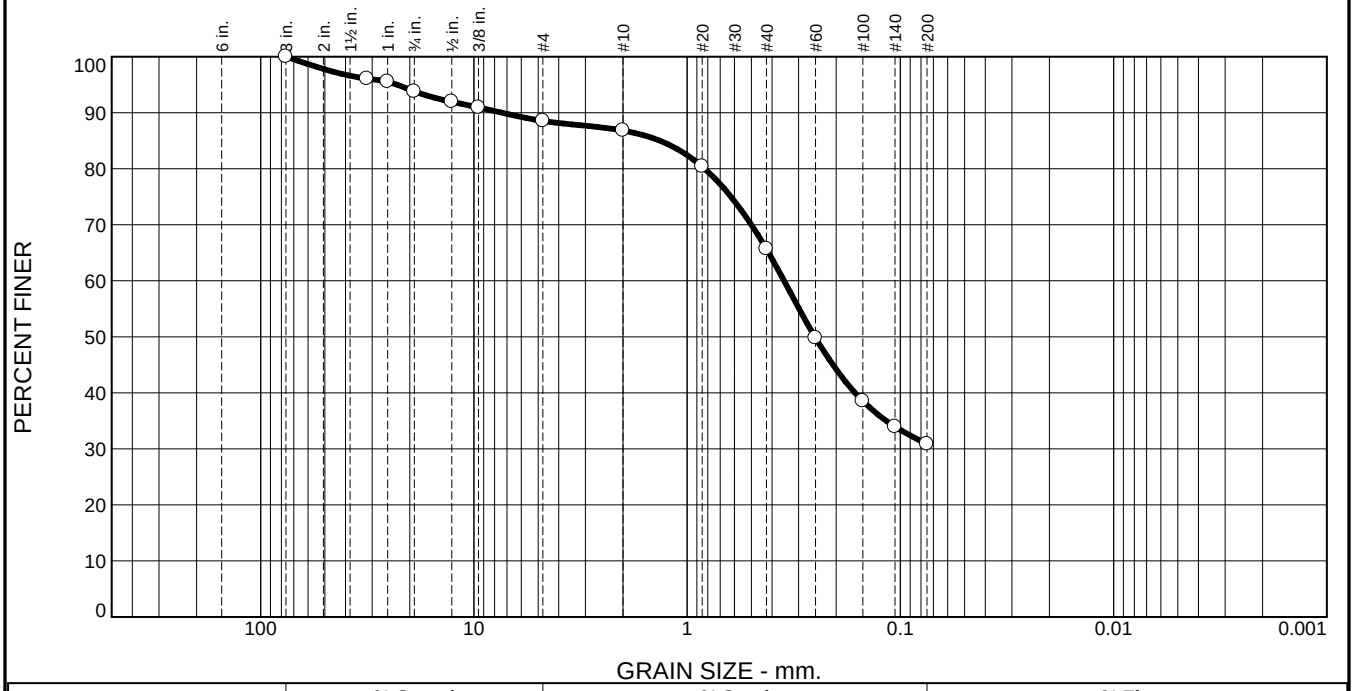
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7177-6852

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.2	5.3	1.7	21.1	34.8	30.9	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	96.1		
1"	95.5		
3/4"	93.8		
1/2"	92.0		
3/8"	90.9		
#4	88.5		
#10	86.8		
#20	80.4		
#40	65.7		
#60	49.8		
#100	38.5		
#140	34.0		
#200	30.9		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 7.4064 D_{85}= 1.3432 D_{60}= 0.3512
D_{50}= 0.2518 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=1.91

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 8

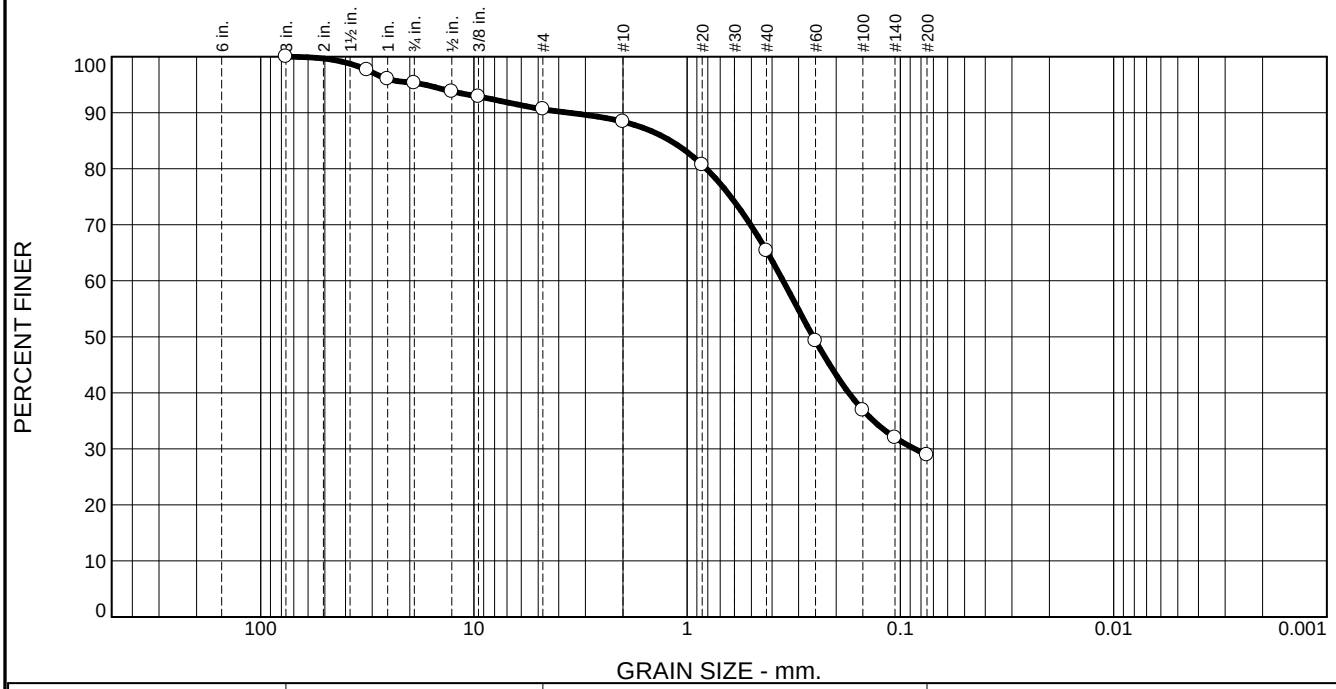
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7178-6853

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.7	4.7	2.2	23.0	36.5	28.9	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	97.6		
1"	96.0		
3/4"	95.3		
1/2"	93.8		
3/8"	92.9		
#4	90.6		
#10	88.4		
#20	80.7		
#40	65.4		
#60	49.3		
#100	36.9		
#140	32.0		
#200	28.9		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 3.6204 D_{85}= 1.1979 D_{60}= 0.3550
D_{50}= 0.2564 D_{30}= 0.0857 D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=1.83

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 9

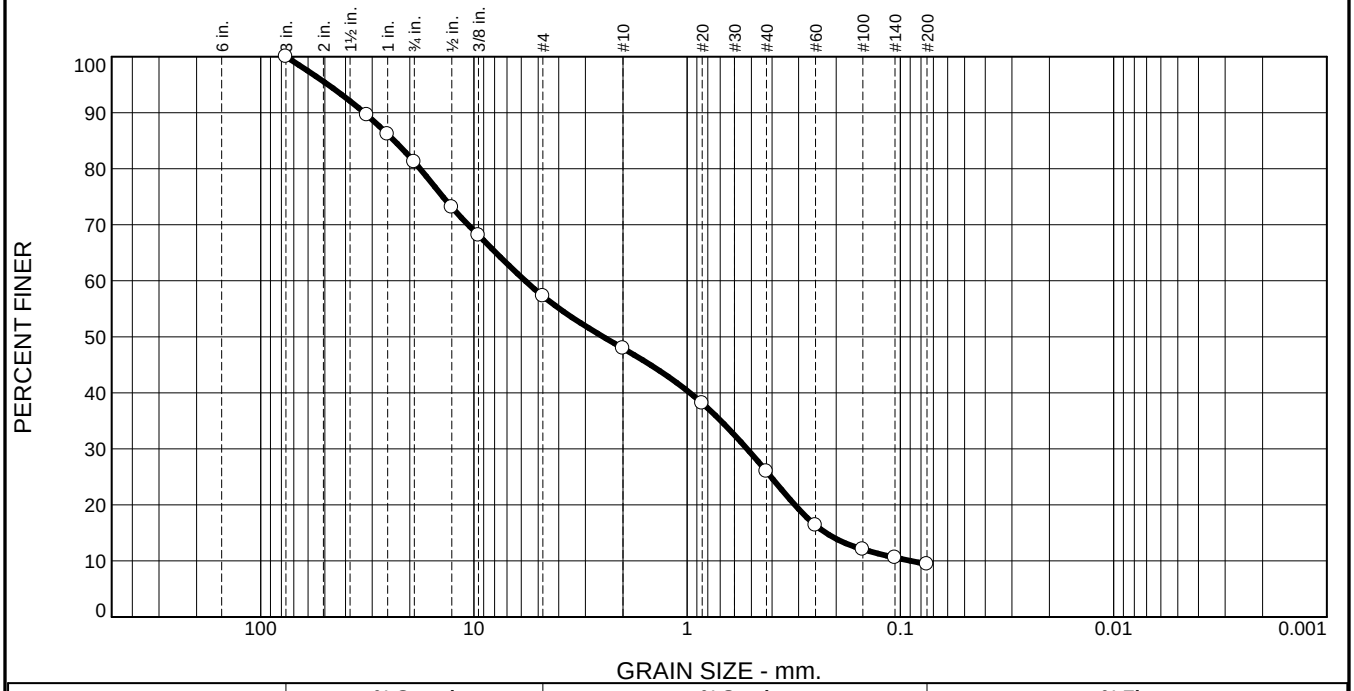
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7179-6854

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	18.8	23.9	9.4	21.9	16.6	9.4	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	89.6		
1"	86.2		
3/4"	81.2		
1/2"	73.1		
3/8"	68.1		
#4	57.3		
#10	47.9		
#20	38.2		
#40	26.0		
#60	16.4		
#100	12.1		
#140	10.6		
#200	9.4		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 32.6990 D_{85}= 23.6371 D_{60}= 5.7505
D_{50}= 2.4748 D_{30}= 0.5236 D_{15}= 0.2235
D_{10}= 0.0894 C_u= 64.32 C_c= 0.53

Remarks

F.M.=4.46

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23

Sample Number: 10

GeoTest, Inc.

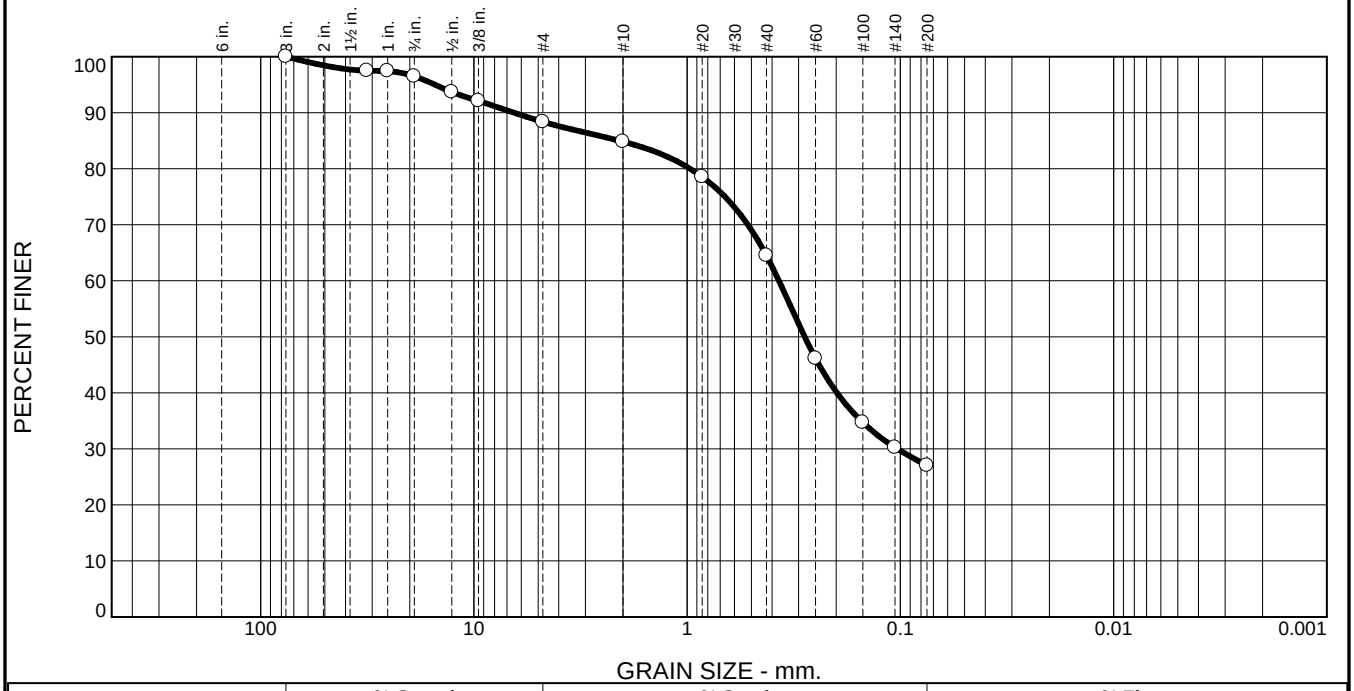
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7180-6855

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.5	8.1	3.6	20.3	37.5	27.0	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	97.5		
1"	97.4		
3/4"	96.5		
1/2"	93.7		
3/8"	92.1		
#4	88.4		
#10	84.8		
#20	78.5		
#40	64.5		
#60	46.1		
#100	34.7		
#140	30.3		
#200	27.0		

* (no specification provided)

Material Description

Brown sandy silt, little topsoil

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 6.4931 D_{85}= 2.0810 D_{60}= 0.3712
D_{50}= 0.2810 D_{30}= 0.1034 D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=1.98

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23

Sample Number: 11

GeoTest, Inc.

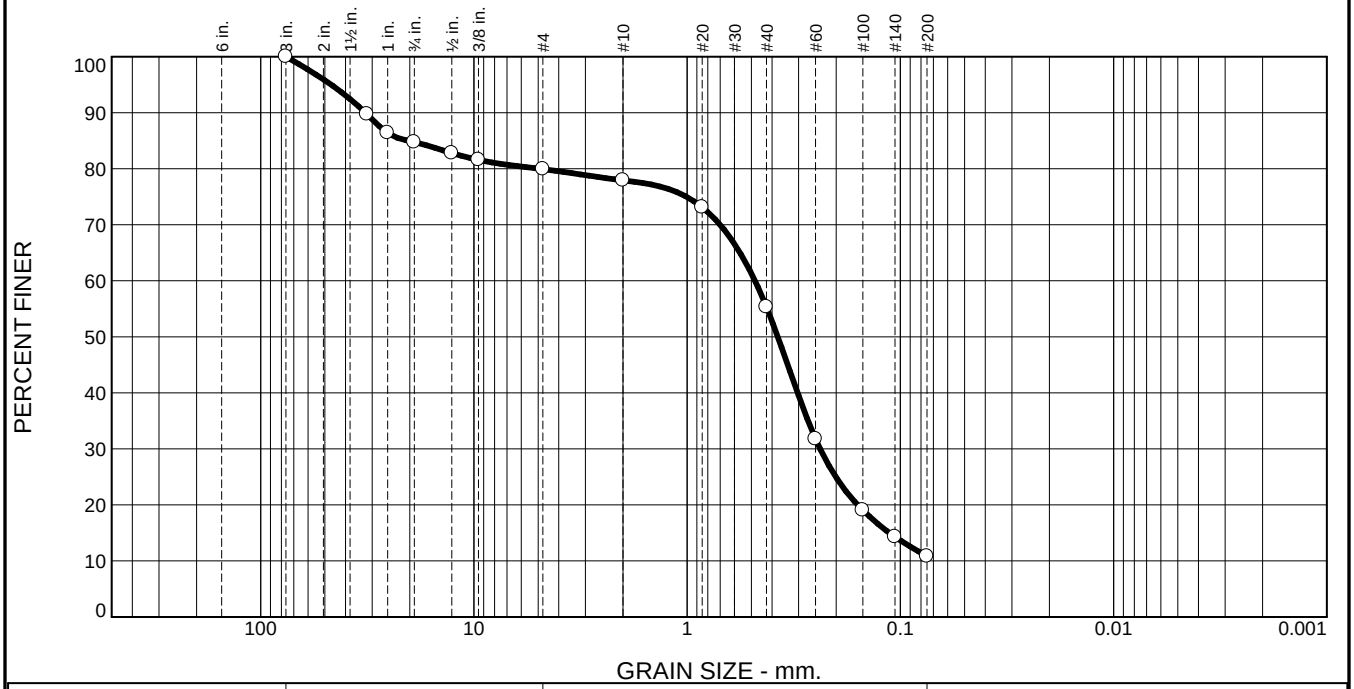
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7181-6856

