Rose & Westra
A Division of GZA

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

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January 22, 2019
File: 16.0062335.53

Ms. Abigail Hendershott
District Supervisor - Michigan Department of Environmental Quality
5th Floor – Unit 10
350 Ottawa Avenue NE
Grand Rapids, MI 49503

Re: Wolverine World Wide, Inc.
MDOT Parcel Investigation Summary Report

Dear Ms. Hendershott:

Rose & Westra, a Division of GZA GeoEnvironmental, Inc. (R&W/GZA) is presenting this MDOT Parcel Soil Investigation Report (Report) on behalf of Wolverine World Wide, Inc. (Wolverine). This Report pertains to the property located at 1758 House Street NE, Belmont, Michigan ("Site" or "MDOT Parcel").

Background Information

Based on historical files, it appears the MDOT Parcel was used for waste disposal in the 1950s and possibly 1960s. Historical aerials show disturbed areas of the parcel which are consistent with physical observations. Figure A presents a Site Plan which includes the overlay of the historical soil disturbances from the 1950 and 1960/61 aerials on a current aerial photograph.

These aerial photographs suggest disturbances on the MDOT Parcel ceased by 1965. The 1965 aerial photograph shows significant vegetative growth in the formerly disturbed areas.

Solid waste was previously removed from the MDOT Parcel. In June 2018, R&W/GZA collected soil verification samples from the excavation area as well as completed 10 soil borings in disturbed areas (indicated on the previously discussed aerial photographs). The June 2018 investigation is summarized in our August 31, 2018 letter entitled *Wolverine World Wide, Inc., MDOT Property 2018 Soil Investigation Report.*

The soil boring and surface soil sampling locations completed in June 2018 are shown on Figure B.

Based on the historical information identified and the findings of the previous investigations, Wolverine developed a scope of work to search for evidence of historical waste disposal in the formerly disturbed areas of the parcel, including various possible sources of waste. The work plan was submitted to the MDEQ on October 3, 2018 and completed on November 2, 2019. The findings of that investigation are summarized herein.

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Soil Investigation

R&W/GZA utilized a triangular grid for the soil investigation. The grid points were located approximately 60 feet apart; see the scope of work for the proposed boring locations. The 60-ft grid interval was selected based on the EPA statistical model and reflects a 95% confidence level of finding a potential source if it is present.

At the request of the MDEQ, four additional borings were included in the ravine on the Site (MDOT-SB-33, -34, -39 and -41).

Borings were advanced using the direct-push method to approximately 20-feet below ground surface (bgs). This depth was selected based on our experience with the identified waste depths at the adjoining House Street site. Consistent with the House Street site work plan, the soil was logged, and field screened at 2-foot intervals using a photoionization detector (PID) and XRF. The verbally approved scope of work indicated if visible waste was encountered the screening interval was reduced to one foot. Visible waste was not encountered.

For borings where no visual, XRF, or PID screening indicated the likely presence of volatile organic compounds (VOCs) or elevated metals concentrations, two samples were collected for laboratory analysis. One sample was collected from a random depth within the top 10 feet and the second from a random interval within the lower 10 ft of the boring.

The approved scope of work indicated when visible waste was identified in the boring or if either PID or XRF screening suggested VOCs present or elevated metals concentrations may be present, soil samples were to be collected from within the identified interval and from approximately 2 ft below that interval. Because none of the screening triggers occurred, no such samples were necessary.

Soil boring logs are attached. Table A summarizes the borings completed, sample intervals, and XRF and PID data from those intervals.

The samples were analyzed for the following analytes in accordance with both the Quality Assurance Project Plan (QAPP) developed by R&W/GZA for the U.S. EPA and the PFAS QAPP developed for MDEQ:

- Volatile organic compounds (VOCs);
- Semi-volatile organic compounds (SVOCs);
- Metals Al, Sb, As, Ba, Be, B, Cd, Cr Total, Cr VI, Co, Cu, Fe, Pb, Mg, Hg, Mo, Ni, Se, Ag, Na, Ti, Tl, V, and Zn;
- Acetate;
- Formate;
- Total ammonia, nitrate, and nitrite;
- Chloride;
- Cyanide (total and available);
- Total phosphorus;
- Sulfate and sulfide; and

- Perfluorinated Sulfonic Acids and Perfluorinated Carboxylic Acids by DOD QSM v1.1 (PFAS).

Excess soil was placed in 55-gallon open-top steel drums which were transported to the House Street Site prior to characterization and proper off-site disposal.

While not in the original scope of work, four additional surface soil samples were collected from the western side of the parcel, in a downstream surface flow area from the former solid waste excavation. These were added to determine if surface water flow to this area may have resulted in elevated metal concentrations in shallow soil. The samples were collected from 0-1 ft and screened with XRF only. Based on the results of the XRF screening, no samples were collected. These are MDOT-SB-1A to MDOT-SB-4A.

All borings for this investigation as well as the prior investigations are shown on Figure 1, overlain on the soil disturbance areas identified on historical aerial photographs.

Investigation Results

Tables 1 through 6 summarize the laboratory data from the June and November 2018 investigations compared to Michigan's Part 201 generic residential cleanup criteria, 2017 residential soil recommended interim action screening levels for volatilization to indoor air, as well as the U.S. EPA residential soil regional removal management levels.

VOCs and SVOCs Results

VOCs and SVOCs were not measured at concentrations greater than Michigan's Part 201 generic residential criteria or the U.S. EPA residential soil regional removal management levels.

Three VOCs (benzene [SB-34, 15-16 ft], 1,4-dichlorobenzene [SB-E1, 0-2 ft], and ethylbenzene [SB-34, 15-16 ft]) were identified in one sample each above their residential soil recommended interim action screening levels for volatilization to indoor air. However, the 1,4-dichlorobenzene and ethylbenzene concentrations do not exceed their non-residential screening levels.

While benzene does exceed its non-residential screening level in sample SB-34 collected at a depth 15-16 ft, the Site is not zoned for future development and no structures are present. Additionally, the detection of benzene was limited to one sample and does not appear to be wide-spread. The detection is at least 120 ft from the nearest property boundary and sampling between the detection and the property boundary did not identify this VOC.

Metals Results

There were no metals detected at concentrations greater than the MDEQ direct contact criteria, particulate soil inhalation criteria, or U.S. EPA residential soil regional removal management levels.

The following table summarizes the metals concentrations greater than the Michigan's generic residential drinking water protection criteria (DWPC) and/or Michigan's generic groundwater/surface water interface protection criteria (GSIPC). These were identified in samples collected throughout the 20 ft borings. It does not appear there is a consistency in the sampled intervals (especially in light of the significant topographic

relief on the site) and these concentrations; therefore, isoconcentration or other contour mapping was not performed because they would likely be misleading.

Metal	Number of Samples with Concentrations Detected > DWPC and/or GSIPC	Maximum Concentration (µg/kg-ppb)
Aluminum	18	35,000,000
Arsenic	5	6,800
Boron	13	40,000
Cobalt	17	15,000
Hexavalent Chromium	1	4,600
Iron	19	36,000,000
Magnesium	17	40,000,000
Mercury	5	2,000
Selenium	4	590
Silver	1	2,500

Additionally, while mercury concentrations in six samples are greater than MDEQ residential soil recommended interim action screening levels for volatilization to indoor air, the Site use is not residential, and no structures are present. Not all mercury compounds are volatile; the analysis and screening number are based on total mercury concentrations and do not consider this. Also, the screening levels are lower than the Michigan Default Background Concentration for mercury.

Several soil samples exceeded the Part 201 Statewide Default Background concentration for total chromium. However, no detections of Chromium III exceeded Part 201 generic criteria. As indicated above, one hexavalent chromium concentration was greater than the GSIPC.

Samples containing total metal concentrations exceeding 20 times their Toxicity Characteristic Leaching Procedure (TCLP) concentration were also analyzed for TCLP metals (see Table 6). Only three samples, including one duplicate, met this requirement and were analyzed. In all three samples, chromium was above the TCLP analysis threshold, but the TCLP analysis did not exceed the RCRA threshold concentration of 5,000 µg/L in any of the samples.

General Chemistry Results

Phosphorus (all samples) and unionized ammonia (SB-25, collected 10-11 ft) were the only general chemistry compounds detected greater than the GSIPC. Additionally, the concentration of nitrate-nitrite in sample SB-25 collected 10-11 ft below grade is greater than the DWPC. While Michigan does not have default background concentrations for phosphorus and nitrate-nitrite, in R&W/GZA's experience, these constituents are often found at concentrations ranging in several hundred mg/kg in and near active and former farm fields.

PFAS Results

Forty-seven soil samples contained PFOS concentrations greater than GSIPC, ranging from 5 to 2,000 µg/kg from surface samples to 19 ft below grade. Of the 47 samples with PFOS concentrations above GSIP, 21 were collected within the top 2 ft of soil. The remaining 26 were from between 2 – 19 ft. The concentrations do not appear to coincide with depth, again specifically considering the significant topographic gradients on the site.

Summary

A permanent monitoring well (MW-8) is located on the MDOT Parcel. Groundwater samples from this well have not contained any of the metals measured in soil above their Part 201 groundwater generic cleanup criteria, except for aluminum and iron above aesthetic drinking water values only. PFOS/PFOA are present in the groundwater above their respective Part 201 drinking water criteria. No other contaminants were present in the groundwater samples collected from MW-8 in July and October 2018 above generic cleanup criteria.

The June and October/November 2018 investigations did not identify contaminant concentrations in soil greater than direct contact or soil inhalation criteria. Drinking water exposure (PFOS+PFOA only) is the primary potential concern. As you know, residents immediately adjacent to and directly downgradient from the MDOT Parcel, have all been offered bottled water and either a whole house filter or a point of use filter for their home.

Based on the information gathered during the MDOT Parcel investigations, it does not appear that waste materials similar to those identified on the House Street Disposal Facility are present on the MDOT Parcel. Additionally, it does not appear that additional investigation, delineation, or remediation is warranted.

Sincerely,
Rose & Westra, a Division of GZA GeoEnvironmental, Inc.

Loretta J. Powers
Senior Project Manager

Mark Westra
Associate Principal

Attachments: Figures and Tables
Soil Boring Logs

c/enc: Mr. Dave Latchana – Wolverine World Wide, Inc. *via email David.Latchana@wwwinc.com*
Mr. John V. Byl – Warner Norcross & Judd LLP *via email jbyl@wnj.com*

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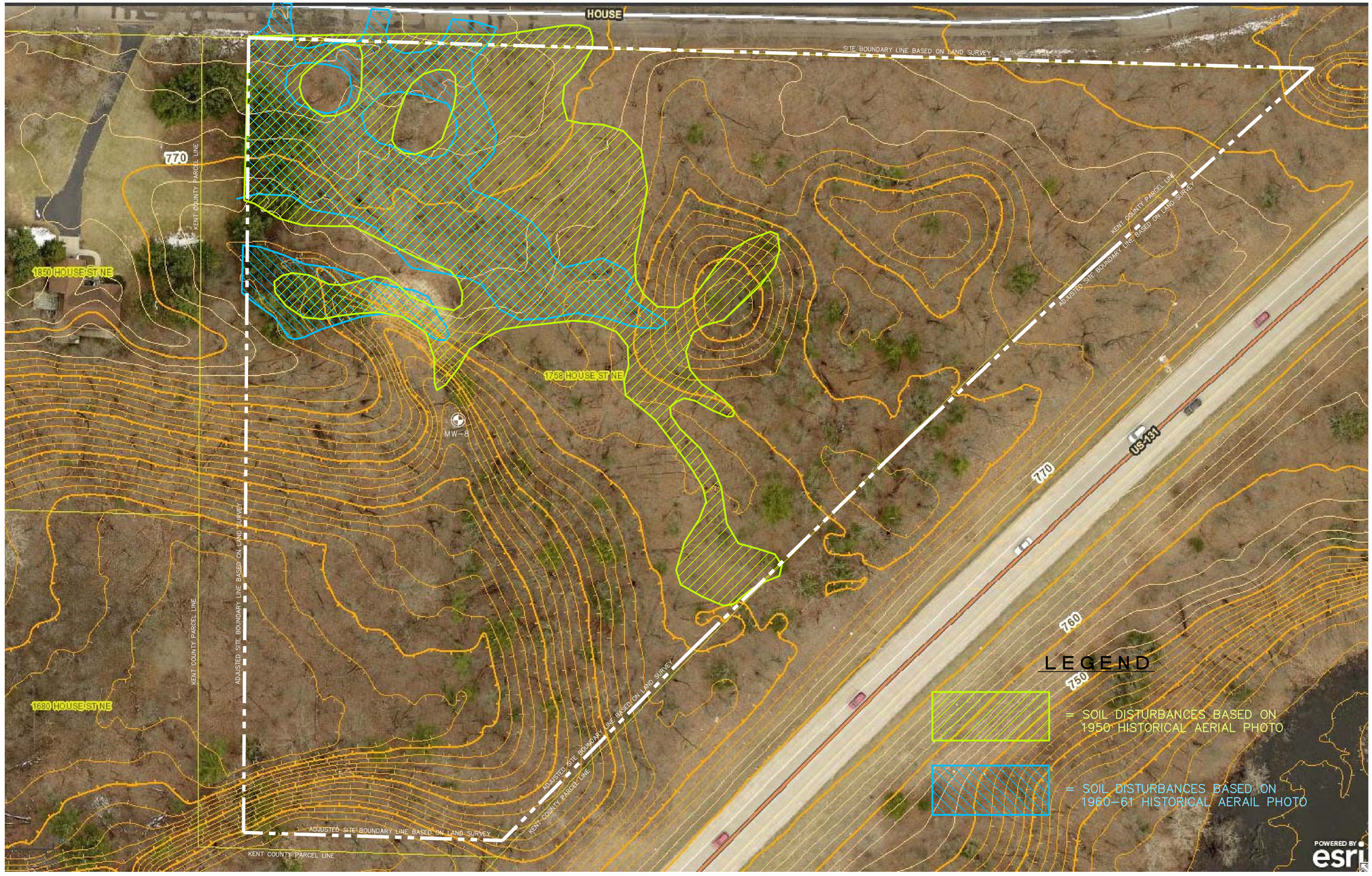


NOTES:

1) TRACED SOIL DISTURBANCES FROM 1965, 1968 & 1973 FALL WITHIN THE LIMITS OF THE 1950 & 1960-61 SOIL DISTURBANCE LIMITS.

2) BASED ON DISCREPANCY IN THE PARCEL LINE LOCATIONS BETWEEN THE KENT COUNTY GIS MAPPING AND LAND SURVEY INFORMATION, IT APPEARS THE TOPOGRAPHIC CONTOURS ARE ALSO SHIFTED AND MAY NOT ACCURATELY REPRESENT THE CURRENT SITE.