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.3	4.8	2.0	22.6	44.5	10.8	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	89.7		
1"	86.4		
3/4"	84.7		
1/2"	82.8		
3/8"	81.6		
#4	79.9		
#10	77.9		
#20	73.1		
#40	55.3		
#60	31.8		
#100	19.1		
#140	14.3		
#200	10.8		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 32.2820 D_{85}= 20.4121 D_{60}= 0.4808
D_{50}= 0.3760 D_{30}= 0.2379 D_{15}= 0.1125
D_{10}= C_u= C_c=

Remarks

F.M.=2.82

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 12

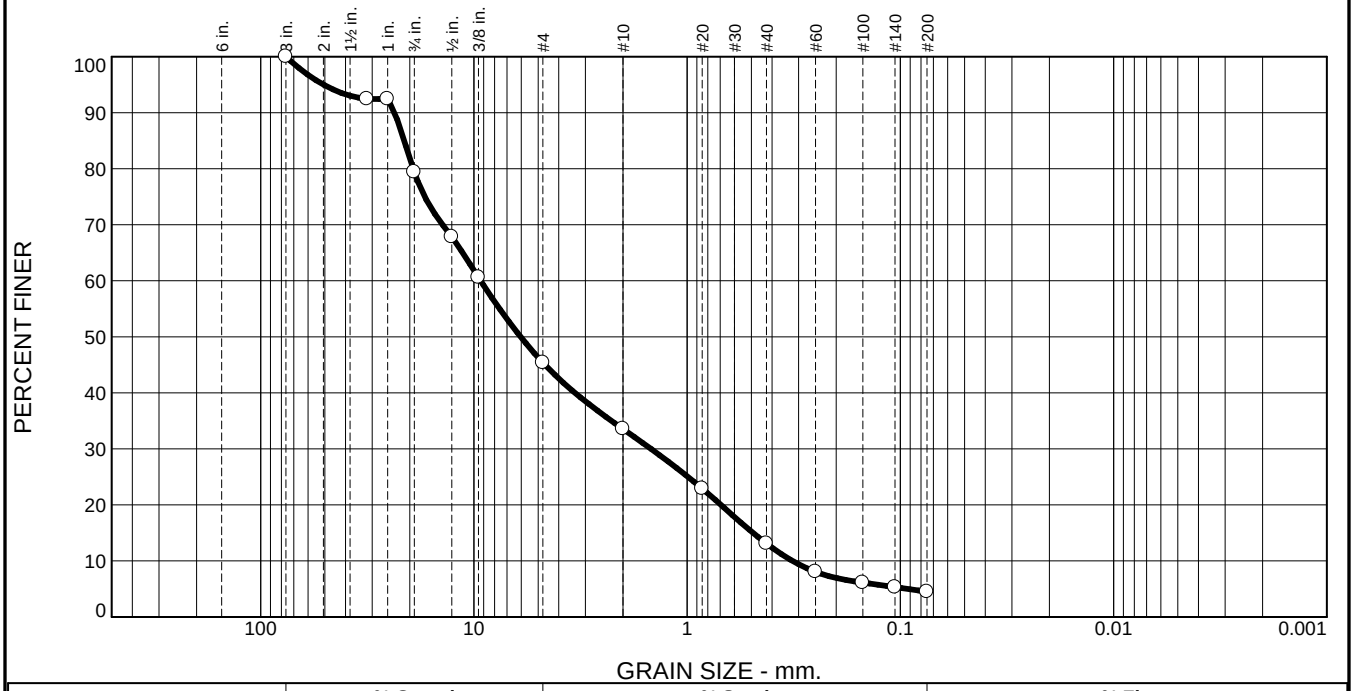
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7182-6857

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	20.6	34.0	11.8	20.5	8.6	4.5	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	92.5		
1"	92.5		
3/4"	79.4		
1/2"	67.8		
3/8"	60.6		
#4	45.4		
#10	33.6		
#20	22.9		
#40	13.1		
#60	8.0		
#100	6.1		
#140	5.3		
#200	4.5		

* (no specification provided)

Material Description

Brown sand and gravel, little topsoil

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 23.5441 D_{85}= 21.2405 D_{60}= 9.3029
D_{50}= 6.0393 D_{30}= 1.4790 D_{15}= 0.4908
D_{10}= 0.3207 C_u= 29.01 C_c= 0.73

Remarks

F.M.=5.25

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23

Sample Number: 13

GeoTest, Inc.

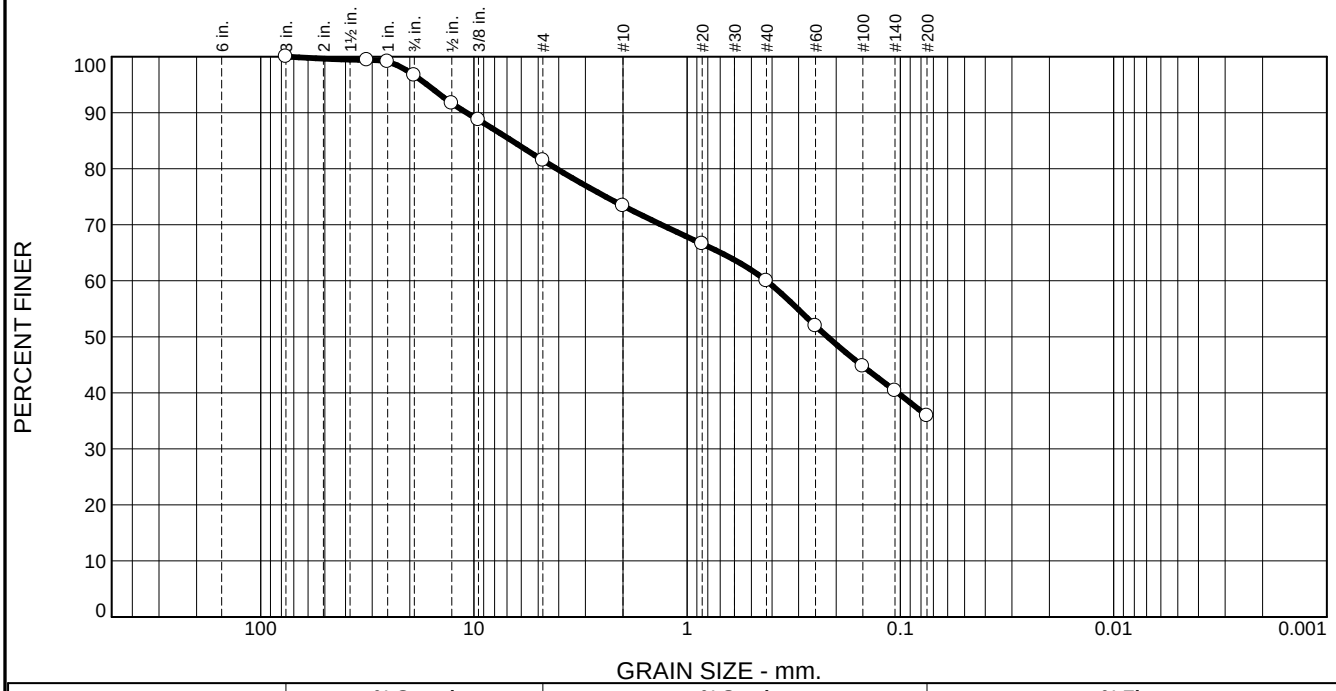
West Allis, WI

Client: Three Leaf Partners

Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7183-6858

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.3	15.2	8.1	13.4	24.1	35.9	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	99.4		
1"	99.1		
3/4"	96.7		
1/2"	91.7		
3/8"	88.7		
#4	81.5		
#10	73.4		
#20	66.6		
#40	60.0		
#60	52.0		
#100	44.8		
#140	40.4		
#200	35.9		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 10.8312 D_{85}= 6.6383 D_{60}= 0.4254
D_{50}= 0.2195 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=2.26

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 14

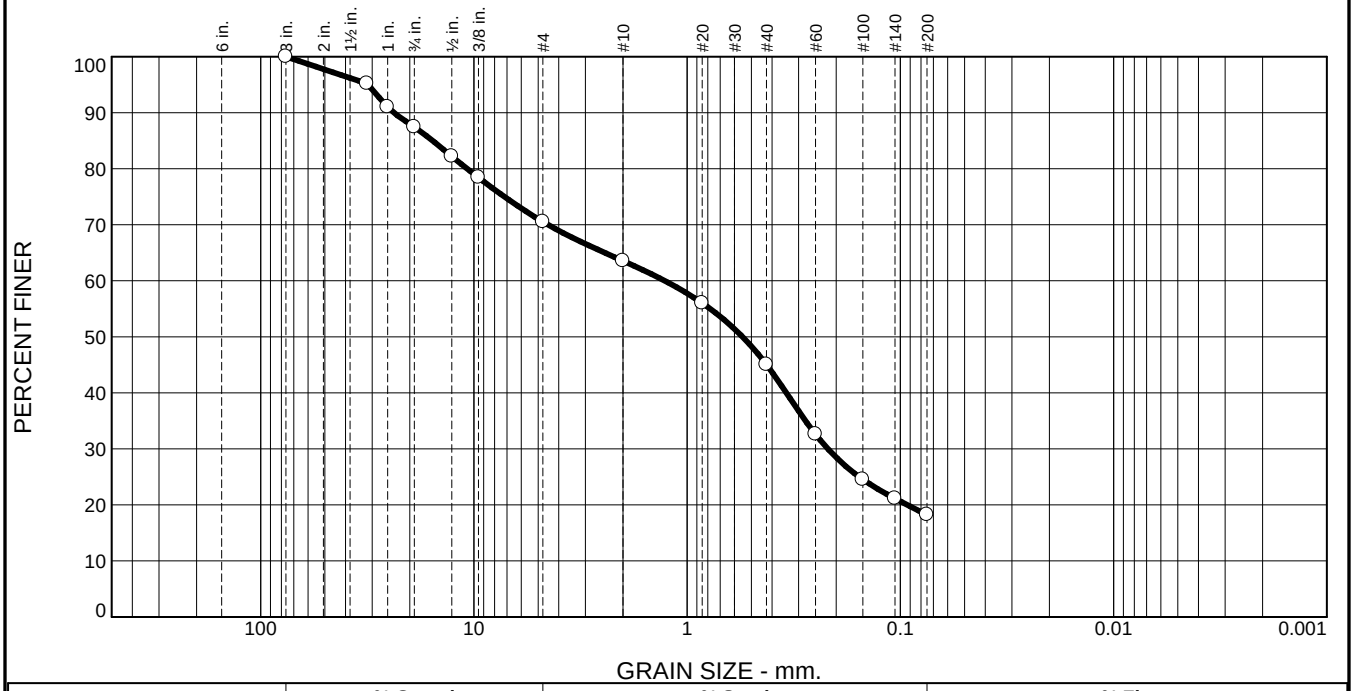
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7184-6859

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.6	16.9	6.9	18.5	26.9	18.2	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	95.2		
1"	91.0		
3/4"	87.4		
1/2"	82.2		
3/8"	78.4		
#4	70.5		
#10	63.6		
#20	56.0		
#40	45.1		
#60	32.6		
#100	24.5		
#140	21.1		
#200	18.2		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 23.7282 D_{85}= 15.6351 D_{60}= 1.2733
D_{50}= 0.5496 D_{30}= 0.2188 D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=3.31

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 15

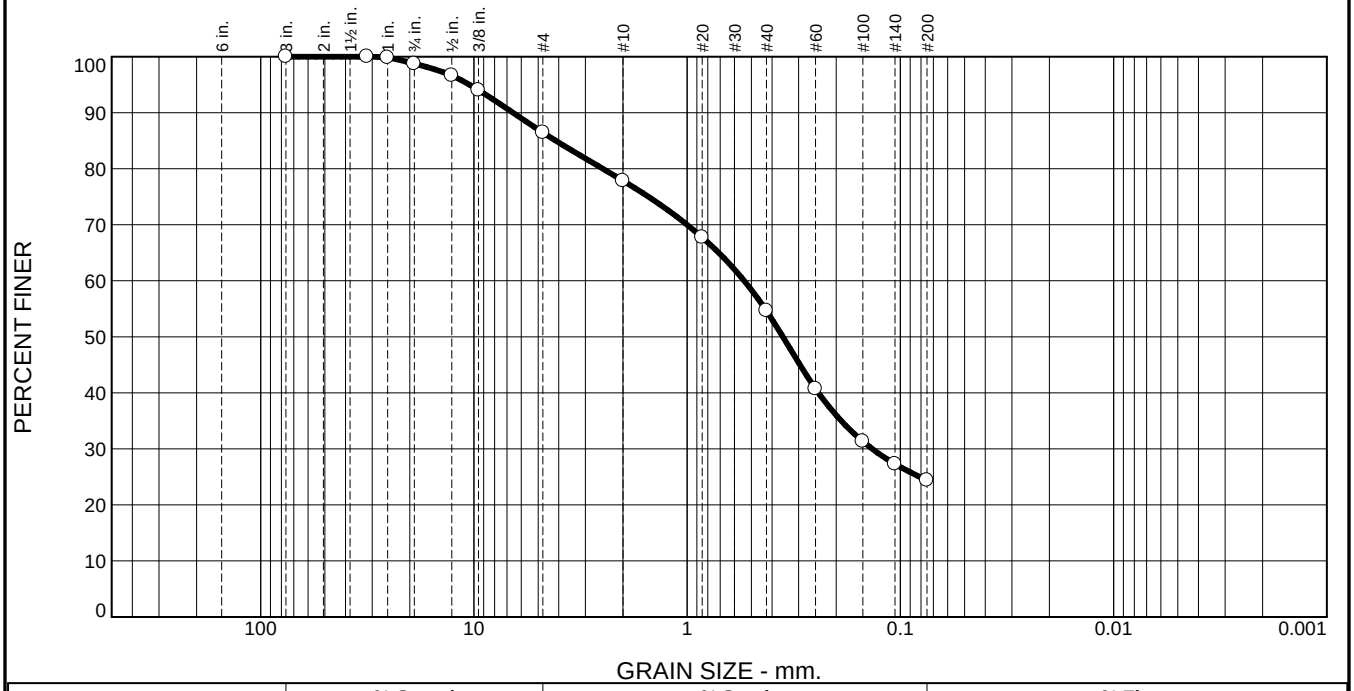
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7185-6860

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.3	12.2	8.6	23.3	30.2	24.4	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	100.0		
1"	99.8		
3/4"	98.7		
1/2"	96.6		
3/8"	94.0		
#4	86.5		
#10	77.9		
#20	67.7		
#40	54.6		
#60	40.7		
#100	31.3		
#140	27.3		
#200	24.4		

* (no specification provided)

Material Description

Brown clay with gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 6.5592 D_{85}= 4.1299 D_{60}= 0.5399
D_{50}= 0.3558 D_{30}= 0.1356 D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=2.30

Date Received: 4/18/23 **Date Tested:** 4/27/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 16