HISTORICAL SOIL DISTURBANCES

SCALE: 1" = 40'

NORTH

DRAWN BY	DESIGN BY	DATE
KJB	LJP	1/18/19

FILE NO.: 62335_53_HLAN

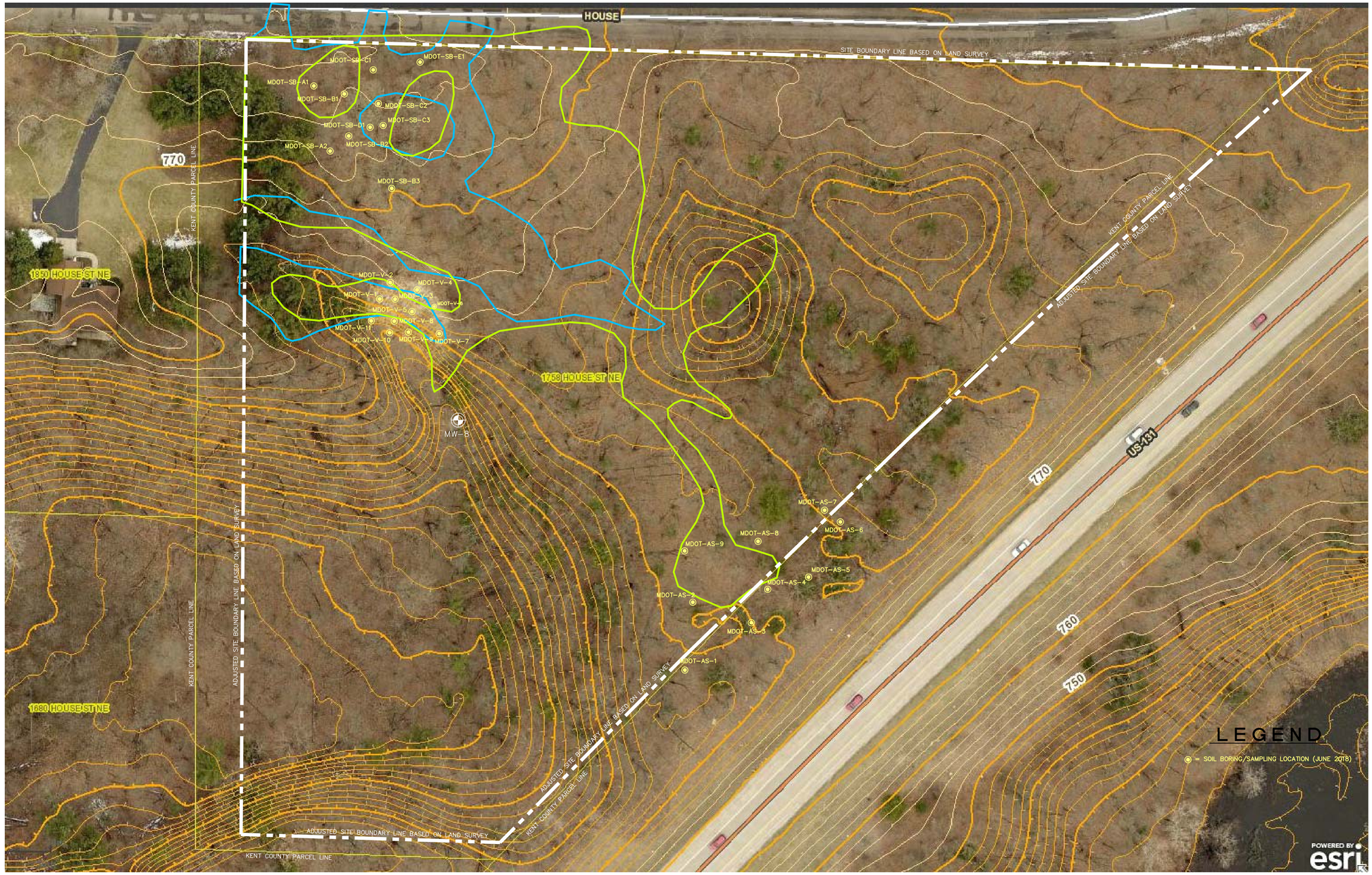
NO.	REVISIONS	BY	DATE
	REVISED IN ACCORDANCE WITH CONSTRUCTION RECORDS		

WWW/WNJ
1758 HOUSE STREET NE, PLAINFIELD TWP,
KENT COUNTY, MICHIGAN
MDOT PARCEL

ROSE & WESTRA
A DIVISION OF GZA
Grand Rapids, Michigan
GEOTECHNICAL-ENVIRONMENTAL-ECOLOGICAL-WATER-CONSTRUCTION MANAGEMENT

PROJECT NO.
16.0062335.53

SHEET NO.
A



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3) THE LOCATIONS OF SOIL BORINGS, BACKGROUND AND VERIFICATION SAMPLES ARE BASED ON EQUIPMENT WITH SUBMETER ACCURACY AND MAY VARY UP TO 3.3 FEET. ON-SITE MONITORING WELL LOCATIONS WERE SURVEYED BY A LICENSED SURVEYOR.

JUNE 2018 BORING and SAMPLING LOCATIONS

SCALE: 1" = 40'

NORTH

DRAWN BY	DESIGN BY	DATE
KJB	LJP	1/18/19

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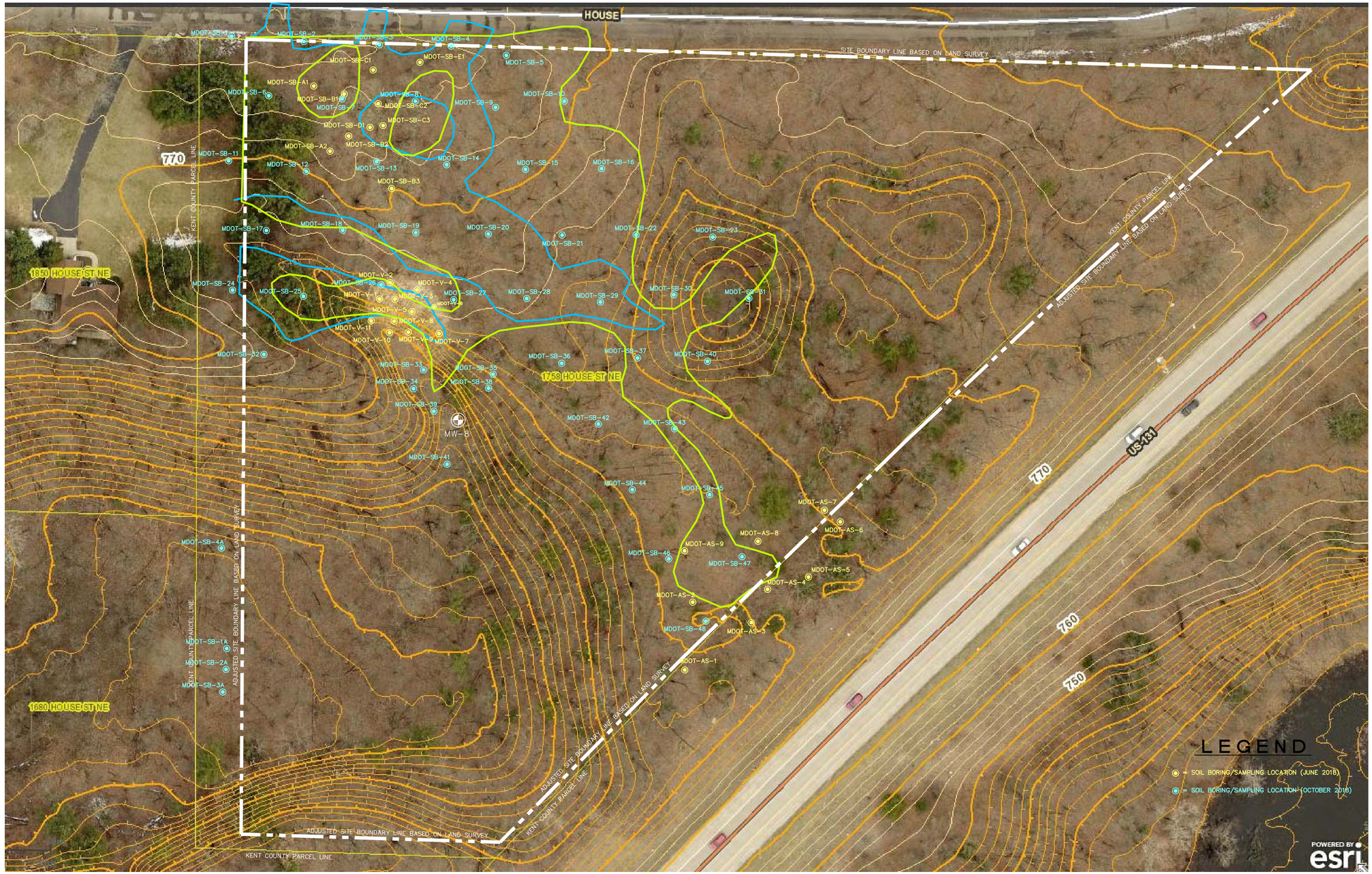