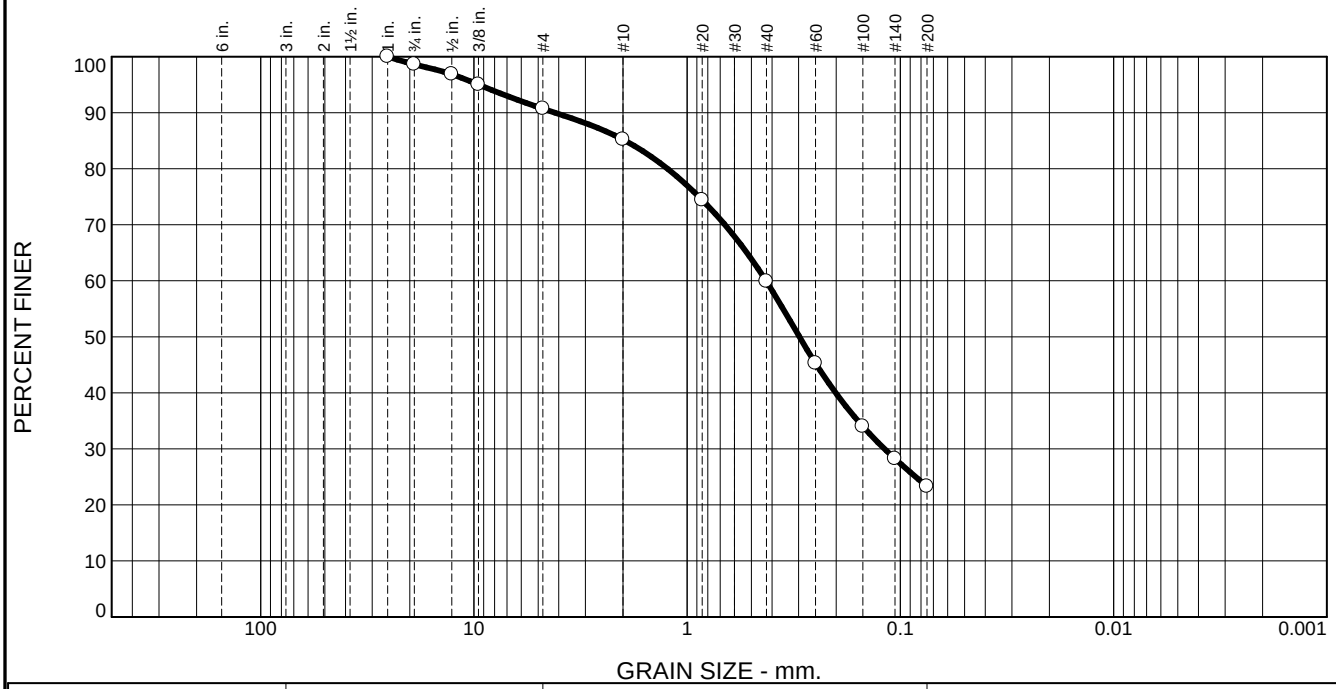
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7186-6861

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.4	7.9	5.5	25.3	36.6	23.3	

Test Results (ASTM D6913 & ASTM D1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
3/4"	98.6		
1/2"	96.9		
3/8"	95.0		
#4	90.7		
#10	85.2		
#20	74.4		
#40	59.9		
#60	45.3		
#100	34.0		
#140	28.2		
#200	23.3		

* (no specification provided)

Material Description

Brown clay

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 4.1716 D_{85}= 1.9521 D_{60}= 0.4269
D_{50}= 0.2976 D_{30}= 0.1187 D_{15}=
D_{10}= C_u= C_c=

Remarks

F.M.=1.98

Date Received: 4/18/23 **Date Tested:** 4/28/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 17

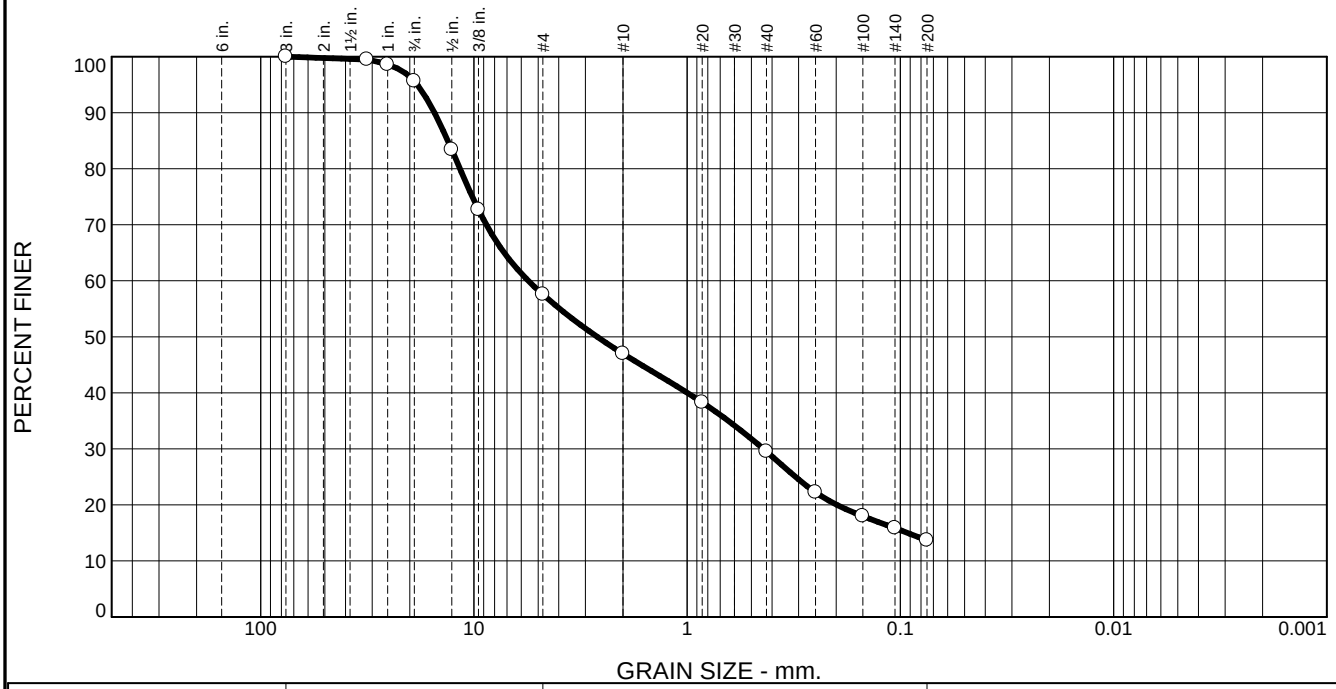
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7187-6862

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.4	38.0	10.6	17.5	15.8	13.7	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	99.5		
1"	98.6		
3/4"	95.6		
1/2"	83.4		
3/8"	72.7		
#4	57.6		
#10	47.0		
#20	38.3		
#40	29.5		
#60	22.2		
#100	18.0		
#140	15.8		
#200	13.7		

* (no specification provided)

Material Description

Brown sand and gravel

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 15.3163 D_{85}= 13.2611 D_{60}= 5.5607
D_{50}= 2.6404 D_{30}= 0.4391 D_{15}= 0.0926
D_{10}= C_u= C_c=

Remarks

F.M.=4.07

Date Received: 4/18/23 **Date Tested:** 4/28/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 18

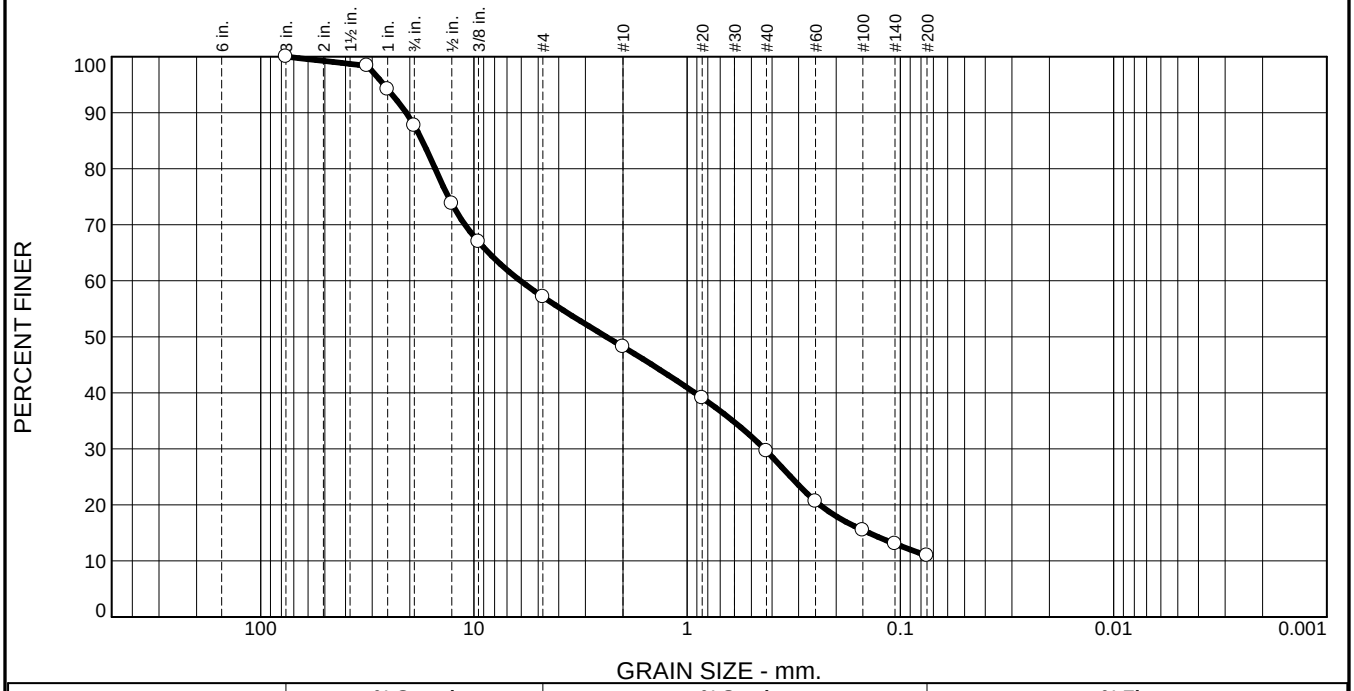
GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7188-6863

Sieve Analysis Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.3	30.6	8.9	18.6	18.7	10.9	

Test Results (ASTM C136 & ASTM C117)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
1 1/4"	98.4		
1"	94.2		
3/4"	87.7		
1/2"	73.8		
3/8"	67.0		
#4	57.1		
#10	48.2		
#20	39.1		
#40	29.6		
#60	20.6		
#100	15.5		
#140	13.1		
#200	10.9		

* (no specification provided)

Material Description

Brown sand and gravel with topsoil

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 20.7905 D_{85}= 17.4838 D_{60}= 6.0538
D_{50}= 2.3916 D_{30}= 0.4347 D_{15}= 0.1404
D_{10}= C_u= C_c=

Remarks

F.M.=4.23

Date Received: 4/18/23 **Date Tested:** 4/28/23

Tested By: Craig Englund

Checked By: Imtiaz Ahmed

Title: Lab Manager

Source of Sample: Bluff **Depth:** Onsite **Date Sampled:** 4/18/23
Sample Number: 19

GeoTest, Inc.

West Allis, WI

Client: Three Leaf Partners
Project: Hatland Quarry Apartments

Project No: 7708 **Test No** 7189-6864

APPENDIX B

REPORT OF RESULTS – SITE-WIDE FILL TEST PIT SAMPLING AND ANALYSIS

Endpoint Solutions
6871 South Lovers Lane
Franklin, WI 53132
Telephone: (414) 427-1200
Fax: (414) 427-1259
www.endpointcorporation.com

Mr. John Ford
President
Three Leaf Partners
504 West Juneau Avenue
Milwaukee, WI 53203

May 12, 2023

Subject: **Report of Results – Site-Wide Fill Test Pit Sampling and Analysis**
Hartland Quarry Apartments
644, 700 & 701 West Capitol Drive, Hartland, Wisconsin

Dear John:

As part of Phase II Environmental Assessment (EA) activities, Endpoint Solutions Corp. (Endpoint) worked with GeoTest, Inc. during the excavation of test pits at the Hartland Quarry Apartment project site located at 644, 700 & 701 West Capitol Drive, in the Village of Hartland, Waukesha County, Wisconsin (the "subject property"). The subject property is the former location of the Hartland Quarry, as well as the Tews and LaFarge concrete plants. The extent of the subject property is depicted on **Figure 1**. While GeoTest, Inc. excavated test pits across the subject property to evaluate the physical characteristics of the fill materials, Endpoint visually evaluated the fill materials for obvious indications of contamination (visual and olfactory) and collected samples for laboratory chemical analysis.

BACKGROUND

HISTORIC AERIAL PHOTOS

Based on a review of historic aerial photographs obtained from the Waukesha County Interactive Mapping Site (www.waukeshacounty.gov/interactivemap), quarrying operations were active on the subject property at the time of the earliest aerial photograph in 1941. Quarrying operations appeared to extend across the entire subject property, and also onto the adjoining property to the west of the subject property currently being considered for development by Kwik Trip. By circa 1970, quarrying operations on the subject property appear to have been completed based on the observation of vegetation maturing across the northern portions of the subject property.

By 1963, several structures were observed in the southwest portion of the subject property, and between 1995 and 2000, the current structure was developed in the far southwestern portion of the subject property. A copy of the historic aerial photographs referenced herein are attached in **Appendix A**.

SITE RECONNAISSANCE

On April 14, 2023, representatives of Endpoint met with representatives of GeoTest, Inc., Three Leaf Partners, Walbec Group and Mr. Ed Troxler to perform a walking reconnaissance of the subject property. Currently, the subject property consists of the offices and shop buildings for BSIT, a bulk aggregate transportation company, and a former aggregate pit which has been partially reclaimed with concrete slabs, concrete washout and reportedly soils transported from Village of Hartland sewer utility projects.

SCOPE OF WORK

Based on the findings of non-soil (waste) inclusions in the surficial fills on the adjoining property to the west of the subject property, the apparent depth of quarrying operations as evidenced by the historic aerial photographs and the time period of the quarrying and filling operations, it is quite likely that various non-soil (waste) materials were included in the soil materials deposited on the subject property. Additionally, during the walking reconnaissance, a five (5) gallon bucket containing used oil filters was observed protruding from the ground surface in a vegetated portion of the subject property. Lastly, it is reported that pieces of equipment were likely buried on the subject property.

While it is impossible to evaluate the entire volume of fill historically placed on the subject property prior to mass grading activities, it is possible to attempt to identify areas of potential concern using historic aerial photos, interviews with knowledgeable persons, reconnaissance of the subject property and visual assessment and sample analysis during test pits advanced as part of the geotechnical evaluation.

Therefore, based on the physical conditions of the subject property and the need to evaluate the physical properties of the soils for foundation support, GeoTest, Inc. proposed to excavate a series of nine (9) test pits (**TP-1 through TP-9**) through the apparent fill materials. Besides providing an opportunity to evaluate the physical characteristics of the fill materials, the test pits were also to provide an indication of the general thickness of the fill materials. Endpoint accompanied GeoTest, Inc. during the test pit exploration process to visually evaluate the soils as well as to collect representative samples of the materials from each test pit location for laboratory testing for volatile organic compounds (VOCs) polycyclic aromatic hydrocarbons (PAHs), metals and polychlorinated biphenyls (PCBs). During these assessment activities, a total of nine (9) samples representing a composite sample of the fill materials from each test pit was submitted for analysis. Additionally, a sample of the underlying native soils from test pit TP-7 was also submitted for laboratory analysis. The sample of the fill materials from test pit TP-7 l was identified as sample TP-7A, while the sample of the underlying native soil was identified as sample TP-7B.

RESULTS

SOIL CONDITIONS

Based on the *Geotechnical Subsurface Investigation Report* prepared by GeoTest, Inc. (May 4, 2023), fill materials have been accepted at the subject property since the 1970s. Reportedly, the fill materials accepted consisted primarily of soil and concrete; however, occasional inert materials such as asphalt, miscellaneous building materials, wood and metal have also been accepted.

The nine (9) test pits were excavated to depths ranging between approximately 5.5 to 11.3 feet below the ground surface (ft bgs). The locations of the test pits are depicted on **Figure 4** provided by GeoTest, Inc. Native soils at the subject property consisted of fine to coarse sand, fine to coarse sand and gravel, fine to coarse gravel and clayey silt. Fill materials consisted of fine sand, fine to coarse sand and gravel, and rubble consisting of concrete, asphalt, wood and metal pieces in a sand & gravel matrix.

VOC Results

No VOC constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis. The VOC results are summarized in **Table A.2.a**.

PAH Results

No PAH constituents were detected in eight (8) of the ten (10) composite samples submitted for analysis. These samples included the native soils from the TP-1, TP-2, TP-3, TP-6 TP-7, TP-8 and TP-9 locations and the fill sample from the TP-5 location. Numerous PAH constituents were detected in the sample of fill materials submitted from the TP-4 location. The concentration of chrysene reported in this sample exceeded its soil-to-groundwater exposure pathway residual contaminant level (RCL) established by the Wisconsin Department of Natural Resources (WDNR). Numerous PAH constituents were also detected in the sample of fill materials submitted from the TP-7 location. The concentrations of benzo(b)fluoranthene and chrysene reported in this sample exceeded their respective soil-to-groundwater exposure pathway RCLs established by the WDNR.

The PAH results are summarized in **Table A.2.b**.

Metals Results

All of the samples submitted for metals analysis contained detected concentrations of several metals. Six (6) of the ten (10) samples submitted reported concentrations which exceeded soil-to-groundwater pathway, non-industrial direct contact and industrial direct contact RCLs and background threshold values (BTVs) established by the WDNR.

- The sample of the native soil submitted from TP-1 contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV, and cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.
- The sample of the native soil from the TP-2 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and its BTV.
- The sample of the fill material submitted from the TP-4 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs but below its BTV.
- The sample of fill material submitted from the TP-7 location contained a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway RCL and BTV.
- The sample of native soil underlying the fill materials at the TP-7 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.
- The sample of native soil submitted from the TP-8 location contained a concentration of arsenic which exceeded its soil-to-groundwater exposure pathway, non-industrial and

industrial direct contact RCLs but below its BTV, and a concentration of cadmium which exceeded its soil-to-groundwater exposure pathway and non-industrial direct contact RCLs and its BTV.

The metal results are summarized in **Table A.2.c**.

PCB Results

No PCB constituents were detected in any of the composite samples of fill materials and native soils submitted for analysis. The PCB results are summarized in **Table A.2.d**.

A copy of the analytical results and chain-of-custody form are attached in **Appendix A**.

DISCUSSION

Overall, results of the analyses performed on the composite samples submitted from the test pits indicate a lack of widespread significant contamination. None of the samples contained detectable concentrations of any VOC or PCB constituents, and eight (8) of the ten (10) samples submitted did not contain any detectable concentrations of PAH constituents. Detected concentrations of contaminants above published RCLs were limited to metals (arsenic and/or cadmium) in the samples submitted from TP-1, TP-2, the native soils at TP-7 (sample TP-7B) and TP-8, but no results exceeded the arsenic BTV. The samples submitted from TP-4 and the fill soils at TP-7 (sample TP-7A) contained concentrations of chrysene and/or benzo(b)fluoranthene in excess of their respective RCLs. It should be noted that only the concentrations of cadmium reported in the samples collected from TP-1, TP-2 the native soils at TP-7 (sample TP-7B) and TP-8 exceeded the established BTV for cadmium.

RECOMMENDED NEXT STEPS

Based on the lack of VOC and PCB contamination in the test pit samples submitted, volatile vapor migration should not be a concern except potentially in the area of the former leaking underground storage tank (LUST) area in the extreme southern portion of the Site, not evaluated as part of the test pit scope of work. In addition, based on the relatively low concentrations of PAH constituents and metals detected, it is unlikely remedial measures will be required; however, the WDNR would require the soils containing elevated concentrations above RCLs and BTVs to be properly managed on the Site during redevelopment. The four (4) samples which contained detectable concentrations of arsenic were the only samples which exceeded direct contact RCLs (non-industrial and industrial); however, none of these concentrations exceeded the BTV established for arsenic; therefore, it may be necessary to place these soils beneath an exposure barrier. The exposure barrier can consist of buildings, pavements or layers of clean, non-contaminated soil.

As the Site has received extensive amounts of fill materials, the WDNR will require the preparation and submission of an Application to Construct on a Historic Fill Site (the "Application for Exemption"). The Application for Exemption is submitted to both the WDNR Remediation & Redevelopment (R&R) program as well as the Waste Management Program. Vapor intrusion is the greatest concern for both programs (volatile vapors for the R&R program and methane for the Waste Management program). As stated above, it is our opinion there is no widespread concern for

volatile vapor migration beyond the LUST area and none of the test pits encountered major quantities of buried organic matter which could act as a source of methane during decomposition.

Please note, while the test pit sampling did not identify widespread contamination at the Site, our visual observations during the initial Site reconnaissance did identify the presence of a five (5) gallon bucket containing used oil filters. It is likely that other non-soil types of materials have been randomly buried at the Site which may have the potential to cause environmental concerns. Therefore, we recommend an environmental professional be onsite during the earthwork activities to document the procedures as will be required by the approved Application for Exemption, as well as to identify any non-soil items of concern that would require specialized disposal as well as proper management of potentially impacted soils.

CLOSING

We trust this document and its attachments provide the level of information necessary to present to city representatives as part of the approval process. If you have any questions, please feel free to contact me directly.

Sincerely,

Endpoint Solutions

Robert A. Cigale, P.G.
Principal Consultant

ATTACHMENTS
Figures
Appendix A

FIGURES

N

0 2000' 4000'

SOURCE: USGS

LOCATION MAP

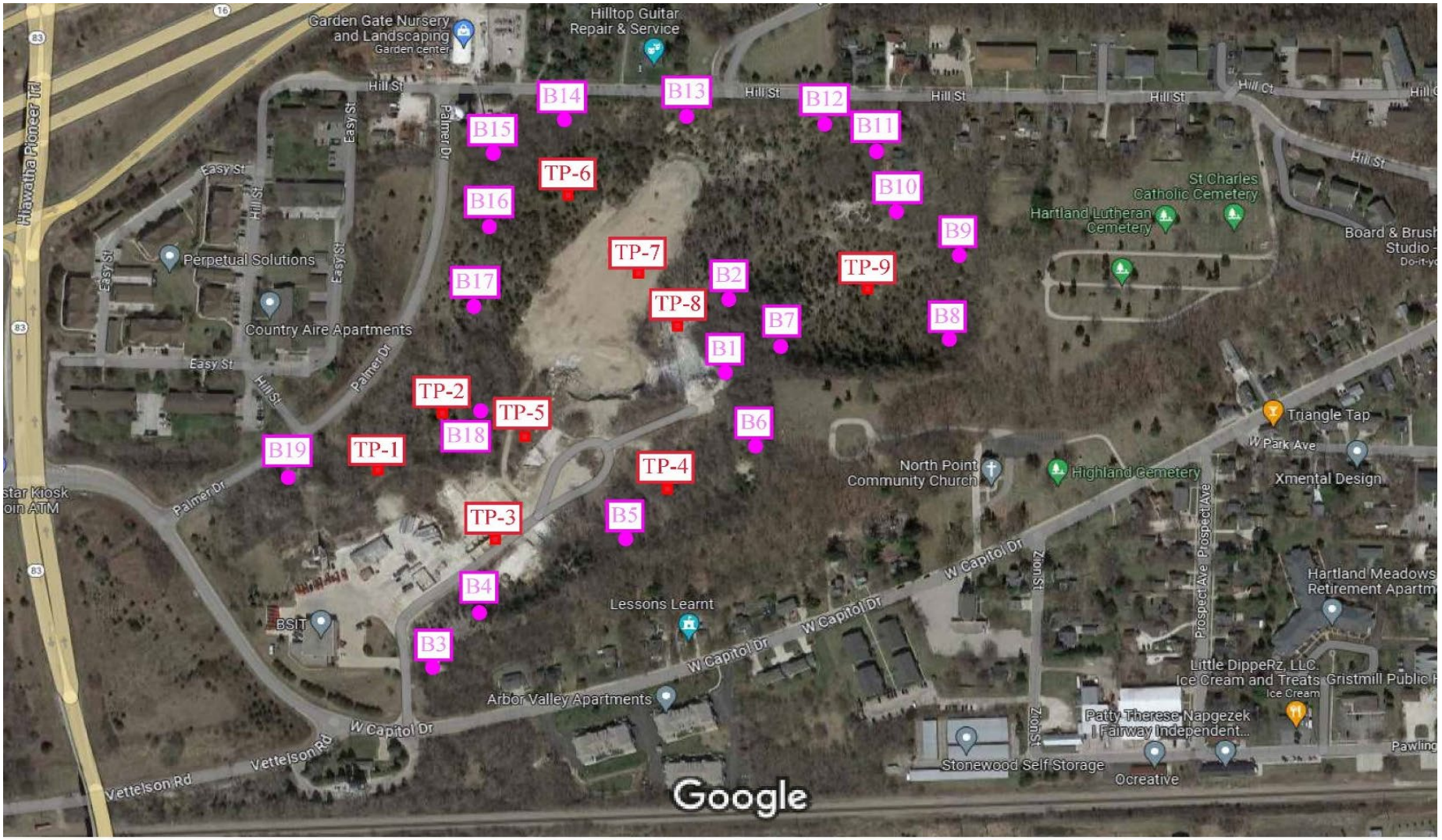
700WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: MLP	DATE: 04/12/2023	Figure 1
REVIEWED BY: RAC	PROJECT NO: 843-001-001	

P:\Three Leaf Partners - 843\001 - Hartland\CAD\001-001\FIG 01_843-001-001_Location Map.dwg



■ Test Pit Locations

● Bluff Samples

GeoTest

Project Name:	Hartland Quarry Apartments	**Project No.:**	7708
Project Location:	700/701 W. Capitol Drive Hartland, Wisconsin Waukesha County	**Date:**	4/29/23
		Drawn By:	MDF
		Scale:	NTS

FIGURE 4
Sampling Location Diagram

TABLES

Table A.2.a
Soil Analytical Results - VOCs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

VOCs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Sample ID, Date of Collection, Soil Type, Relative Water Content									
				TP-1 Composite 4/17/2023 Native Unsaturated	**TP-2** Composite 4/17/2023 Native Unsaturated	**TP-3** Composite 4/17/2023 Native Unsaturated	**TP-4** Composite 4/17/2023 Fill Unsaturated	**TP-5** Composite 4/17/2023 Fill Unsaturated	**TP-6** Composite 4/17/2023 Native Unsaturated	**TP-7A** Composite 4/17/2023 Fill Unsaturated	**TP-7B** Composite 4/17/2023 Native Unsaturated	**TP-8** Composite 4/17/2023 Native Unsaturated	**TP-9** Composite 4/17/2023 Native Unsaturated
Benzene	**7.07**	1.6	*0.0051*	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Bromobenzene	**679**	342	-----	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	**1.83**	0.418	*0.0003*	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
Bromoform	**113**	25.4	*0.0023*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
tert-Butylbenzene	**183**	183	-----	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
sec-Butylbenzene	**145**	145	-----	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
n-Butylbenzene	**108**	108	-----	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029
Carbon Tetrachloride	**4.03**	0.916	*0.0039*	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
Chlorobenzene	**761**	370	-----	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
Chloroethane	**2,120**	2,120	*0.2266*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	**1.98**	0.454	*0.0033*	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032	<0.032
Chloromethane	**669**	159	*0.0155*	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064
2-Chlorotoluene	**907**	907	-----	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034
4-Chlorotoluene	**253**	253	-----	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
1,2-Dibromo-3-chloropropane	**0.092**	0.008	*0.0002*	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055	<0.055
Dibromodichloromethane	**530**	126	*0.032*	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038
1,4-Dichlorobenzene	**16.4**	3.74	*0.144*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
1,3-Dichlorobenzene	**297**	297	*1.1528*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
1,2-Dichlorobenzene	**376**	376	*1.168*	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Dichlorodifluoromethane	**530**	126	*3.0863*	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
1,2-Dichloroethane	**2.87**	0.652	*0.0028*	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
1,1-Dichloroethane	**22.2**	5.06	*0.4834*	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033
1,1-Dichloroethene	**1,190**	320	*0.005*	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049
cis-1,2-Dichloroethene	**2,340**	156	*0.0412*	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
trans-1,2-Dichloroethene	**1,850**	1,560	*0.0626*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,2-Dichloropropane	**15**	3.4	*0.0033*	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,3-Dichloropropane	**1,490**	1,490	-----	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
trans-1,3-Dichloropropene	**1,510**	1,510	*0.0003*	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
cis-1,3-Dichloropropene	**1,210**	1,210	*0.0003*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Di-isopropyl ether	**2,260**	2,260	-----	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028
1,2-Dibromoethane (EDB)	**0.221**	0.05	-----	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Ethylbenzene	**35.4**	8.02	*1.57*	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Hexachlorobutadiene	**7.19**	1.63	-----	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isopropylbenzene (Cumene)	**268**	268	-----	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
p-Isopropyltoluene	**162**	162	-----	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methylene Chloride	**1,150**	61.8	*0.0026*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl-tert-butyl-ether (MTBE)	**282**	63.8	*0.027*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
Naphthalene	**24.1**	5.52	*0.6582*	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
n-Propylbenzene	**264**	264	-----	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	**3.6**	0.810	*0.0002*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1,2-Tetrachloroethane	**12.3**	2.78	*0.0534*	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041
Tetrachloroethene (PCE)	**145**	33	*0.0045*	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
Toluene	**818**	818	*1.1072*	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
1,2,4-Trichlorobenzene	**113**	24	*0.408*	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
1,2,3-Trichlorobenzene	**934**	62.6	-----	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
1,1,1-Trichloroethane	**640**	640	*0.1402*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,2-Trichloroethane	**7.01**	1.59	*0.0032*	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037	<0.037
Trichloroethene (TCE)	**8.41**	1.3	*0.0036*	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039
Trichlorofluoromethane	**1,230**	1,230	-----	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066
1,2,4-Trimethylbenzene	**219**	219	*0.6890*	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
1,3,5-Trimethylbenzene	**182**	182		<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Vinyl Chloride	**2.08**	0.067	*0.0001*	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
m&p-Xylene	**260**	260	*3.96*	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062
o-Xylene				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

1) VOC - Volatile Organic Compound
2) mg/kg - milligrams per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established

Table A.2.b
Soil Analytical Results - PAHs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PAHs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Sample ID, Date of Collection, Soil Type, Relative Water Content									
				TP-1 Composite 4/17/23 Native Unsaturated	**TP-2** Composite 4/17/23 Native Unsaturated	**TP-3** Composite 4/17/23 Native Unsaturated	**TP-4** Composite 4/17/23 Fill Unsaturated	**TP-5** Composite 4/17/23 Fill Unsaturated	**TP-6** Composite 4/17/23 Native Unsaturated	**TP-7A** Composite 4/17/23 Fill Unsaturated	**TP-7B** Composite 4/17/23 Native Unsaturated	**TP-8** Composite 4/17/23 Native Unsaturated	**TP-9** Composite 4/17/23 Native Unsaturated
Acenaphthene	**45,200**	3,590	-----	<0.0118	<0.0118	<0.0118	<0.0118	<0.0118	<0.0118	0.012 "J"	<0.0118	<0.0118	<0.0118
Acenaphthylene	-----	-----	-----	<0.0149	<0.0149	<0.0149	<0.0149	<0.0149	<0.0149	0.083	<0.0149	<0.0149	<0.0149
Anthracene	**100,000**	17,900	*196.9492*	<0.0105	<0.0105	<0.0105	0.02 "J"	<0.0105	<0.0105	0.049	<0.0105	<0.0105	<0.0105
Benzo(a)anthracene	**20.8**	1.14	-----	<0.0164	<0.0164	<0.0164	0.083	<0.0164	<0.0164	0.241	<0.0164	<0.0164	<0.0164
Benzo(a)pyrene	**2.11**	0.115	*0.47*	<0.0137	<0.0137	<0.0137	0.064	<0.0137	<0.0137	0.34	<0.0137	<0.0137	<0.0137
Benzo(b)fluoranthene	**21.1**	1.15	*0.2390*	<0.0144	<0.0144	<0.0144	0.121	<0.0144	<0.0144	*0.43*	<0.0144	<0.0144	<0.0144
Benzo(g,h,i)perylene	-----	-----	-----	<0.0151	<0.0151	<0.0151	0.109	<0.0151	<0.0151	0.42	<0.0151	<0.0151	<0.0151
Benzo(k)fluoranthene	**211**	11.5	-----	<0.0199	<0.0199	<0.0199	0.055 "J"	<0.0199	<0.0199	0.194	<0.0199	<0.0199	<0.0199
Chrysene	**2,110**	115	*0.0721*	<0.0162	<0.0162	<0.0162	*0.101*	<0.0162	<0.0162	*0.283*	<0.0162	<0.0162	<0.0162
Dibenzo(a,h)anthracene	**2.11**	0.115	-----	<0.0151	<0.0151	<0.0151	<0.0151	<0.0151	<0.0151	0.063	<0.0151	<0.0151	<0.0151
Fluoranthene	**30,100**	2,390	*88.8778*	<0.013	<0.013	<0.013	0.138	<0.013	<0.013	0.205	<0.013	<0.013	<0.013
Fluorene	**30,100**	2,390	*14.8299*	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136	<0.0136
Indeno(1,2,3-cd)pyrene	**21.10**	1.15	-----	<0.0163	<0.0163	<0.0163	0.075	<0.0163	<0.0163	0.304	<0.0163	<0.0163	<0.0163
1-Methyl naphthalene	**72.7**	17.6	-----	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096
2-Methyl naphthalene	**3,010**	239	-----	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193
Naphthalene	**24.1**	5.52	*0.6582*	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219
Phenanthrene	-----	-----	-----	<0.0124	<0.0124	<0.0124	0.065	<0.0124	<0.0124	0.065	<0.0124	<0.0124	<0.0124
Pyrene	**22,600**	1,790	*54.5455*	<0.0135	<0.0135	<0.0135	0.11	<0.0135	<0.0135	0.215	<0.0135	<0.0135	<0.0135

1) PAHs - Polycyclic Aromatic Hydrocarbons
2) mg/kg - milligrams per kilogram
3) RCL - Residual Contaminant Level
4) ----- - Standard not established
5) "J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)
6) Italicized result indicates Soil-to-Groundwater Pathway RCL exceedance
7) Orange highlighted result indicates Soil-to-Groundwater Pathway RCL exceedance