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SITE PLAN with BORING LOCATIONS

SCALE: 1" = 40'

NORTH

DRAWN BY	DESIGN BY	DATE
KJB	LJP	1/18/19

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Table A
Soil Boring Summary
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Start Date	End Date	Start Depth (ft)	End Depth (ft)	Samples Analyzed		PID Readings for Samples Analyzed		XRF Results for Samples Analyzed							
									As		Cr		Hg		Pb	
					S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
MDOT-SB-1	17-Oct-18	17-Oct-18	0	20	6-7	18-19	ND	ND	1.9	4.9	61	144	<	<	8.6	15.1
MDOT-SB-2	17-Oct-18	17-Oct-18	0	20	6-7	19-20	ND	ND	<	6.8	84	136	<	<	6.4	17.9
MDOT-SB-3	17-Oct-18	17-Oct-18	0	20	2-3	18-19	ND	ND	<	<	21.5	40	<	<	4.2	6.6
MDOT-SB-4	18-Oct-18	18-Oct-18	0	20	2-3	14-15	0.3	0.3	4.7	4.7	76	70	<	<	11.2	9.2
MDOT-SB-5	18-Oct-18	18-Oct-18	0	20	7-8	18-19	0.3	0.3	<	<	129	65	<	<	6	5.6
MDOT-SB-6	18-Oct-18	18-Oct-18	0	20	7-8	15-16	0.6	0.4	<	<	70	61	<	<	6	5.9
MDOT-SB-7	18-Oct-18	18-Oct-18	0	20	2-3	12-13	0.8	0.5	3	1.9	46	25	<	<	5.3	<
MDOT-SB-8	18-Oct-18	18-Oct-18	0	20	6-7	13-14	0.8	0.6	<	<	42	39	<	<	6.4	7.4
MDOT-SB-9	18-Oct-18	18-Oct-18	0	20	2-3	17-18	0.1	0.9	<	2.2	91	191	<	<	9.2	9
MDOT-SB-10*	16-Oct-18	16-Oct-18	0	20	3-4	13-14	0.3	0.3	<	<	<	<	<	<	5	12
MDOT-SB-11	19-Oct-18	19-Oct-18	0	20	0-1	12-13	66.2	11.9	<	2.7	17.6	7.5	<	<	7.5	<
MDOT-SB-12	19-Oct-18	19-Oct-18	0	20	2-3	15-16	NM	0.4	2	4.7	15.3	60	<	<	2.9	5.5
MDOT-SB-13	19-Oct-18	19-Oct-18	0	20	5-6	13-14	0.3	0.2	2.3	<	46	<	<	<	10.6	2.1
MDOT-SB-14	19-Oct-18	19-Oct-18	0	20	2-3	13-14	0.7	0.9	<	<	73	31.9	<	<	6.3	5.2
MDOT-SB-15	23-Oct-18	23-Oct-18	0	20	1-2	11-12	0.2	0.3	2	5.3	38.1	58	<	<	3.8	6.4
MDOT-SB-16*	16-Oct-18	16-Oct-18	0	20	5-6	16-17	0.2	0.8	5	<	<	<	<	<	11	6
MDOT-SB-17	19-Oct-18	19-Oct-18	0	20	1-2	11-12	1.3	0.1	1.8	3.9	262	47	<	<	2.1	4
MDOT-SB-18	19-Oct-18	19-Oct-18	0	20	9-10	16-17	0.2	1.1	<	<	<	7.9	<	<	<	<
MDOT-SB-19	19-Oct-18	19-Oct-18	0	20	8-9	19-20	0.1	0.3	<	<	78	82	<	<	4.8	8.8
MDOT-SB-20	19-Oct-18	19-Oct-18	0	20	5-6	14-15	0.6	0.8	<	<	46	64	<	<	7.9	11.7
MDOT-SB-21	17-Oct-18	17-Oct-18	0	20	5-6	11-12	NR	ND	NA	2.6	NA	194	NA	<	NA	12
MDOT-SB-22*	16-Oct-18	16-Oct-18	0	20	0-1	16-17	0.2	0.8	5	NA	51	NA	<	NA	10	NA
MDOT-SB-23	23-Oct-18	23-Oct-18	0	20	1-2	17-18	1.1	0.4	7.9	2.4	97	20.7	<	<	7.5	2.9
MDOT-SB-24	22-Oct-18	22-Oct-18	0	20	4-5	10-11	NR	0.2	NA	3.8	NA	51	NA	<	NA	5.3
MDOT-SB-25	22-Oct-18	22-Oct-18	0	20	2-3	10-11	6.1	5.7	2.1	<	93	19.4	<	<	2.6	4
MDOT-SB-26	22-Oct-18	22-Oct-18	0	20	2-3	10-11	0.1	NR	<	NA	7.6	NA	<	NA	2.3	NA
MDOT-SB-27	22-Oct-18	22-Oct-18	0	20	9-10	19-20	0.3	0.4	1.8	1.7	11.8	10.6	<	<	3.7	5.4
MDOT-SB-28	17-Oct-18	17-Oct-18	0	20	4-5	10-11	NR	0.1	NA	<	NA	98	NA	<	NA	7.6
MDOT-SB-29	16-Oct-18	16-Oct-18	0	20	7-8	12-13	0.9	0.6	<	<	59	35.7	<	<	6.1	6
MDOT-SB-30	23-Oct-18	23-Oct-18	0	20	8-9	19-20	0.4	ND	<	<	22.7	<	<	<	4.5	4.6
MDOT-SB-31	23-Oct-18	23-Oct-18	0	20	1-2	7-8	1.0	1.2	<	<	48	8.4	<	<	3.2	4.1
MDOT-SB-32	22-Oct-18	22-Oct-18	0	20	6-7	12-13	0.7	0.6	<	1.6	15	8.6	<	<	2.8	2
MDOT-SB-33	24-Oct-18	24-Oct-18	0	20	6-7	18-19	0.9	1.0	2	<	16.6	7.6	<	<	2.7	2.2
MDOT-SB-34	24-Oct-18	24-Oct-18	0	20	4-5	15-16	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA
MDOT-SB-35	22-Oct-18	22-Oct-18	0	20	4-5	18-19	NR	0.1	NA	2.2	NA	7.8	NA	<	NA	4.4
MDOT-SB-36*	16-Oct-18	16-Oct-18	0	20	0-1	9-10	0.9	1.0	<	<	<	<	<	<	12	7
MDOT-SB-37	17-Oct-18	17-Oct-18	0	20	3-4	11-12	NR	ND	NA	<	NA	64	NA	<	NA	4.8
MDOT-SB-38	22-Oct-18	22-Oct-18	0	20	2-3	12-13	0.3	0.3	8.1	2	95	14.8	<	<	10	5.8
MDOT-SB-39	24-Oct-18	24-Oct-18	0	20	7-8	12-13	0.9	0.8	1.5	<	13.5	7.4	<	<	2.2	4.4
MDOT-SB-40	23-Oct-18	23-Oct-18	0	20	1-2	19-20	0.5	0.5	<	<	10.3	<	<	<	<	2
MDOT-SB-41	24-Oct-18	24-Oct-18	0	20	3-4	19-20	NR	1.0	NA	<	NA	6.2	NA	<	NA	2.3
MDOT-SB-42	17-Oct-18	17-Oct-18	0	20	1-2	11-12	ND	ND	<	<	46	184	<	<	8	11.6
MDOT-SB-43	23-Oct-18	23-Oct-18	0	20	6-7	16-17	0.5	NR	<	NA	6.1	NA	<	NA	2.8	NA
MDOT-SB-44	24-Oct-18	24-Oct-18	0	20	2-3	14-15	0.3	0.6	<	2.1	29.4	20.3	<	<	2.3	<
MDOT-SB-45	23-Oct-18	23-Oct-18	0	20	8-9	18-19	0.8	0.6	<	<	13.8	5.7	<	<	<	<
MDOT-SB-46	24-Oct-18	24-Oct-18	0	20	2-3	18-19	ND	0.1	<	<	16	<	<	<	3.3	<
MDOT-SB-47	24-Oct-18	24-Oct-18	0	20	0-1	14-15	0.7	0.2	2.8	1.7	36	8.2	3.3	<	2.8	2
MDOT-SB-48	24-Oct-18	24-Oct-18	0	20	1-2	19-20	0.3	0.1	<	<	9.4	13.5	<	<	2.9	2.9

"*" indicates Vanta XRF unit was used. Results are reported without ±.

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-B3	MDOT-SB-B3	MDOT-SB-C2	MDOT-SB-C2	MDOT-SB-D1	MDOT-SB-D1	MDOT-SB-E1	MDOT-SB-E1	MDOT-SB-E1	MDOT-V-1
Sample Name									SB-B3 (2-4)	SB-B3 (16-18)	SB-C2 (2-4)	SB-C2 (16-18)	SB-D1 (12-14)	SB-D1 (16-18)	SB-E1 (0-2)	SB-E1 (0-2) DUP	SB-E1 (16-18)	V-1
Depth Interval (Feet below ground surface)									2 - 4	16 - 18	2 - 4	16 - 18	12 - 14	16 - 18	0 - 2	0 - 2	16 - 18	0 - 0.5
Laboratory Sample ID(s)									TF26024-021	TF26024-001	TF26024-004	TF26024-005	TF26024-002	TF26024-003	TF26024-006	TF26024-007	TF26024-008	TF26024-010
Sample Date									06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/25/2018	06/16/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<550	<650	<560	<630	<610	<510	170 [J]	<840	<570	<550
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<550	<650	<560	<630	<610	<510	<860	<840	<570	<550
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<130	<110	<130	<120	<100	<170	<170	<110	<110
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<130	<110	<130	<120	<100	<170	<170	<110	<110
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<55	<65	<56	<63	<61	<51	110	120	<57	<55
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<55	<65	<56	<63	<61	<51	***68 [J]***	***67 [J]***	<57	<55
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<130	<110	<130	<120	<100	<170	<170	<110	<110
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<550	<650	<560	<630	<610	<510	<860	<840	<570	<550
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	30 [J]	89	28 [J]	<63	<61	<51	140	130	<57	34 [J]
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<550	<650	<560	<630	<610	<510	<860	<840	<570	<550
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<270	<330	<280	<320	<310	<250	<430	<420	<280	<280
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<55	<65	<56	<63	<61	<51	51 [J]	43 [J]	<57	<55
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	73	<56	<63	<61	<51	<86	<84	<57	<55
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<55	<65	<56	<63	<61	<51	<86	<84	<57	<55
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<110	73 [J]	<110	<130	<120	<100	<170	<170	<110	<110
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-V-2	MDOT-V-3	MDOT-V-4	MDOT-V-5	MDOT-V-6	MDOT-V-7	MDOT-V-8	MDOT-V-9	MDOT-V-10	MDOT-V-11
Sample Name									V-2	V-3	V-4	V-5	V-6	V-7	V-8	V-9	V-10	V-11
Depth Interval (Feet below ground surface)									0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
Laboratory Sample ID(s)									TF26024-011	TF26024-012	TF26024-013	TF26024-014	TF26024-015	TF26024-016	TF26024-017	TF26024-018	TF26024-019	TF26024-020
Sample Date									06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<740	<580	<780	<830	<540	<740	<550	<520	<630	<690
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<740	<580	<780	<830	<540	<740	<550	<520	<630	<690
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<150	<120	<160	<170	<110	<150	<110	<100	<130	<140
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<150	<120	<160	<170	<110	<150	<110	<100	<130	<140
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<150	<120	<160	<170	<110	<150	<110	<100	<130	<140
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<740	<580	<780	<830	<540	<740	<550	<520	<630	<690
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	59 [J]	58	44 [J]	150	100	79	130	180	260	150
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<740	<580	<780	<830	<540	<740	<550	<520	<630	<690
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<370	<290	<390	<410	<270	<370	<280	<260	<310	<350
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<74	<58	<78	<83	<54	<74	<55	<52	<63	<69
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<150	<120	<160	<170	<110	<150	<110	<100	<130	<140
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-1	MDOT-SB-1	MDOT-SB-2	MDOT-SB-2	MDOT-SB-3	MDOT-SB-3	MDOT-SB-4	MDOT-SB-4	MDOT-SB-5	MDOT-SB-5
Sample Name									MDOT-SB-1 6-7	MDOT-SB-1 18-19	MDOT-SB-2 6-7	MDOT-SB-2 19-20	MDOT-SB-3 2-3	MDOT-SB-3 18-19	MDOT-SB-4 2-3	MDOT-SB-4 14-15	MDOT-SB-5 7-8	MDOT-SB-5 18-19
Depth Interval (Feet below ground surface)									6 - 7	18 - 19	6 - 7	19 - 20	2 - 3	18 - 19	2 - 3	14 - 15	7 - 8	18 - 19
Laboratory Sample ID(s)									TJ26056-002	TJ26056-003	TJ26056-004	TJ26056-005	TJ26056-006	TJ26056-007	TJ26056-008	TJ26056-009	TJ26056-010	TJ26056-011
Sample Date									10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<610	<600	<840	<580	<550	<620	<520	<620	120 [J]	<460
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<610	<600	<840	<580	<550	<620	<520	<620	<560	<460
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<120	<120	<170	<120	<110	<120	<100	<120	<110	<91
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<120	<120	<170	<120	<110	<120	<100	<120	<110	<91
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<120	<120	<170	<120	<110	<120	<100	<120	<110	<91
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<610	<600	<840	<580	<550	<620	<520	<620	<560	<460
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<61	<60	<84	24 [J]	<55	<62	<52	<62	<56	<46
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<610	<600	<840	<580	<550	<620	<520	<620	<560	<460
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<310	<300	<420	<290	<270	<310	<260	<310	<280	<230
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<61	<60	<84	<58	<55	<62	<52	<62	<56	<46
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<120	<120	<170	<120	<110	<120	<100	<120	<110	<91
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-6	MDOT-SB-6	MDOT-SB-7	MDOT-SB-7	MDOT-SB-8	MDOT-SB-8	MDOT-SB-9	MDOT-SB-9	MDOT-SB-10	MDOT-SB-10
Sample Name									MDOT-SB-6 7-8	MDOT-SB-6 15-16	MDOT-SB-7 2-3	MDOT-SB-7 12-13	MDOT-SB-8 6-7	MDOT-SB-8 13-14	MDOT-SB-9 2-3	MDOT-SB-9 17-18	MDOT-SB-10 3-4	MDOT-SB-10 13-14
Depth Interval (Feet below ground surface)									7 - 8	15 - 16	2 - 3	12 - 13	6 - 7	13 - 14	2 - 3	17 - 18	3 - 4	13 - 14
Laboratory Sample ID(s)									TJ26056-012	TJ26056-013	TJ27022-002	TJ27022-003	TJ27022-004	TJ27022-005	TJ27022-006	TJ27022-007	TJ27022-008	TJ27022-009
Sample Date									10/25/2018	10/25/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<600	120 [J]	130 [J]	<540	<490	<520	<610	190 [J]	<570	<670
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<600	<580	<610	<540	<490	<520	<610	<900	<570	<670
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<120	<120	<120	<110	<98	<100	<120	<180	<110	<130
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<120	<120	<120	<110	<98	<100	<120	<180	<110	<130
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<120	<120	<120	<110	<98	<100	<120	<180	<110	<130
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<600	<580	<610	<540	<490	<520	<610	<900	<570	<670
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<60	<58	39 [J]	<54	27 [J]	<52	<61	<90	<57	<67
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<600	<580	<610	<540	<490	<520	<610	<900	<570	<670
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<300	<290	<310	<270	<250	<260	<300	<450	<290	<340
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<60	<58	<61	<54	<49	<52	<61	<90	<57	<67
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<120	<120	<120	<110	<98	<100	<120	<180	<110	<130
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-11	MDOT-SB-11	MDOT-SB-12	MDOT-SB-12	MDOT-SB-13	MDOT-SB-13	MDOT-SB-14	MDOT-SB-14	MDOT-SB-15	MDOT-SB-15
Sample Name									MDOT-SB-11 0-1	MDOT-SB-11 12-13	MDOT-SB-12 2-3	MDOT-SB-12 15-16	MDOT-SB-13 5-6	MDOT-SB-13 13-14	MDOT-SB-14 2-3	MDOT-SB-14 13-14	MDOT-SB-15 1-2	MDOT-SB-15 1-2 DUP
Depth Interval (Feet below ground surface)									0 - 1	12 - 13	2 - 3	15 - 16	5 - 6	13 - 14	2 - 3	13 - 14	1 - 2	1 - 2
Laboratory Sample ID(s)									TJ27022-010	TJ27022-011	TJ27022-012	TJ27022-013	TJ27022-014	TJ27022-015	TJ30010-002	TJ30010-003	TJ30010-004	TJ30010-005
Sample Date									10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	130 [J]	<530	<590	<600	120 [J]	<590	<570	<580	<530	<550
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<530	<530	<590	<600	<570	<590	<570	<580	<530	<550
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<110	<120	<120	<110	<120	<110	<120	<110	<110
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<110	<120	<120	<110	<120	<110	<120	<110	<110
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<110	<120	<120	<110	<120	<110	<120	<110	<110
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<530	<530	<590	<600	<570	<590	<570	<580	<530	<550
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	320	<53	<59	<60	<57	<59	<57	<58	<53	<55
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<530	<530	<590	<600	<570	<590	<570	<580	<530	<550
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<260	<260	<290	<300	<290	<290	<280	<290	<260	<270
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<53	<53	<59	<60	<57	<59	<57	<58	<53	<55
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<110	<110	<120	<120	<110	<120	<110	<120	<110	<110
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-15	MDOT-SB-16	MDOT-SB-16	MDOT-SB-17	MDOT-SB-17	MDOT-SB-17	MDOT-SB-18	MDOT-SB-18	MDOT-SB-19	MDOT-SB-19
Sample Name									MDOT-SB-15 11-12	MDOT-SB-16 5-6	MDOT-SB-16 16-17	MDOT-SB-17 1-2	MDOT-SB-17 11-12	MDOT-SB-17 11-12 DUP	MDOT-SB-18 9-10	MDOT-SB-18 16-17	MDOT-SB-19 8-9	MDOT-SB-19 19-20
Depth Interval (Feet below ground surface)									11 - 12	5 - 6	16 - 17	1 - 2	11 - 12	11 - 12	9 - 10	16 - 17	8 - 9	19 - 20