TABLE A.2.c
Soil Analytical Table - Metals
644, 700 & 701 West Capitol Drive
Hartland , Wisconsin

Metals (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Background Threshold Value	Sample ID, Date of Collection, Soil Type, Relative Water Content									
					TP-1 Composite Unsaturated 4/17/2023 Native	**TP-2** Composite Unsaturated 4/17/2023 Native	**TP-3** Composite Unsaturated 4/17/2023 Native	**TP-4** Composite Unsaturated 4/17/2023 Fill	**TP-5** Composite Unsaturated 4/17/2023 Fill	**TP-6** Composite Unsaturated 4/17/2023 Native	**TP-7A** Composite Unsaturated 4/17/2023 Fill	**TP-7B** Composite Unsaturated 4/17/2023 Native	**TP-8** Composite Unsaturated 4/17/2023 Native	**TP-9** Composite Unsaturated 4/17/2023 Native
Arsenic	**3**	0.677	*0.584*	8	1.32 "J"	<1.08	<1.08	1.43 "J"	<1.08	<1.08	<1.08	**6.39**	**6.98**	<1.08
Barium	**100,000**	15,300	*164.8*	364	53.8	43.2	12.8	47.8	7.73	11.4	37.9	32.7	41.8	3.93 "J"
Cadmium	**985**	71.1	*0.752*	1	*1.08*	*1.03*	0.559	0.678	0.405	0.456	*0.831*	*2.08*	*2.47*	0.215 "J"
Chromium, total	-----	-----	*360,000*	44	9.30	8.53	3.72	5.47	2.59	4.21	7.24	7.74	9.85	2.32
Lead	**800**	400	*27*	52	4.82	4.18	2.32	17.2	1.11 "J"	1.32 "J"	6.20	12.1	15.3	0.925 "J"
Mercury	**3.13**	3.13	*0.208*	-----	0.0775 "J"	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426	<0.0426
Selenium	**5,840**	391	*0.52*	-----	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	<1.29
Silver	**5,840**	391	*0.8491*	-----	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112

1) mg/kg - milligrams per kilogram
2) RCL - Residual Contaminant Level
3) ----- - Standard not established
4) "J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)
5) Bold result indicates a Industrial Direct Contact RCL exceedance
6) Underlined result indicates Non-Industrial Direct Contact RCL exceedance
7) Italicized result indicates Soil-to-Groundwater Pathway RCL exceedance
8) Gray shaded result indicates background threshold exceedance

TABLE A.2.d
Soil Analytical Results - PCBs

644, 700 & 701 West Capitol Drive
Hartland, Wisconsin

PCBs (mg/kg)	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater Pathway RCL	Background Threshold Value	Sample ID, Date of Collection, Soil Type, Relative Water Content									
					TP-1 Composite Unsaturated Native 4/17/23	**TP-2** Composite Unsaturated Native 4/17/23	**TP-3** Composite Unsaturated Native 4/17/23	**TP-4** Composite Unsaturated Fill 4/17/23	**TP-5** Composite Unsaturated Fill 4/17/23	**TP-6** Composite Unsaturated Native 4/17/23	**TP-7A** Composite Unsaturated Fill 4/17/23	**TP-7B** Composite Unsaturated Native 4/17/23	**TP-8** Composite Unsaturated Native 4/17/23	**TP-9** Composite Unsaturated Native 4/17/23
Aroclor 1016	*28*	4.11	**0.0094**	-----	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Aroclor 1221	*0.883*	0.213	**0.0094**	-----	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Aroclor 1232	*0.792*	0.19	**0.0094**	-----	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Aroclor 1242	*0.972*	0.235	**0.0094**	-----	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Aroclor 1248	*0.975*	0.236	**0.0094**	-----	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Aroclor 1254	*0.988*	0.239	**0.0094**	-----	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
Aroclor 1260	*1*	0.243	**0.0094**	-----	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007

mg/kg - milligrams per kilogram
PCBs - Polychlorinated biphenyls
RCL - Residual Contaminant Level
----- - Standard not established
"J" - Indicates estimated result between the limit of detection (LOD) and the limit of quantitation (LOQ)

APPENDIX A

ANALYTICAL RESULTS

CHAIN-OF-CUSTODY

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

TRAVIS MANSER
ENDPOINT SOLUTIONS
6871 SOUTH LOVER'S LANE
FRANKLIN, WI 53132

Report Date *04-May-23*

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	81.6	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	1.32 "J"	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	53.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	1.08	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	9.30	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	4.82	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	0.0775 "J"	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281A
Sample ID TP-1
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281B
Sample ID TP-2
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	43.2	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	1.03	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	8.53	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	4.18	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281B
Sample ID TP-2
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	99	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	90	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281C
Sample ID TP-3
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.1	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	12.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.559	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	3.72	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	2.32	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281C
Sample ID TP-3
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281D
Sample ID TP-4
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.8	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	1.43 "J"	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	47.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.678	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	5.47	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	17.2	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	0.02 "J"	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	0.083	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	0.064	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	0.121	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	0.109	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	0.055 "J"	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	0.101	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	0.138	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	0.075	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	0.065	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	0.11	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281D
Sample ID TP-4
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281E
Sample ID TP-5
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	7.73	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.405	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	2.59	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	1.11 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281E
Sample ID TP-5
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281F
Sample ID TP-6
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	11.4	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.456	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	4.21	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	1.32 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281F
Sample ID TP-6
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281G
Sample ID TP-7A
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.9	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	37.9	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.831	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	7.24	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	6.20	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	0.012 "J"	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	0.083	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	0.049	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	0.241	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	0.34	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	0.43	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	0.42	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	0.194	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	0.283	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	0.063	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	0.205	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	0.304	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	0.065	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	0.215	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281G
Sample ID TP-7A
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	93	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281H
Sample ID TP-7B
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.8	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	6.39	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	32.7	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	2.08	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	7.74	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	12.1	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	3
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281H
Sample ID TP-7B
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	96	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	102	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	102	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281I
Sample ID TP-8
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	6.98	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	41.8	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	2.47	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	9.85	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	15.3	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281I
Sample ID TP-8
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	91	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281J
Sample ID TP-9
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	96.3	%			1	5021		4/19/2023	ZJW	1
Inorganic										
Metals										
Arsenic, Total	< 1.08	mg/kg	1.08	3.6	1	6010B		4/25/2023	SL	1
Barium, Total	3.93 "J"	mg/kg	2.08	6.93	1	6010B		4/25/2023	SL	1
Cadmium, Total	0.215 "J"	mg/kg	0.0743	0.248	1	6010B		4/25/2023	SL	1
Chromium, Total	2.32	mg/kg	0.115	0.386	1	6010B		4/25/2023	SL	1
Lead, Total	0.925 "J"	mg/kg	0.588	1.96	1	6010B		4/25/2023	SL	1
Mercury, Total	< 0.0426	mg/kg	0.0426	0.142	1	7471		4/26/2023	SL	1
Selenium, Total	< 1.29	mg/kg	1.29	4.29	1	6010B		4/25/2023	SL	1
Silver, Total	< 0.112	mg/kg	0.112	0.376	1	6010B		4/25/2023	SL	1
Organic										
PAH SIM										
Acenaphthene	< 0.0118	mg/kg	0.0118	0.045	1	M8270C	4/26/2023	4/26/2023	NJC	1
Acenaphthylene	< 0.0149	mg/kg	0.0149	0.057	1	M8270C	4/26/2023	4/26/2023	NJC	1
Anthracene	< 0.0105	mg/kg	0.0105	0.04	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)anthracene	< 0.0164	mg/kg	0.0164	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(a)pyrene	< 0.0137	mg/kg	0.0137	0.053	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(b)fluoranthene	< 0.0144	mg/kg	0.0144	0.055	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(g,h,i)perylene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Benzo(k)fluoranthene	< 0.0199	mg/kg	0.0199	0.077	1	M8270C	4/26/2023	4/26/2023	NJC	1
Chrysene	< 0.0162	mg/kg	0.0162	0.062	1	M8270C	4/26/2023	4/26/2023	NJC	1
Dibenzo(a,h)anthracene	< 0.0151	mg/kg	0.0151	0.058	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluoranthene	< 0.013	mg/kg	0.013	0.05	1	M8270C	4/26/2023	4/26/2023	NJC	1
Fluorene	< 0.0136	mg/kg	0.0136	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0163	mg/kg	0.0163	0.063	1	M8270C	4/26/2023	4/26/2023	NJC	1
1-Methyl naphthalene	< 0.0096	mg/kg	0.0096	0.037	1	M8270C	4/26/2023	4/26/2023	NJC	1
2-Methyl naphthalene	< 0.0193	mg/kg	0.0193	0.074	1	M8270C	4/26/2023	4/26/2023	NJC	1
Naphthalene	< 0.0219	mg/kg	0.0219	0.084	1	M8270C	4/26/2023	4/26/2023	NJC	1
Phenanthrene	< 0.0124	mg/kg	0.0124	0.048	1	M8270C	4/26/2023	4/26/2023	NJC	1
Pyrene	< 0.0135	mg/kg	0.0135	0.052	1	M8270C	4/26/2023	4/26/2023	NJC	1
PCB'S										
PCB-1016	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1221	< 0.004	mg/kg	0.004	0.013	1	EPA 8082A		4/29/2023	SL	1
PCB-1232	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.011	1	EPA 8082A		4/29/2023	SL	1
PCB-1248	< 0.0036	mg/kg	0.0036	0.012	1	EPA 8082A		4/29/2023	SL	1
PCB-1254	< 0.0041	mg/kg	0.0041	0.014	1	EPA 8082A		4/29/2023	SL	1
PCB-1260	< 0.007	mg/kg	0.007	0.023	1	EPA 8082A		4/29/2023	SL	1
VOC's										
Benzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Bromobenzene	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
Bromodichloromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
Bromoform	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
tert-Butylbenzene	< 0.033	mg/kg	0.033	0.14	1	8260B		4/21/2023	CJR	1
sec-Butylbenzene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
n-Butylbenzene	< 0.029	mg/kg	0.029	0.12	1	8260B		4/21/2023	CJR	1
Carbon Tetrachloride	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1

Project Name HARTLAND QUARRY **Invoice #** E42281
Project # TBD "843"

Lab Code 5042281J
Sample ID TP-9
Sample Matrix Soil
Sample Date 4/17/2023

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Chlorobenzene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
Chloroethane	< 0.1	mg/kg	0.1	0.41	1	8260B		4/21/2023	CJR	1
Chloroform	< 0.032	mg/kg	0.032	0.13	1	8260B		4/21/2023	CJR	1
Chloromethane	< 0.064	mg/kg	0.064	0.26	1	8260B		4/21/2023	CJR	1
2-Chlorotoluene	< 0.034	mg/kg	0.034	0.14	1	8260B		4/21/2023	CJR	1
4-Chlorotoluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2-Dibromo-3-chloropropane	< 0.055	mg/kg	0.055	0.22	1	8260B		4/21/2023	CJR	1
Dibromochloromethane	< 0.038	mg/kg	0.038	0.16	1	8260B		4/21/2023	CJR	1
1,4-Dichlorobenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3-Dichlorobenzene	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
1,2-Dichlorobenzene	< 0.026	mg/kg	0.026	0.11	1	8260B		4/21/2023	CJR	1
Dichlorodifluoromethane	< 0.046	mg/kg	0.046	0.19	1	8260B		4/21/2023	CJR	1
1,2-Dichloroethane	< 0.042	mg/kg	0.042	0.17	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethane	< 0.033	mg/kg	0.033	0.13	1	8260B		4/21/2023	CJR	1
1,1-Dichloroethene	< 0.049	mg/kg	0.049	0.2	1	8260B		4/21/2023	CJR	1
cis-1,2-Dichloroethene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
trans-1,2-Dichloroethene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,2-Dichloropropane	< 0.04	mg/kg	0.04	0.16	1	8260B		4/21/2023	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
trans-1,3-Dichloropropene	< 0.027	mg/kg	0.027	0.11	1	8260B		4/21/2023	CJR	1
cis-1,3-Dichloropropene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
Di-isopropyl ether	< 0.028	mg/kg	0.028	0.11	1	8260B		4/21/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
Ethylbenzene	< 0.023	mg/kg	0.023	0.096	1	8260B		4/21/2023	CJR	1
Hexachlorobutadiene	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Isopropylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
p-Isopropyltoluene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
Methylene chloride	< 0.1	mg/kg	0.1	0.42	1	8260B		4/21/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
Naphthalene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/21/2023	CJR	1
n-Propylbenzene	< 0.025	mg/kg	0.025	0.1	1	8260B		4/21/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,1,2-Tetrachloroethane	< 0.041	mg/kg	0.041	0.17	1	8260B		4/21/2023	CJR	1
Tetrachloroethene	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.045	mg/kg	0.045	0.18	1	8260B		4/21/2023	CJR	1
1,2,3-Trichlorobenzene	< 0.18	mg/kg	0.18	0.56	1	8260B		4/21/2023	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
1,1,2-Trichloroethane	< 0.037	mg/kg	0.037	0.15	1	8260B		4/21/2023	CJR	1
Trichloroethene (TCE)	< 0.039	mg/kg	0.039	0.16	1	8260B		4/21/2023	CJR	1
Trichlorofluoromethane	< 0.066	mg/kg	0.066	0.27	1	8260B		4/21/2023	CJR	1
1,2,4-Trimethylbenzene	< 0.035	mg/kg	0.035	0.14	1	8260B		4/21/2023	CJR	1
1,3,5-Trimethylbenzene	< 0.031	mg/kg	0.031	0.13	1	8260B		4/21/2023	CJR	1
Vinyl Chloride	< 0.036	mg/kg	0.036	0.15	1	8260B		4/21/2023	CJR	1
m&p-Xylene	< 0.062	mg/kg	0.062	0.25	1	8260B		4/21/2023	CJR	1
o-Xylene	< 0.03	mg/kg	0.03	0.12	1	8260B		4/21/2023	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		4/21/2023	CJR	1
SUR - 4-Bromofluorobenzene	92	Rec %			1	8260B		4/21/2023	CJR	1
SUR - Dibromofluoromethane	96	Rec %			1	8260B		4/21/2023	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
3	The matrix spike not within established limits.

SL denotes sub contract lab - Certification #399089350

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature

CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, LLC

www.synergy-lab.net
1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • mrsynergy@wi.twcbc.com

Chain # 45974
Page 1 of 1

Sample Handling Request
___ Rush Analysis Date Required: _____
(Rushes accepted only with prior authorization)
✓ Normal Turn Around

Lab I.D. #
QUOTE # :
Project #: TBD "843"
Sampler: (signature)
Project (Name / Location): Hartland Quarry // 644, 700 & 701 W. Capitol Drive, Hartland, WI

Reports To: Travis Manser	Invoice To:
Company Endpoint Solutions Corp.	Company
Address 6871 South Lovers Lane	Address SAME
City State Zip Franklin, WI	City State Zip
Phone 414-858-2265	Phone
Email travis@endpointcorporation.com	Email

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
504228 1 A	TP-1	4/17	0845	N	4	Soil	MeOH / none
B	TP-2		0915				
C	TP-3		0920				
D	TP-4		1000				
E	TP-5		1100				
F	TP-6		1115				
G	TP-7A		1130				
H	TP-7B		1130				
I	TP-8		1200				
J	TP-9		1230				

Analysis Requested / **Other Analysis**

DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-RCRA METALS	PID/FID
					X	X						X		X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: CS
Temp. of Temp. Blank: ____ °C On Ice: Y
Cooler seal intact upon receipt: Y Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	0826	4-18-23			

Received in Laboratory By: Time: 915a Date: 04.19.23

APPENDIX C

LUST AREA SOIL BORING LOGS

BOREHOLE ABANDONMENT FORMS

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Hartland Quarry Apartments - Phase II		SB- 1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Greg Last Name: Wester Firm: Horizon Construction And Exploration	08 / 18 / 2023	08 / 18 / 2023	Split Spoon

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	974.41 Feet MSL	2 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E
_____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Waukesha	67	Village of Hartland

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1											
	8/ 18	7 5 5	2	FILL: light brown, well graded, loose, Sandy Gravel (GW)						D				
			3											
	9/ 18	6 4 3	4											*SB-1 (3.5-5)
			5											
			6											
	7/ 18	8 9 13	7	FILL: light brown, medium grained, well graded, medium dense, Sandy Gravel, trace silt (SW)						M				
			8											
	13/ 18	17 12 7	9 10	... Very Moist						VM				*SB-1 (8.5-10)

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	Endpoint Solutions Corp.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Boring Number: SB- 1

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			11	... wet						W				
			12											
			13											
	10/ 18	13 10 7	14	Gray, medium grained, poorly graded, medium dense, Sand, petroleum odor (SP)						W				
			15	Gray, medium grained, Well graded, medium dense, Sand, petroleum odor (SW)						W				
			16	End of boring at 15'										
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26											
			27											
			28											
			29											
			30											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Facility/Project Name: Hartland Quarry Apartments - Phase II	License/Permit/Monitoring Number	Boring Number: SB- 2	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Greg Last Name: Wester Firm: Horizon Construction And Exploration	Date Drilling Started: 08/18/2023	Date Drilling Completed: 08/18/2023	Drilling Method: Split Spoon
WI Unique Well No. _____ DNR Well ID No. _____ Well Name	Final Static Water Level: _____ Feet MSL	Surface Elevation: 971.23 Feet MSL	Borehole Diameter: 2 inches
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ State Plane _____ N, _____ E _____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____	Lat ° ' " Long ° ' "	Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W	
Facility ID	County: Waukesha	County Code: 67	Civil Town/City/ or Village: Village of Hartland

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				Concrete										
	14/18	7 5 5	1 2	FILL: Tan, medium grained, well graded, medium dense, Silty Sand, trace gravel (SM)						M				*SB-2 (1-2.5)
			3											
	15/18	6 4 3	4	... Coarse grained										
			5	... Pushed rock										
			6	... Gray, fine grained, petroleum odor										
	16/18	8 9 13	7							M				*SB-2 (6-7.5)
			8							W				
	18/18	17 12 7	9 10	... wet										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	Endpoint Solutions Corp.

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Boring Number: SB- 2

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			11											
			12											
			13											
	0/ 18	14 13 14	14											
			15											
			16											
			17											
			18	Tan, medium grained, Well graded, medium dense, Sand (SW)						D				
	18/ 18	18 16 15	19											
			20											
			21	End of boring at 20'										
			22											
			23											
			24											
			25											
			26											
			27											
			28											
			29											
			30											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Facility/Project Name: Hartland Quarry Apartments - Phase II	License/Permit/Monitoring Number	Boring Number: SB- 3	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Greg Last Name: Wester Firm: Horizon Construction And Exploration	Date Drilling Started: 08/18/2023	Date Drilling Completed: 08/18/2023	Drilling Method: Direct Push
WI Unique Well No. _____ DNR Well ID No. _____ Well Name	Final Static Water Level: _____ Feet MSL	Surface Elevation: 971.23 Feet MSL	Borehole Diameter: 2 inches
Local Grid Origin ☐ (estimated: _) or Boring Location ☐ State Plane _____ N, _____ E _____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____	Lat ° ' " Long ° ' "	Local Grid Location _____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W	
Facility ID	County: Waukesha	County Code: 67	Civil Town/City/ or Village: Village of Hartland

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				Concrete										
1	30/60		1–5	FILL: Tan, medium grained, well graded, medium dense, Gravely Sand (SW) ...Light brown						D M				*SB-3(2)
2	32/60		6–10	FILL: Light brown, medium grained, well graded, medium dense, Silty Sand, trace gravel (SM) ... Wet						M W				*SB-3(10)

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	Endpoint Solutions Corp.

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Boring Number: SB- 3

Sample										Soil Properties						
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID		Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
3	42/ 60		11												
			12	Gray, fine grained, poorly graded, loose, Silty Sand (SM)							W				
			13												
			14												
			15	End of boring at 15'											
			16												
			17												
			18												
			19												
			20												
			21												
			22												
			23												
			24												
			25												
			26												
			27												
			28												
			29												
			30												

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Facility/Project Name: Hartland Quarry Apartments - Phase II	License/Permit/Monitoring Number	Boring Number: SB- 4	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Greg Last Name: Wester Firm: Horizon Construction And Exploration	Date Drilling Started: 08/18/2023	Date Drilling Completed: 08/18/2023	Drilling Method: Direct Push
WI Unique Well No. _____ DNR Well ID No. _____ Well Name	Final Static Water Level: _____ Feet MSL	Surface Elevation: 972.00 Feet MSL	Borehole Diameter: 2 inches
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ State Plane _____ N, _____ E _____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____	Lat ° ' " Long ° ' "	Local Grid Location ☒ N ☒ E _____ Feet ☐ S _____ Feet ☐ W	
Facility ID	County: Waukesha	County Code: 6 7	Civil Town/City/ or Village: Village of Hartland

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				Concrete										
1	30/60		1–5	FILL: Light brown, medium grained, well graded, medium dense, Gravely Sand (SW)						M				*SB-4(2)
										M				
2	51/60		5–10	FILL: Light brown, medium grained, well graded, medium dense, Silty Sand, trace gravel (SM) ...Wet						W				*SB-4(7)
				Gray, medium plastic, very firm, Silty Clay (CL)						M				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm: Endpoint Solutions Corp.

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Boring Number: SB- 4

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
3	42/ 60		11											
			12	...soft, wet						W				
			13	...firm, moist						M				
			14	Light brown, Medium grained, poorly graded, loose, Silty Sand (SM)						M				
			15	End of boring at 15'										
			16											
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26											
			27											
			28											
			29											
			30											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Facility/Project Name: Hartland Quarry Apartments - Phase II	License/Permit/Monitoring Number	Boring Number: SB- 5	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Greg Last Name: Wester Firm: Horizon Construction And Exploration	Date Drilling Started: 08/18/2023	Date Drilling Completed: 08/18/2023	Drilling Method: Direct Push
WI Unique Well No. _ _ _ _ _ _ / DNR Well ID No. _ _ _ / Well Name	Final Static Water Level: _____ Feet MSL	Surface Elevation: 970.67 Feet MSL	Borehole Diameter: 2 inches
Local Grid Origin ☐ (estimated: _) or Boring Location ☐ State Plane _____ N, _____ E _____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____	Lat ° ' " Long ° ' "	Local Grid Location _____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W	
Facility ID	County: Waukesha	County Code: 6 7	Civil Town/City/ or Village: Village of Hartland

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				Concrete										
1	30/60		1–3	FILL: Light brown, medium grained, well graded, medium dense, Gravely Sand (SW)						D				*SB-5(2)
			4–5	FILL: Brown, medium grained, well graded, medium dense, Silty Sand (SM)						M				
2	51/60		6–8	...Wet						W				*SB-5(7)
			9–10	Brown, medium plastic, very firm, Silty Clay (CL)						M				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm: Endpoint Solutions Corp.

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Boring Number: SB- 5

Sample									Soil Properties						
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
3	42/ 60		11 12 13 14 15	... Gray						M				
			15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	End of boring at 15'										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Facility/Project Name: Hartland Quarry Apartments - Phase II	License/Permit/Monitoring Number	Boring Number: SB- 6	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: Greg Last Name: Wester Firm: Horizon Construction And Exploration	Date Drilling Started: 08/18/2023	Date Drilling Completed: 08/18/2023	Drilling Method: Direct Push
WI Unique Well No. _____ DNR Well ID No. _____ Well Name	Final Static Water Level: _____ Feet MSL	Surface Elevation: 971.01 Feet MSL	Borehole Diameter: 2 inches
Local Grid Origin ☐ (estimated: _) or Boring Location ☐ State Plane _____ N, _____ E _____ 1/4 of _____ 1/4 of Section _____, T _____ N, R _____	Lat ° ' " Long ° ' "	Local Grid Location _____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W	
Facility ID	County: Waukesha	County Code: 67	Civil Town/City/ or Village: Village of Hartland

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				Concrete										
1	50/60		1–5	FILL: Light brown, medium grained, well graded, medium dense, Gravely Sand (SW)						M M				*SB-6(2)
2	52/60		6–10	FILL: Light brown, medium grained, well graded, medium dense, Silty Sand, trace gravel (SM) ...Wet						W				*SB-6(8)

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm: Endpoint Solutions Corp.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Boring Number: SB- 6

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
3	60/ 60		11											
			12											
				Gray, medium plastic, very firm, Silty Clay(CL)						M				
			13											
			14											
				Light brown, Medium grained, poorly graded, loose, Gravely Sand (SW)						M				
			15											
				End of boring at 15'										
			16											
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26											
			27											
			28											
			29											
			30											

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waukesha	_ _ _ _ _ _ _	SB-1

Latitude / Longitude (see instructions): _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 644, 700 & 701 West Capitol Drive

Well City, Village or Town	Well ZIP Code
Village of Hartland	53029

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Soil Borings	_ _ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 08/18/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	NA
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2	NA

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	NA

2. Facility / Owner Information

Facility Name: Hartland Quarry
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	15	<1 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Endpoint Solutions Corp.		08/21/2023

Street or Route	Telephone Number
6871 South Lovers Lane Road	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		08/25/2023

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waukesha	_ _ _ _ _ _ _	SB-1

Latitude / Longitude (see instructions): _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 644, 700 & 701 West Capitol Drive

Well City, Village or Town	Well ZIP Code
Village of Hartland	53029

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Well	_ _ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 08/18/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
20	1
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2	20

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	NA

2. Facility / Owner Information

Facility Name: Hartland Quarry
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	20	<1 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Endpoint Solutions Corp.		08/21/2023

Street or Route	Telephone Number
6871 South Lovers Lane Road	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		08/25/2023

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waukesha	_ _ _ _ _ _ _	SB-3

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 644, 700 & 701 West Capitol Drive

Well City, Village or Town	Well ZIP Code
Village of Hartland	53029

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Soil Borings	_ _ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 08/18/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	NA
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2	NA

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	NA

2. Facility / Owner Information

Facility Name: Hartland Quarry
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	15	<1 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Endpoint Solutions Corp.		08/21/2023

Street or Route	Telephone Number
6871 South Lovers Lane Road	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		08/25/2023

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waukesha	_ _ _ _ _ _ _	SB-4

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 644, 700 & 701 West Capitol Drive

Well City, Village or Town	Well ZIP Code
Village of Hartland	53029

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Well	_ _ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 08/18/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	1
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2	15

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	NA

2. Facility / Owner Information

Facility Name: Hartland Quarry
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	15	<1 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Endpoint Solutions Corp.		08/21/2023

Street or Route	Telephone Number
6871 South Lovers Lane Road	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		08/25/2023

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waukesha	_ _ _ _ _ _ _	SB-5

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 644, 700 & 701 West Capitol Drive

Well City, Village or Town	Well ZIP Code
Village of Hartland	53029

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Well	_ _ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 08/18/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	1
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2	15

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	NA

2. Facility / Owner Information

Facility Name: Hartland Quarry
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	15	<1 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Endpoint Solutions Corp.		08/21/2023

Street or Route	Telephone Number
6871 South Lovers Lane Road	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		08/25/2023

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waukesha	_ _ _ _ _ _ _	SB-6

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 644, 700 & 701 West Capitol Drive

Well City, Village or Town	Well ZIP Code
Village of Hartland	53029

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Well	_ _ _ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 08/18/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	1
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2	15

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	NA

2. Facility / Owner Information

Facility Name: Hartland Quarry
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	15	<1 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Endpoint Solutions Corp.		08/21/2023

Street or Route	Telephone Number
6871 South Lovers Lane Road	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		08/25/2023

DNR Use Only

Date Received	Noted By

Comments:

APPENDIX D

LUST AREA ANALYTICAL DATA & CHAIN-OF-CUSTODY

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

August 24, 2023

Ryan Johnson
Endpoint Solutions
6871 S Lovers Lane
Franklin, WI 53132

RE: Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Dear Ryan Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on August 19, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40266996001	**SB-1 (3-5.5)**	Solid	08/18/23 09:40	08/19/23 08:45
40266996002	**SB-1 (8-10)**	Solid	08/18/23 09:55	08/19/23 08:45
40266996003	**SB-2 (1-2.5)**	Solid	08/18/23 10:20	08/19/23 08:45
40266996004	**SB-2 (6-7.5)**	Solid	08/18/23 10:30	08/19/23 08:45
40266996005	**SB-3 (2)**	Solid	08/18/23 11:30	08/19/23 08:45
40266996006	**SB-3 (10)**	Solid	08/18/23 11:35	08/19/23 08:45
40266996007	**SB-4 (2)**	Solid	08/18/23 11:40	08/19/23 08:45
40266996008	**SB-4 (7)**	Solid	08/18/23 11:45	08/19/23 08:45
40266996009	**SB-5 (2)**	Solid	08/18/23 12:00	08/19/23 08:45
40266996010	**SB-5 (7)**	Solid	08/18/23 12:05	08/19/23 08:45
40266996011	**SB-6 (2)**	Solid	08/18/23 12:50	08/19/23 08:45
40266996012	**SB-6 (8)**	Solid	08/18/23 12:55	08/19/23 08:45

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40266996001	**SB-1 (3-5.5)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996002	**SB-1 (8-10)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996003	**SB-2 (1-2.5)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996004	**SB-2 (6-7.5)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996005	**SB-3 (2)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996006	**SB-3 (10)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996007	**SB-4 (2)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996008	**SB-4 (7)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996009	**SB-5 (2)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996010	**SB-5 (7)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996011	**SB-6 (2)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1
40266996012	**SB-6 (8)**	EPA 8260	ALD	11
		ASTM D2974-87	NMK	1

PASI-G = Pace Analytical Services - Green Bay

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40266996001	**SB-1 (3-5.5)**					
ASTM D2974-87	Percent Moisture	1.6	%	0.10	08/21/23 16:39	
40266996002	**SB-1 (8-10)**					
ASTM D2974-87	Percent Moisture	6.1	%	0.10	08/21/23 16:39	
40266996003	**SB-2 (1-2.5)**					
ASTM D2974-87	Percent Moisture	9.7	%	0.10	08/21/23 16:39	
40266996004	**SB-2 (6-7.5)**					
EPA 8260	Ethylbenzene	1210	ug/kg	743	08/22/23 12:08	
EPA 8260	Naphthalene	27900	ug/kg	3710	08/22/23 12:08	
EPA 8260	1,2,4-Trimethylbenzene	13600	ug/kg	743	08/22/23 12:08	
EPA 8260	1,3,5-Trimethylbenzene	515J	ug/kg	743	08/22/23 12:08	
EPA 8260	Xylene (Total)	1040J	ug/kg	2230	08/22/23 12:08	
ASTM D2974-87	Percent Moisture	8.6	%	0.10	08/21/23 16:39	
40266996005	**SB-3 (2)**					
ASTM D2974-87	Percent Moisture	5.1	%	0.10	08/21/23 16:39	
40266996006	**SB-3 (10)**					
ASTM D2974-87	Percent Moisture	8.5	%	0.10	08/21/23 16:39	
40266996007	**SB-4 (2)**					
ASTM D2974-87	Percent Moisture	5.4	%	0.10	08/21/23 17:45	
40266996008	**SB-4 (7)**					
ASTM D2974-87	Percent Moisture	8.6	%	0.10	08/21/23 17:45	
40266996009	**SB-5 (2)**					
ASTM D2974-87	Percent Moisture	2.9	%	0.10	08/21/23 17:45	
40266996010	**SB-5 (7)**					
ASTM D2974-87	Percent Moisture	8.4	%	0.10	08/21/23 17:46	
40266996011	**SB-6 (2)**					
ASTM D2974-87	Percent Moisture	3.6	%	0.10	08/21/23 17:46	
40266996012	**SB-6 (8)**					
ASTM D2974-87	Percent Moisture	6.9	%	0.10	08/21/23 17:46	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Sample: SB-1 (3-5.5) **Lab ID: 40266996001** Collected: 08/18/23 09:40 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<12.3**	ug/kg	20.7	12.3	1	08/22/23 07:15	08/23/23 11:14	71-43-2	
Ethylbenzene	**<12.3**	ug/kg	51.7	12.3	1	08/22/23 07:15	08/23/23 11:14	100-41-4	
Methyl-tert-butyl ether	**<15.2**	ug/kg	51.7	15.2	1	08/22/23 07:15	08/23/23 11:14	1634-04-4	
Naphthalene	**<16.1**	ug/kg	258	16.1	1	08/22/23 07:15	08/23/23 11:14	91-20-3	
Toluene	**<13.0**	ug/kg	51.7	13.0	1	08/22/23 07:15	08/23/23 11:14	108-88-3	
1,2,4-Trimethylbenzene	**<15.4**	ug/kg	51.7	15.4	1	08/22/23 07:15	08/23/23 11:14	95-63-6	
1,3,5-Trimethylbenzene	**<16.6**	ug/kg	51.7	16.6	1	08/22/23 07:15	08/23/23 11:14	108-67-8	
Xylene (Total)	**<37.3**	ug/kg	155	37.3	1	08/22/23 07:15	08/23/23 11:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	114	%	68-156		1	08/22/23 07:15	08/23/23 11:14	460-00-4	
Toluene-d8 (S)	110	%	69-153		1	08/22/23 07:15	08/23/23 11:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	114	%	71-161		1	08/22/23 07:15	08/23/23 11:14	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**1.6**	%	0.10	0.10	1		08/21/23 16:39		