Laboratory Sample ID(s)									TJ30010-006	TJ30010-007	TJ30010-008	TJ30010-009	TJ30010-010	TJ30010-011	TJ30010-012	TJ30010-013	TJ30010-014	TJ30010-015
Sample Date									10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<610	<680	<530	150 [J]	<620	<630	<930	<550	<540	<550
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<610	<680	<530	<550	<620	<630	<930	<550	<540	<550
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<120	<140	<110	<110	<120	<130	<190	<110	<110	<110
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<120	<140	<110	<110	<120	<130	<190	<110	<110	<110
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<120	<140	<110	<110	<120	<130	<190	<110	<110	<110
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<610	<680	<530	<550	<620	<630	<930	<550	<540	<550
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	36 [J]	<68	<53	69	<62	<63	<93	<55	<54	<55
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<610	<680	<530	<550	<620	<630	<930	<550	<540	<550
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<310	<340	<260	<270	<310	<320	<470	<270	<270	<270
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<61	<68	<53	<55	<62	<63	<93	<55	<54	<55
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<120	<140	<110	<110	<120	<130	<190	<110	<110	<110
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-20	MDOT-SB-20	MDOT-SB-21	MDOT-SB-21	MDOT-SB-22	MDOT-SB-22	MDOT-SB-23	MDOT-SB-23	MDOT-SB-24	MDOT-SB-24
Sample Name									MDOT-SB-20 5-6	MDOT-SB-20 14-15	MDOT-SB-21(5-6)	MDOT-21(11-12)	MDOT-SB-22(0-1)	MDOT-SB-22(16-17)	MDOT-SB-23(1-2)	MDOT-SB-23(17-18)	MDOT-SB-24 (4-5)	MDOT-SB-24 (10-11)
Depth Interval (Feet below ground surface)									5 - 6	14 - 15	5 - 6	11 - 12	0 - 1	16 - 17	1 - 2	17 - 18	4 - 5	10 - 11
Laboratory Sample ID(s)									TJ30010-016	TJ30010-017	TJ31048-002	TJ31048-003	TJ31048-004	TJ31048-005	TJ31048-006	TJ31048-007	TK01042-004	TK01042-005
Sample Date									10/29/2018	10/29/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	170 [J]	<500	<590	200 [J]	180 [J]	<560	<550	<580	<640	<690
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<810	<500	<590	<880	<780	<560	<550	<580	<640	<690
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<160	<100	<120	<180	<160	<110	<110	<120	<130	<140
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<160	<100	<120	<180	<160	<110	<110	<120	<130	<140
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<160	<100	<120	<180	<160	<110	<110	<120	<130	<140
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<810	<500	<590	<880	<780	<560	<550	<580	<640	<690
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	33 [J]	<50	<59	47 [J]	170	<56	<55	<58	<64	<69
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<810	<500	<590	<880	<780	<560	<550	<580	<640	<690
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<410	<250	<300	<440	<390	<280	<280	<290	<320	<340
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<81	<50	<59	<88	<78	<56	<55	<58	29 [BJ]	<69
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<81	<50	<59	<88	<78	<56	<55	<58	<64	<69
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<160	<100	<120	<180	<160	<110	<110	<120	<130	<140
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-25	MDOT-SB-25	MDOT-SB-26	MDOT-SB-26	MDOT-SB-26	MDOT-SB-27	MDOT-SB-27	MDOT-SB-28	MDOT-SB-28	MDOT-SB-29
Sample Name									MDOT-SB-25 (2-3)	MDOT-SB-25 (10-11)	MDOT-SB-26(2-3)	MDOT-SB-26(2-3)DUP	MDOT-SB-26(10-11)	MDOT-SB-27(9-10)	MDOT-SB-27(19-20)	MDOT-SB-28(4-5)	MDOT-SB-28(10-11)	MDOT-SB-29(7-8)
Depth Interval (Feet below ground surface)									2 - 3	10 - 11	2 - 3	2 - 3	10 - 11	9 - 10	19 - 20	4 - 5	10 - 11	7 - 8
Laboratory Sample ID(s)									TK01042-002	TK01042-003	TJ31048-018	TJ31048-020	TJ31048-019	TJ31048-016	TJ31048-017	TJ31048-014	TJ31048-015	TJ31048-012
Sample Date									10/31/2018	10/31/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<560	<680	<540	<490	<620	<600	<570	<550	<840	<620
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<560	<680	<540	<490	<620	<600	<570	<550	<840	<620
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<140	<110	<98	<120	<120	<110	<110	<170	<120
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<140	<110	<98	<120	<120	<110	<110	<170	<120
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<140	<110	<98	<120	<120	<110	<110	<170	<120
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<560	<680	<540	<490	<620	<600	<570	<550	<840	<620
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<56	<68	<54	59	<62	<60	<57	<55	<84	<62
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<560	<680	<540	<490	<620	<600	<570	<550	<840	<620
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<280	<340	<270	<240	<310	<300	<290	<280	<420	<310
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<56	<68	<54	<49	<62	73	<57	<55	<84	<62
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<56	<68	<54	<49	<62	<60	<57	<55	<84	<62
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<110	<140	<110	<98	<120	<120	<110	<110	<170	<120
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-29	MDOT-SB-30	MDOT-SB-30	MDOT-SB-31	MDOT-SB-31	MDOT-SB-32	MDOT-SB-32	MDOT-SB-33	MDOT-SB-33	MDOT-SB-34
Sample Name									MDOT-SB-29(12-13)	MDOT-SB-30(8-9)	MDOT-SB-30(19-20)	MDOT-SB-31(1-2)	MDOT-SB-31(7-8)	MDOT-SB-32 (6-7)	MDOT-SB-32 (12-13)	MDOT-SB-33(6-7)	MDOT-SB-33(18-19)	MDOT-SB-34 (4-5)
Depth Interval (Feet below ground surface)									12 - 13	8 - 9	19 - 20	1 - 2	7 - 8	6 - 7	12 - 13	6 - 7	18 - 19	4 - 5
Laboratory Sample ID(s)									TJ31048-013	TJ31048-010	TJ31048-011	TJ31048-008	TJ31048-009	TK01042-006	TK01042-007	TK02072-012	TK02072-013	TK03016-002
Sample Date									10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/02/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<560	<590	<570	120 [J]	<650	<530	<640	<540	<580	<640
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<560	<590	<570	<580	<650	<530	<640	<540	<580	<640
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<120	<110	<120	<130	<110	<130	<110	<120	<130
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<120	<110	<120	<130	<110	<130	<110	<120	<130
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<120	<110	<120	<130	<110	<130	<110	<120	<130
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<560	<590	<570	<580	<650	<530	<640	<540	<580	<640
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<560	<590	<570	<580	<650	<530	<640	<540	<580	<640
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<280	<290	<290	<290	<330	<270	<320	<270	<290	<320
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<56	<59	<57	<58	<65	<53	<64	<54	<58	<64
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<110	<120	<110	<120	<130	<110	<130	<110	<120	<130
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-34	MDOT-SB-35	MDOT-SB-35	MDOT-SB-36	MDOT-SB-36	MDOT-SB-36	MDOT-SB-37	MDOT-SB-37	MDOT-SB-38	MDOT-SB-38
Sample Name									MDOT-SB-34 (15-16)	MDOT-SB-35 (4-5)	MDOT-SB-35 (18-19)	MDOT-SB-36 (0-1)	MDOT-SB-36 (0-1) DUP	MDOT-SB-36 (9-10)	MDOT-SB-37 (3-4)	MDOT-SB-37 (11-12)	MDOT-SB-38 (2-3)	MDOT-SB-38 (12-13)
Depth Interval (Feet below ground surface)									15 - 16	4 - 5	18 - 19	0 - 1	0 - 1	9 - 10	3 - 4	11 - 12	2 - 3	12 - 13
Laboratory Sample ID(s)									TK03016-003	TK01042-008	TK01042-009	TK01042-012	TK01042-013	TK01042-014	TK01042-015	TK01042-016	TK01042-010	TK01042-011
Sample Date									11/02/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<550	<540	<670	210 [J]	<1,000	<570	<570	<590	<590	<640
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	***30 [J]***	<54	<67	<90	<100	<57	<57	<59	<59	<64
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<550	<540	<670	<900	<1,000	<570	<570	<590	<590	<640
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<110	<130	<180	<200	<110	<110	<120	<120	<130
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<110	<130	<180	<200	<110	<110	<120	<120	<130
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<110	<130	<180	<200	<110	<110	<120	<120	<130
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	***44 [J]***	<54	<67	<90	<100	<57	<57	<59	<59	<64
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<550	<540	<670	<900	<1,000	<570	<570	<590	<590	<640
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<55	<54	<67	510	350	<57	<57	<59	<59	<64
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	29 [J]	<54	<67	<90	<100	<57	<57	<59	<59	<64
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<550	<540	<670	<900	<1,000	<570	<570	<590	<590	<640
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<280	<270	<330	<450	<510	<280	<280	<290	<300	<320
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	36 [J]	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<55	<54	<67	<90	<100	<57	<57	<59	<59	<64
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	83	<54	<67	<90	<100	<57	<57	<59	<59	<64
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	45 [J]	<54	<67	<90	<100	<57	<57	<59	<59	<64
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	130	<110	<130	<180	<200	<110	<110	<120	<120	<130
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-39	MDOT-SB-39	MDOT-SB-39	MDOT-SB-40	MDOT-SB-40	MDOT-SB-41	MDOT-SB-41	MDOT-SB-41	MDOT-SB-42	MDOT-SB-42
Sample Name									MDOT-SB-39(7-8)	MDOT-SB-39(7-8)DUP	MDOT-SB-39(12-13)	MDOT-SB-40 (1-2)	MDOT-SB-40 (19-20)	MDOT-SB-41(3-4)	MDOT-SB-41(19-20)	MDOT-SB-41(19-20)DUP	MDOT-SB-42(1-2)	MDOT-SB-42(11-12)