Sample: SB-1 (8-10) **Lab ID: 40266996002** Collected: 08/18/23 09:55 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<13.4**	ug/kg	22.6	13.4	1	08/21/23 07:15	08/21/23 14:34	71-43-2	
Ethylbenzene	**<13.4**	ug/kg	56.5	13.4	1	08/21/23 07:15	08/21/23 14:34	100-41-4	
Methyl-tert-butyl ether	**<16.6**	ug/kg	56.5	16.6	1	08/21/23 07:15	08/21/23 14:34	1634-04-4	
Naphthalene	**<17.6**	ug/kg	282	17.6	1	08/21/23 07:15	08/21/23 14:34	91-20-3	
Toluene	**<14.2**	ug/kg	56.5	14.2	1	08/21/23 07:15	08/21/23 14:34	108-88-3	
1,2,4-Trimethylbenzene	**<16.8**	ug/kg	56.5	16.8	1	08/21/23 07:15	08/21/23 14:34	95-63-6	
1,3,5-Trimethylbenzene	**<18.2**	ug/kg	56.5	18.2	1	08/21/23 07:15	08/21/23 14:34	108-67-8	
Xylene (Total)	**<40.8**	ug/kg	169	40.8	1	08/21/23 07:15	08/21/23 14:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	117	%	68-156		1	08/21/23 07:15	08/21/23 14:34	460-00-4	
Toluene-d8 (S)	114	%	69-153		1	08/21/23 07:15	08/21/23 14:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	111	%	71-161		1	08/21/23 07:15	08/21/23 14:34	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**6.1**	%	0.10	0.10	1		08/21/23 16:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Sample: SB-2 (1-2.5) **Lab ID: 40266996003** Collected: 08/18/23 10:20 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<14.5**	ug/kg	24.3	14.5	1	08/21/23 07:15	08/21/23 14:14	71-43-2	
Ethylbenzene	**<14.5**	ug/kg	60.7	14.5	1	08/21/23 07:15	08/21/23 14:14	100-41-4	
Methyl-tert-butyl ether	**<17.9**	ug/kg	60.7	17.9	1	08/21/23 07:15	08/21/23 14:14	1634-04-4	
Naphthalene	**<19.0**	ug/kg	304	19.0	1	08/21/23 07:15	08/21/23 14:14	91-20-3	
Toluene	**<15.3**	ug/kg	60.7	15.3	1	08/21/23 07:15	08/21/23 14:14	108-88-3	
1,2,4-Trimethylbenzene	**<18.1**	ug/kg	60.7	18.1	1	08/21/23 07:15	08/21/23 14:14	95-63-6	
1,3,5-Trimethylbenzene	**<19.6**	ug/kg	60.7	19.6	1	08/21/23 07:15	08/21/23 14:14	108-67-8	
Xylene (Total)	**<43.9**	ug/kg	182	43.9	1	08/21/23 07:15	08/21/23 14:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	68-156		1	08/21/23 07:15	08/21/23 14:14	460-00-4	
Toluene-d8 (S)	111	%	69-153		1	08/21/23 07:15	08/21/23 14:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	113	%	71-161		1	08/21/23 07:15	08/21/23 14:14	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**9.7**	%	0.10	0.10	1		08/21/23 16:39		

Sample: SB-2 (6-7.5) **Lab ID: 40266996004** Collected: 08/18/23 10:30 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<177**	ug/kg	297	177	12.5	08/21/23 07:15	08/22/23 12:08	71-43-2	
Ethylbenzene	**1210**	ug/kg	743	177	12.5	08/21/23 07:15	08/22/23 12:08	100-41-4	
Methyl-tert-butyl ether	**<218**	ug/kg	743	218	12.5	08/21/23 07:15	08/22/23 12:08	1634-04-4	
Naphthalene	**27900**	ug/kg	3710	232	12.5	08/21/23 07:15	08/22/23 12:08	91-20-3	
Toluene	**<187**	ug/kg	743	187	12.5	08/21/23 07:15	08/22/23 12:08	108-88-3	
1,2,4-Trimethylbenzene	**13600**	ug/kg	743	221	12.5	08/21/23 07:15	08/22/23 12:08	95-63-6	
1,3,5-Trimethylbenzene	**515J**	ug/kg	743	239	12.5	08/21/23 07:15	08/22/23 12:08	108-67-8	
Xylene (Total)	**1040J**	ug/kg	2230	536	12.5	08/21/23 07:15	08/22/23 12:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	68-156		12.5	08/21/23 07:15	08/22/23 12:08	460-00-4	S4
Toluene-d8 (S)	115	%	69-153		12.5	08/21/23 07:15	08/22/23 12:08	2037-26-5	S4
1,2-Dichlorobenzene-d4 (S)	149	%	71-161		12.5	08/21/23 07:15	08/22/23 12:08	2199-69-1	S4
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**8.6**	%	0.10	0.10	1		08/21/23 16:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Sample: SB-3 (2) **Lab ID: 40266996005** Collected: 08/18/23 11:30 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<13.2**	ug/kg	22.1	13.2	1	08/22/23 07:15	08/23/23 11:34	71-43-2	
Ethylbenzene	**<13.2**	ug/kg	55.4	13.2	1	08/22/23 07:15	08/23/23 11:34	100-41-4	
Methyl-tert-butyl ether	**<16.3**	ug/kg	55.4	16.3	1	08/22/23 07:15	08/23/23 11:34	1634-04-4	
Naphthalene	**<17.3**	ug/kg	277	17.3	1	08/22/23 07:15	08/23/23 11:34	91-20-3	
Toluene	**<13.9**	ug/kg	55.4	13.9	1	08/22/23 07:15	08/23/23 11:34	108-88-3	
1,2,4-Trimethylbenzene	**<16.5**	ug/kg	55.4	16.5	1	08/22/23 07:15	08/23/23 11:34	95-63-6	
1,3,5-Trimethylbenzene	**<17.8**	ug/kg	55.4	17.8	1	08/22/23 07:15	08/23/23 11:34	108-67-8	
Xylene (Total)	**<40.0**	ug/kg	166	40.0	1	08/22/23 07:15	08/23/23 11:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%	68-156		1	08/22/23 07:15	08/23/23 11:34	460-00-4	
Toluene-d8 (S)	111	%	69-153		1	08/22/23 07:15	08/23/23 11:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	112	%	71-161		1	08/22/23 07:15	08/23/23 11:34	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**5.1**	%	0.10	0.10	1		08/21/23 16:39		

Sample: SB-3 (10) **Lab ID: 40266996006** Collected: 08/18/23 11:35 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<14.1**	ug/kg	23.7	14.1	1	08/22/23 07:15	08/23/23 11:54	71-43-2	
Ethylbenzene	**<14.1**	ug/kg	59.3	14.1	1	08/22/23 07:15	08/23/23 11:54	100-41-4	
Methyl-tert-butyl ether	**<17.4**	ug/kg	59.3	17.4	1	08/22/23 07:15	08/23/23 11:54	1634-04-4	
Naphthalene	**<18.5**	ug/kg	297	18.5	1	08/22/23 07:15	08/23/23 11:54	91-20-3	
Toluene	**<15.0**	ug/kg	59.3	15.0	1	08/22/23 07:15	08/23/23 11:54	108-88-3	
1,2,4-Trimethylbenzene	**<17.7**	ug/kg	59.3	17.7	1	08/22/23 07:15	08/23/23 11:54	95-63-6	
1,3,5-Trimethylbenzene	**<19.1**	ug/kg	59.3	19.1	1	08/22/23 07:15	08/23/23 11:54	108-67-8	
Xylene (Total)	**<42.8**	ug/kg	178	42.8	1	08/22/23 07:15	08/23/23 11:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%	68-156		1	08/22/23 07:15	08/23/23 11:54	460-00-4	
Toluene-d8 (S)	105	%	69-153		1	08/22/23 07:15	08/23/23 11:54	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	110	%	71-161		1	08/22/23 07:15	08/23/23 11:54	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**8.5**	%	0.10	0.10	1		08/21/23 16:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Sample: SB-4 (2) **Lab ID: 40266996007** Collected: 08/18/23 11:40 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<13.2**	ug/kg	22.3	13.2	1	08/22/23 07:15	08/23/23 12:13	71-43-2	
Ethylbenzene	**<13.2**	ug/kg	55.7	13.2	1	08/22/23 07:15	08/23/23 12:13	100-41-4	
Methyl-tert-butyl ether	**<16.4**	ug/kg	55.7	16.4	1	08/22/23 07:15	08/23/23 12:13	1634-04-4	
Naphthalene	**<17.4**	ug/kg	278	17.4	1	08/22/23 07:15	08/23/23 12:13	91-20-3	
Toluene	**<14.0**	ug/kg	55.7	14.0	1	08/22/23 07:15	08/23/23 12:13	108-88-3	
1,2,4-Trimethylbenzene	**<16.6**	ug/kg	55.7	16.6	1	08/22/23 07:15	08/23/23 12:13	95-63-6	
1,3,5-Trimethylbenzene	**<17.9**	ug/kg	55.7	17.9	1	08/22/23 07:15	08/23/23 12:13	108-67-8	
Xylene (Total)	**<40.2**	ug/kg	167	40.2	1	08/22/23 07:15	08/23/23 12:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	110	%	68-156		1	08/22/23 07:15	08/23/23 12:13	460-00-4	
Toluene-d8 (S)	114	%	69-153		1	08/22/23 07:15	08/23/23 12:13	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	112	%	71-161		1	08/22/23 07:15	08/23/23 12:13	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**5.4**	%	0.10	0.10	1		08/21/23 17:45		

Sample: SB-4 (7) **Lab ID: 40266996008** Collected: 08/18/23 11:45 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<14.1**	ug/kg	23.7	14.1	1	08/22/23 07:15	08/22/23 20:18	71-43-2	
Ethylbenzene	**<14.1**	ug/kg	59.4	14.1	1	08/22/23 07:15	08/22/23 20:18	100-41-4	M1
Methyl-tert-butyl ether	**<17.5**	ug/kg	59.4	17.5	1	08/22/23 07:15	08/22/23 20:18	1634-04-4	
Naphthalene	**<18.5**	ug/kg	297	18.5	1	08/22/23 07:15	08/22/23 20:18	91-20-3	
Toluene	**<15.0**	ug/kg	59.4	15.0	1	08/22/23 07:15	08/22/23 20:18	108-88-3	
1,2,4-Trimethylbenzene	**<17.7**	ug/kg	59.4	17.7	1	08/22/23 07:15	08/22/23 20:18	95-63-6	
1,3,5-Trimethylbenzene	**<19.1**	ug/kg	59.4	19.1	1	08/22/23 07:15	08/22/23 20:18	108-67-8	
Xylene (Total)	**<42.9**	ug/kg	178	42.9	1	08/22/23 07:15	08/22/23 20:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	109	%	68-156		1	08/22/23 07:15	08/22/23 20:18	460-00-4	
Toluene-d8 (S)	112	%	69-153		1	08/22/23 07:15	08/22/23 20:18	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	107	%	71-161		1	08/22/23 07:15	08/22/23 20:18	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**8.6**	%	0.10	0.10	1		08/21/23 17:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Sample: SB-5 (2) **Lab ID: 40266996009** Collected: 08/18/23 12:00 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<12.6**	ug/kg	21.2	12.6	1	08/22/23 07:15	08/23/23 12:33	71-43-2	
Ethylbenzene	**<12.6**	ug/kg	53.0	12.6	1	08/22/23 07:15	08/23/23 12:33	100-41-4	
Methyl-tert-butyl ether	**<15.6**	ug/kg	53.0	15.6	1	08/22/23 07:15	08/23/23 12:33	1634-04-4	
Naphthalene	**<16.5**	ug/kg	265	16.5	1	08/22/23 07:15	08/23/23 12:33	91-20-3	
Toluene	**<13.4**	ug/kg	53.0	13.4	1	08/22/23 07:15	08/23/23 12:33	108-88-3	
1,2,4-Trimethylbenzene	**<15.8**	ug/kg	53.0	15.8	1	08/22/23 07:15	08/23/23 12:33	95-63-6	
1,3,5-Trimethylbenzene	**<17.1**	ug/kg	53.0	17.1	1	08/22/23 07:15	08/23/23 12:33	108-67-8	
Xylene (Total)	**<38.3**	ug/kg	159	38.3	1	08/22/23 07:15	08/23/23 12:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	116	%	68-156		1	08/22/23 07:15	08/23/23 12:33	460-00-4	
Toluene-d8 (S)	122	%	69-153		1	08/22/23 07:15	08/23/23 12:33	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	115	%	71-161		1	08/22/23 07:15	08/23/23 12:33	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**2.9**	%	0.10	0.10	1		08/21/23 17:45		

Sample: SB-5 (7) **Lab ID: 40266996010** Collected: 08/18/23 12:05 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<14.1**	ug/kg	23.7	14.1	1	08/22/23 07:15	08/23/23 12:53	71-43-2	
Ethylbenzene	**<14.1**	ug/kg	59.2	14.1	1	08/22/23 07:15	08/23/23 12:53	100-41-4	
Methyl-tert-butyl ether	**<17.4**	ug/kg	59.2	17.4	1	08/22/23 07:15	08/23/23 12:53	1634-04-4	
Naphthalene	**<18.5**	ug/kg	296	18.5	1	08/22/23 07:15	08/23/23 12:53	91-20-3	
Toluene	**<14.9**	ug/kg	59.2	14.9	1	08/22/23 07:15	08/23/23 12:53	108-88-3	
1,2,4-Trimethylbenzene	**<17.6**	ug/kg	59.2	17.6	1	08/22/23 07:15	08/23/23 12:53	95-63-6	
1,3,5-Trimethylbenzene	**<19.0**	ug/kg	59.2	19.0	1	08/22/23 07:15	08/23/23 12:53	108-67-8	
Xylene (Total)	**<42.7**	ug/kg	177	42.7	1	08/22/23 07:15	08/23/23 12:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	119	%	68-156		1	08/22/23 07:15	08/23/23 12:53	460-00-4	
Toluene-d8 (S)	131	%	69-153		1	08/22/23 07:15	08/23/23 12:53	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	116	%	71-161		1	08/22/23 07:15	08/23/23 12:53	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**8.4**	%	0.10	0.10	1		08/21/23 17:46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Sample: SB-6 (2) **Lab ID: 40266996011** Collected: 08/18/23 12:50 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<12.8**	ug/kg	21.5	12.8	1	08/22/23 07:15	08/23/23 13:13	71-43-2	
Ethylbenzene	**<12.8**	ug/kg	53.7	12.8	1	08/22/23 07:15	08/23/23 13:13	100-41-4	
Methyl-tert-butyl ether	**<15.8**	ug/kg	53.7	15.8	1	08/22/23 07:15	08/23/23 13:13	1634-04-4	
Naphthalene	**<16.8**	ug/kg	269	16.8	1	08/22/23 07:15	08/23/23 13:13	91-20-3	
Toluene	**<13.5**	ug/kg	53.7	13.5	1	08/22/23 07:15	08/23/23 13:13	108-88-3	
1,2,4-Trimethylbenzene	**<16.0**	ug/kg	53.7	16.0	1	08/22/23 07:15	08/23/23 13:13	95-63-6	
1,3,5-Trimethylbenzene	**<17.3**	ug/kg	53.7	17.3	1	08/22/23 07:15	08/23/23 13:13	108-67-8	
Xylene (Total)	**<38.8**	ug/kg	161	38.8	1	08/22/23 07:15	08/23/23 13:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	108	%	68-156		1	08/22/23 07:15	08/23/23 13:13	460-00-4	
Toluene-d8 (S)	106	%	69-153		1	08/22/23 07:15	08/23/23 13:13	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	111	%	71-161		1	08/22/23 07:15	08/23/23 13:13	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**3.6**	%	0.10	0.10	1		08/21/23 17:46		

Sample: SB-6 (8) **Lab ID: 40266996012** Collected: 08/18/23 12:55 Received: 08/19/23 08:45 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Short List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<13.7**	ug/kg	22.9	13.7	1	08/22/23 07:15	08/23/23 13:33	71-43-2	
Ethylbenzene	**<13.7**	ug/kg	57.4	13.7	1	08/22/23 07:15	08/23/23 13:33	100-41-4	
Methyl-tert-butyl ether	**<16.9**	ug/kg	57.4	16.9	1	08/22/23 07:15	08/23/23 13:33	1634-04-4	
Naphthalene	**<17.9**	ug/kg	287	17.9	1	08/22/23 07:15	08/23/23 13:33	91-20-3	
Toluene	**<14.5**	ug/kg	57.4	14.5	1	08/22/23 07:15	08/23/23 13:33	108-88-3	
1,2,4-Trimethylbenzene	**<17.1**	ug/kg	57.4	17.1	1	08/22/23 07:15	08/23/23 13:33	95-63-6	
1,3,5-Trimethylbenzene	**<18.5**	ug/kg	57.4	18.5	1	08/22/23 07:15	08/23/23 13:33	108-67-8	
Xylene (Total)	**<41.4**	ug/kg	172	41.4	1	08/22/23 07:15	08/23/23 13:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	68-156		1	08/22/23 07:15	08/23/23 13:33	460-00-4	
Toluene-d8 (S)	104	%	69-153		1	08/22/23 07:15	08/23/23 13:33	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	71-161		1	08/22/23 07:15	08/23/23 13:33	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**6.9**	%	0.10	0.10	1		08/21/23 17:46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

QC Batch: 452776
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Short List
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266996002, 40266996003, 40266996004

METHOD BLANK: 2601602 Matrix: Solid
Associated Lab Samples: 40266996002, 40266996003, 40266996004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	08/21/23 11:18	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	08/21/23 11:18	
Benzene	ug/kg	<11.9	20.0	08/21/23 11:18	
Ethylbenzene	ug/kg	<11.9	50.0	08/21/23 11:18	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	08/21/23 11:18	
Naphthalene	ug/kg	<15.6	250	08/21/23 11:18	
Toluene	ug/kg	<12.6	50.0	08/21/23 11:18	
Xylene (Total)	ug/kg	<36.1	150	08/21/23 11:18	
1,2-Dichlorobenzene-d4 (S)	%	108	71-161	08/21/23 11:18	
4-Bromofluorobenzene (S)	%	109	68-156	08/21/23 11:18	
Toluene-d8 (S)	%	101	69-153	08/21/23 11:18	

LABORATORY CONTROL SAMPLE: 2601603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2540	101	70-130	
Ethylbenzene	ug/kg	2500	2570	103	80-120	
Methyl-tert-butyl ether	ug/kg	2500	2340	94	65-130	
Toluene	ug/kg	2500	2480	99	80-120	
Xylene (Total)	ug/kg	7500	7580	101	70-130	
1,2-Dichlorobenzene-d4 (S)	%			108	71-161	
4-Bromofluorobenzene (S)	%			110	68-156	
Toluene-d8 (S)	%			102	69-153	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2601608 2601609

Parameter	Units	40266996003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<14.5	1220	1220	1100	1050	90	86	70-130	4	20	
Ethylbenzene	ug/kg	<14.5	1220	1220	1100	1050	91	87	80-120	5	20	
Methyl-tert-butyl ether	ug/kg	<17.9	1220	1220	1030	1000	85	82	66-130	3	20	
Toluene	ug/kg	<15.3	1220	1220	1110	1110	91	91	79-120	0	20	
Xylene (Total)	ug/kg	<43.9	3640	3640	3390	3280	93	90	70-130	3	20	
1,2-Dichlorobenzene-d4 (S)	%						110	112	71-161			
4-Bromofluorobenzene (S)	%						115	118	68-156			
Toluene-d8 (S)	%						117	110	69-153			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

QC Batch: 452888
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Short List
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266996001, 40266996005, 40266996006, 40266996007, 40266996008, 40266996009, 40266996010, 40266996011, 40266996012

METHOD BLANK: 2601967 Matrix: Solid
Associated Lab Samples: 40266996001, 40266996005, 40266996006, 40266996007, 40266996008, 40266996009, 40266996010, 40266996011, 40266996012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	08/22/23 14:06	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	08/22/23 14:06	
Benzene	ug/kg	<11.9	20.0	08/22/23 14:06	
Ethylbenzene	ug/kg	<11.9	50.0	08/22/23 14:06	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	08/22/23 14:06	
Naphthalene	ug/kg	<15.6	250	08/22/23 14:06	
Toluene	ug/kg	<12.6	50.0	08/22/23 14:06	
Xylene (Total)	ug/kg	<36.1	150	08/22/23 14:06	
1,2-Dichlorobenzene-d4 (S)	%	108	71-161	08/22/23 14:06	
4-Bromofluorobenzene (S)	%	108	68-156	08/22/23 14:06	
Toluene-d8 (S)	%	101	69-153	08/22/23 14:06	

LABORATORY CONTROL SAMPLE: 2601968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2750	110	70-130	
Ethylbenzene	ug/kg	2500	2780	111	80-120	
Methyl-tert-butyl ether	ug/kg	2500	2190	87	65-130	
Toluene	ug/kg	2500	2710	108	80-120	
Xylene (Total)	ug/kg	7500	8450	113	70-130	
1,2-Dichlorobenzene-d4 (S)	%			116	71-161	
4-Bromofluorobenzene (S)	%			118	68-156	
Toluene-d8 (S)	%			119	69-153	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2601969 2601970

Parameter	Units	40266996008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<14.1	1190	1190	1010	921	85	78	70-130	9	20	
Ethylbenzene	ug/kg	<14.1	1190	1190	1050	911	88	77	80-120	14	20	M1
Methyl-tert-butyl ether	ug/kg	<17.5	1190	1190	890	837	75	71	66-130	6	20	
Toluene	ug/kg	<15.0	1190	1190	1050	971	89	82	79-120	8	20	
Xylene (Total)	ug/kg	<42.9	3570	3570	3230	2870	91	81	70-130	12	20	
1,2-Dichlorobenzene-d4 (S)	%						125	110	71-161			
4-Bromofluorobenzene (S)	%						128	111	68-156			
Toluene-d8 (S)	%						121	103	69-153			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

QC Batch: 452834
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266996001, 40266996002, 40266996003, 40266996004, 40266996005, 40266996006

SAMPLE DUPLICATE: 2601794

Parameter	Units	40266918001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	29.4	29.2	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

QC Batch: 452835
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266996007, 40266996008, 40266996009, 40266996010, 40266996011, 40266996012

SAMPLE DUPLICATE: 2601806

Parameter	Units	40266972001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.3	6.2	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

DL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 843.001.006 THREE LEAF-HARTLND
Pace Project No.: 40266996

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40266996001	**SB-1 (3-5.5)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996002	**SB-1 (8-10)**	EPA 5035/5030B	452776	EPA 8260	452780
40266996003	**SB-2 (1-2.5)**	EPA 5035/5030B	452776	EPA 8260	452780
40266996004	**SB-2 (6-7.5)**	EPA 5035/5030B	452776	EPA 8260	452780
40266996005	**SB-3 (2)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996006	**SB-3 (10)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996007	**SB-4 (2)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996008	**SB-4 (7)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996009	**SB-5 (2)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996010	**SB-5 (7)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996011	**SB-6 (2)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996012	**SB-6 (8)**	EPA 5035/5030B	452888	EPA 8260	452889
40266996001	**SB-1 (3-5.5)**	ASTM D2974-87	452834		
40266996002	**SB-1 (8-10)**	ASTM D2974-87	452834		
40266996003	**SB-2 (1-2.5)**	ASTM D2974-87	452834		
40266996004	**SB-2 (6-7.5)**	ASTM D2974-87	452834		
40266996005	**SB-3 (2)**	ASTM D2974-87	452834		
40266996006	**SB-3 (10)**	ASTM D2974-87	452834		
40266996007	**SB-4 (2)**	ASTM D2974-87	452835		
40266996008	**SB-4 (7)**	ASTM D2974-87	452835		
40266996009	**SB-5 (2)**	ASTM D2974-87	452835		
40266996010	**SB-5 (7)**	ASTM D2974-87	452835		
40266996011	**SB-6 (2)**	ASTM D2974-87	452835		
40266996012	**SB-6 (8)**	ASTM D2974-87	452835		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here: 40266996

ALL SHADED AREAS are for LAB USE ONLY

Company: Endpoint Solutions	Billing Information: SAME
Address: 6871 S Lovers Lane	
Report To: Ryan Johnson	Email To: Ryan.Johnson@EndpointCorporation.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 843.001.006 / Three Leaf - Hartland WI / Waukesha	State: County/City: Time Zone Collected: [ ] PT [ ] MT [X] CT [ ] ET
Phone: 262-370-2666 Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Ryan Johnson	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: STD Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

Container Preservative Type **: 6 4

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: PVOC + N	Analyses: % moisture	Lab Profile/Line
SB-1 (3-5.5)	SL	G	8/18/23	940					X	X	001
SB-1 (8.5-10)				955					X	X	002
SB-2 (1-2.5)				1020					X	X	003
SB-2 (6-7.5)				1030					X	X	004
SB-3 (2)				1130					X	X	005
SB-3 (6)				1135					X	X	006
~~SB-4~~ SB-4 (2)				1140					X	X	007
SB-4 (7)				1145					X	X	008
SB-5 (2)				1200					X	X	009
SB-5 (7)				1205					X	X	010

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: (1)

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2908863

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____ oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: _____ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 1400 8/18/23	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature) CS Logistics	Date/Time: 8/19/23 0845	Received by/Company: (Signature)	Date/Time: 8/19/23 0845
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template: (1)
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here: 402666996

ALL SHADED AREAS are for LAB USE ONLY

Company:	Billing Information:
Address: SAME	
Report To:	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: DS	State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #:	Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Paige	Purchase Order #: Quote #:	DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required:	Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

Container Preservative Type **: 6 (1)

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: PVOC + N	Analyses: % moisture
SB-6(2)	SL	G	8/18/23	1250						
SB-6(8)	SL	G	8/18/23	1255						

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:
Lab Sample # / Comments:

8/19/23 OL1

1012

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: 1

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2908865

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8/18/23 1400	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature) CS Logistics	Date/Time: 8/19/23 0845	Received by/Company: (Signature)	Date/Time: 8/19/23 0845
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Client Name: Endpoint Solutions

Sample Preservation Receipt Form

Project # 402469961

All containers needing preservation have been checked and noted below. ☐Yes ☐No ☑N/A

Lab Lot# of pH paper

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/ Time.

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
001																																	2.5 / 5
002																																	2.5 / 5
003																																	2.5 / 5
004																																	2.5 / 5
005																																	2.5 / 5
006																																	2.5 / 5
007																																	2.5 / 5
008																																	2.5 / 5
009																																	2.5 / 5
010																																	2.5 / 5
011																																	2.5 / 5
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013																																	2.5 / 5
014																																	2.5 / 5
015																																	2.5 / 5
016																																	2.5 / 5
017																																	2.5 / 5
018																																	2.5 / 5
019																																	2.5 / 5
020																																	2.5 / 5

8/19/2356

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other

Headspace in VOA Vials (>6mm) . ☐Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40266996

40266996

Client Name: Endpoint Solutions

Courier: ☑ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☑ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used SR - 109 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr: 0.0 /Corr: 0.0

Temp Blank Present: ☑ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 8/19/23 Initials: SG

Labeled By Initials: MM

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☑Yes ☐No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
Correct Type: (Pace Green Bay) Pace IR (Non-Pace)		
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☑Yes ☐No ☐N/A	12.
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

APPENDIX E

FORM 4400-226

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Development at Historic Fill Site or Licensed Landfill Exemption Application

Form 4400-226 (R 05/16)

Notice: Use of this form is required by the DNR for any application to develop at a historic fill site or licensed landfill pursuant to secs. NR 506.085 and NR 500.08(4), Wis. Adm. Code. The Department will not consider your application unless you provide complete information requested. Personally identifiable information collected will be used to process your application and will also be accessible by request under Wisconsin's Open Records law [ss.19.31 - 19.39, Wis. Stats.]

Instructions: See *Development at Historic Fill Sites and Licensed Landfills: What you need to know* (PUB-RR-683, November 2013) for detailed instructions.

- All Exemption Application materials should be sent to the region where the site is located, as listed on page 6.
- Include $700 fee payment with this application. If the site is a licensed landfill and the Waste and Materials Management program is doing the review, submit no fee now. You will be sent an invoice upon receipt of this application.
- Determine the appropriate exemption type for the site and check appropriate box below.
- Provide complete information requested for each type of exemption. Include the following attachments:
  Required: Summary of Existing and Potential Impacts described in Section V as an attachment, under the seal of a professional engineer or geologist registered to practice in Wisconsin.

  Optional: Site Visit Summary Comments (Section IX) including any photos, sketches or site visit notes.

Exemption Type

☐ **Remediation and Redevelopment Program NR 700 Rule Series Process Exemption:** Site with remedial actions conducted in accordance with NR 700 series
Required: Sections I - VI ***Optional:*** Sections VII - X

☒ **Case-by-Case Evaluation:** Sites with anticipated environmental impacts or wastes of special concerns
Required: Sections I - VI ***Optional:*** Sections VII - X

☐ **Expedited Exemption:** Site with no expected environmental impact
Required: Sections I - VI and Form 4400-226A Expedited Exemption Application ***Optional:*** Sections VII - X

I. Applicant Information

Owner - Last Name	First	MI	Phone Number (include area code)
700 West Capitol Drive LLC			(414) 791-3957

Contact Name (if different)
Tom Beaudry

Street Address	City	State	ZIP Code
1422 Pearl Street	Waukesha	WI	53186-5604

Developer - Last Name	First	MI	Phone Number (include area code)
Ford	John		(414) 399-0165

Street Address	City	State	ZIP Code
504 West Juneau Avenue	Milwaukee	WI	53203

II. Site Name and Location

Site Name	Location / Address
Former Hartland Quarry	644, 700 & 701 West Capitol Drive
Is the site known by another name(s)? ○Yes ◉No ○ Unknown If yes, provide name:	○ City ○ Town ◉ Village of Hartland
Does the site have a license number? ○Yes ◉No ○ Unknown If yes, License Number:	State: WI; ZIP Code: 53029; County: Waukesha

A. Attach a map with site location and limits of fill/waste disposal area.

B. Global Positioning System Coordinates

Latitude	DEG	MIN	SEC	Longitude	DEG	MIN	SEC
	043	06	11	43.0000 N	088	21	26	77.0000 W

Describe method for collecting GPS Coordinates: RR Sites Map

Program Lead, Fee Status and Regulatory ID Numbers *(This area for DNR use only)*

○ **Waste Management Bureau**
○ **Remediation and Redevelopment Bureau - Exemption is part of remedy under NR 700 program**
  ○ Fee already paid for review of remedial design report.
  ○ Review of remedial design report not requested and payment is attached.

☐ Payment Attached
Amount: $

Hazardous Waste Facility License ID #:(5 digits)	DNR FID #: (9 digits)	USEPA ID #:(used for both RCRA & CERCLIS #s) (WI+Alpha+9 digits)

Region	Project Manager	Telephone Number

III. Site Ownership History

Previous Owner - Last Name	First	MI	Telephone Number

Street Address	City	State	ZIP Code

Responsible Municipal / Private Operator - Last Name (if applicable)	First	MI	Telephone Number

Street Address	City	State	ZIP Code

IV. Evaluation of Existing and Potential Impacts. See Development at Historic Fill Sites and Licensed Landfill: Guidance for Investigation and Development at Historic Fill Sites and Licensed Landfill: Potential Problems and Considerations.

A. Analytical data for the following media have been collected and/or examined before completing this application:

1. Groundwater: ◉ Yes ○ No
2. Soil: ◉ Yes ○ No
3. Surface water / sediment: ○ Yes ◉ No
4. Air: ○ Yes ◉ No
5. Methane or other explosive gases: ○ Yes ◉ No

B. Based on known or suspected sources and wastes, their physical characteristics, containment and geologic environment, do you suspect a release of pollutants to the environment?

◉ Yes: ☒ Groundwater ☒ Soil ☐ Surface Water / Sediment ☐ Methane or Other Explosive Gases
○ No

C. If there is NOT a likelihood of a release of pollutants or evidence of a release, would the impact of the proposed development be likely to cause a release to the environment?

○ Yes: **If yes, be sure to summarize actions to be taken to prevent adverse environmental impacts in V. Part C below.**
○ No

V. Summary of Existing and Potential Impacts. See Development at Historic Fill Sites and Licensed Landfill: Guidance for Investigation and Development at Historic Fill Sites and Licensed Landfill: Potential Problems and Considerations.

Describe the following in an attached narrative under the signature of a qualified professional. Organize, label and package as listed below.

A. Existing Site Conditions

1. existing site conditions including waste types,
2. potential for impacts, and
3. evaluation of existing impacts.

B. Proposed Development Summary. Include explanation for overall site decision.

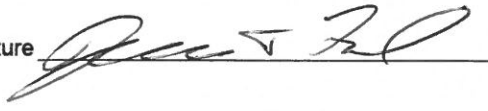
C. Summary of actions to be taken and engineering controls that will prevent or minimize adverse environmental impacts and potential threats to human health and welfare, including worker safety.

VI. Certification of Application Information

I certify that information in this application and all its attachments is true and correct and in conformity with applicable Wis. statutes.

Print / Type Name of Applicant

John T Ford

Applicant Signature  Date Signed 9/8/23