Depth Interval (Feet below ground surface)									7 - 8	7 - 8	12 - 13	1 - 2	19 - 20	3 - 4	19 - 20	19 - 20	1 - 2	11 - 12
Laboratory Sample ID(s)									TK02072-014	TK02072-015	TK02072-016	TK01042-017	TK01042-018	TK02072-017	TK02072-018	TK02072-019	TK02072-004	TK02072-005
Sample Date									11/01/2018	11/01/2018	11/01/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<550	<570	<600	<560	<560	<690	<630	<610	<590	<660
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<550	<570	<600	<560	<560	<690	<630	<610	<590	<660
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<110	<120	<110	<110	<140	<130	<120	<120	<130
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<110	<120	<110	<110	<140	<130	<120	<120	<130
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<110	<120	<110	<110	<140	<130	<120	<120	<130
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<550	<570	<600	<560	<560	<690	<630	<610	<590	<660
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<55	<57	<60	<56	<56	<69	<63	<61	26 [J]	<66
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<550	<570	<600	<560	<560	<690	<630	<610	<590	<660
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<280	<290	<300	<280	<280	<350	<310	<310	<290	<330
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<55	<57	<60	<56	<56	<69	<63	<61	<59	<66
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<110	<110	<120	<110	<110	<140	<130	<120	<120	<130
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-43	MDOT-SB-43	MDOT-SB-44	MDOT-SB-44	MDOT-SB-45	MDOT-SB-45	MDOT-SB-46	MDOT-SB-46	MDOT-SB-47	MDOT-SB-47
Sample Name									MDOT-SB-43(6-7)	MDOT-SB-43(16-17)	MDOT-SB-44(2-3)	MDOT-SB-44(14-15)	MDOT-SB-45(8-9)	MDOT-SB-45(18-19)	MDOT-SB-46(2-3)	MDOT-SB-46-(18-19)	MDOT-SB-47 (0-1)	MDOT-SB-47 (14-15)
Depth Interval (Feet below ground surface)									6 - 7	16 - 17	2 - 3	14 - 15	8 - 9	18 - 19	2 - 3	18 - 19	0 - 1	14 - 15
Laboratory Sample ID(s)									TK02072-003	TK02072-002	TK02072-006	TK02072-007	TK02072-008	TK02072-009	TK02072-010	TK02072-011	TK03016-004	TK03016-005
Sample Date									11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018
Parameter (µg/kg)																		
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<630	<590	<610	<580	<580	<620	<610	<570	<650	<590
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<630	<590	<610	<580	<580	<620	<610	<570	<650	<590
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<130	<120	<120	<120	<120	<120	<120	<110	<130	<120
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<130	<120	<120	<120	<120	<120	<120	<110	<130	<120
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<130	<120	<120	<120	<120	<120	<120	<110	<130	<120
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<630	<590	<610	<580	<580	<620	<610	<570	<650	<590
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<63	<59	<61	<58	<58	<62	<61	<57	200	<59
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<630	<590	<610	<580	<580	<620	<610	<570	<650	<590
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<320	<290	<310	<290	<290	<310	<300	<280	<320	<300
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<63	<59	<61	<58	<58	<62	<61	<57	<65	<59
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<130	<120	<120	<120	<120	<120	<120	<110	<130	<120
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-48	MDOT-SB-48
Sample Name									MDOT-SB-48 (1-2)	MDOT-SB-48 (19-20)
Depth Interval (Feet below ground surface)									1 - 2	19 - 20
Laboratory Sample ID(s)									TK03016-006	TK03016-007
Sample Date									11/02/2018	11/02/2018
Parameter (µg/kg)										
Acetone	15,000	34,000	290,000,000 (C)	130,000,000	390,000,000,000	23,000,000	260,000	180,000,000	<570	<530
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<57	<53
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<57	<53
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<57	<53
2-Butanone (MEK)	260,000	44,000	54,000,000 (C)	29,000,000	67,000,000,000	120,000,000 (C,DD)	NCL	81,000,000	<570	<530
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<110
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<57	<53
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<57	<53
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<57	<53
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<110	<110
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<57	<53
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<57	<53
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<57	<53
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<57	<53
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<57	<53
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<57	<53
1,2-Dichlorobenzene	14,000	280	11,000,000 (C)	39,000,000	100,000,000,000	19,000,000 (C)	NCL	5,400,000	<57	<53
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<57	<53
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<57	<53
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<110
1,1-Dichloroethane	18,000	15,000	230,000	2,100,000	33,000,000,000	27,000,000 (C)	2.6 (M)	360,000	<57	<53
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<57	<53
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<57	<53
cis-1,2-Dichloroethene	1,400	12,000	22,000	180,000	2,300,000,000	2,500,000 (C)	2.1 (M)	470,000	<57	<53
trans-1,2-Dichloroethene	2,000	30,000	23,000	280,000	4,700,000,000	3,800,000 (C)	39 (M)	4,700,000	<57	<53
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<57	<53
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<57	<53
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<57	<53
1,3-Dichloropropene (Calculated: cis + trans)	170	180	1,000	18,000	780,000,000	10,000	NCL	180,000	ND	ND
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<57	<53
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<570	<530
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<57	<53
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<57	<53
Methyl tertiary butyl ether (MTBE)	800	140,000	9,900,000 (C)	25,000,000	200,000,000,000	1,500,000	74 (M)	4,700,000	<57	<53
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)		99,000,000	<570	<530
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<290	<270
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	<57	<53
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<57	<53
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<57	<53
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<57	<53
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<57	<53
1,1,2-Trichloro-1,2,2-Trifluoroethane	9,000,000 (C)	1,700	5,100,000 (C)	180,000,000	5,100,000,000,000	1,000,000,000 (C,D)	NCL	20,000,000	<57	<53
1,2,4-Trichlorobenzene	4,200	5,900	9,600,000 (C)	28,000,000	25,000,000,000	990,000 (DD)	53 (M)	170,000	<57	<53
1,1,1-Trichloroethane	4,000	1,800	250,000	3,800,000	67,000,000,000	500,000,000 (C)	450	24,000,000	<57	<53
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<57	<53
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<57	<53
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<57	<53
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<57	<53
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<57	<53
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<57	<53
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<110	<110
Trihalomethanes (Calculation: Bromodichloromentane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-1	MDOT-SB-1	MDOT-SB-10	MDOT-SB-10	MDOT-SB-11	MDOT-SB-11	MDOT-SB-12	MDOT-SB-12	MDOT-SB-13	MDOT-SB-13
Sample Name									MDOT-SB-1 6-7	MDOT-SB-1 18-19	MDOT-SB-10 3-4	MDOT-SB-10 13-14	MDOT-SB-11 0-1	MDOT-SB-11 12-13	MDOT-SB-12 2-3	MDOT-SB-12 15-16	MDOT-SB-13 5-6	MDOT-SB-13 13-14
Depth Interval (Feet below ground surface)									6 - 7	18 - 19	3 - 4	13 - 14	0 - 1	12 - 13	2 - 3	15 - 16	5 - 6	13 - 14
Laboratory Sample ID(s)									TJ26056-002	TJ26056-003	TJ27022-008	TJ27022-009	TJ27022-010	TJ27022-011	TJ27022-012	TJ27022-013	TJ27022-014	TJ27022-015
Sample Date									10/25/2018	10/25/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<350	<360	<340	<390	<340	<340	<330	<420	<350	<380
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<14	<13	<15	7.4 [J]	<13	<13	<16	<14	<15
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<14	<13	<15	11 [J]	<13	<13	<16	<14	<15
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<14	<13	<15	4.6 [J]	<13	<13	<16	<14	<15
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<360	<340	<390	<340	<340	<330	<420	<350	<380
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<140	<130	<150	<130	<130	<130	<160	<140	<150
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<14	<14	<13	<15	16	<13	<13	<16	<14	<15
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<360	<340	<390	<340	<340	<330	<420	<350	<380
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<140	<130	<150	<130	<130	<130	<160	<140	<150
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<14	<13	<15	<13	<13	<13	<16	<14	<15
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<140	<130	<150	<130	<130	<130	<160	<140	<150
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<360	<340	<390	<340	<340	<330	<420	<350	<380
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<14	<13	<15	7.5 [J]	<13	<13	<16	<14	<15
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<14	<14	<13	<15	13	<13	<13	<16	<14	<15
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<71	<73	<68	<79	<69	<69	<66	<84	<71	<77

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-14	MDOT-SB-14	MDOT-SB-15	MDOT-SB-15	MDOT-SB-15	MDOT-SB-16	MDOT-SB-16	MDOT-SB-17	MDOT-SB-17	MDOT-SB-17
Sample Name									MDOT-SB-14 2-3	MDOT-SB-14 13-14	MDOT-SB-15 1-2	MDOT-SB-15 1-2 DUP	MDOT-SB-15 11-12	MDOT-SB-16 5-6	MDOT-SB-16 16-17	MDOT-SB-17 1-2	MDOT-SB-17 11-12	MDOT-SB-17 11-12 DUP
Depth Interval (Feet below ground surface)									2 - 3	13 - 14	1 - 2	1 - 2	11 - 12	5 - 6	16 - 17	1 - 2	11 - 12	11 - 12
Laboratory Sample ID(s)									TJ30010-002	TJ30010-003	TJ30010-004	TJ30010-005	TJ30010-006	TJ30010-007	TJ30010-008	TJ30010-009	TJ30010-010	TJ30010-011
Sample Date									10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<350	<370	<340	<340	<390	<340	<330	<1,700	<380	<380
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<15	<13	<14	10 [J]	<13	<13	<68	<15	<15
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<370	<340	<340	<390	<340	<330	<1,700	<380	<380
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<150	<130	<140	<150	<130	<130	<680	<150	<150
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<370	<340	<340	<390	<340	<330	<1,700	<380	<380
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<150	<130	<140	<150	<130	<130	<680	<150	<150
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<150	<130	<140	<150	<130	<130	<680	<150	<150
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<370	<340	<340	<390	<340	<330	<1,700	<380	<380
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<14	<15	<13	<14	<15	<13	<13	<68	<15	<15
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<70	<75	<69	<70	<79	<70	<68	<350	<77	<78

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-18	MDOT-SB-18	MDOT-SB-19	MDOT-SB-19	MDOT-SB-2	MDOT-SB-2	MDOT-SB-20	MDOT-SB-20	MDOT-SB-21	MDOT-SB-21
Sample Name									MDOT-SB-18 9-10	MDOT-SB-18 16-17	MDOT-SB-19 8-9	MDOT-SB-19 19-20	MDOT-SB-2 6-7	MDOT-SB-2 19-20	MDOT-SB-20 5-6	MDOT-SB-20 14-15	MDOT-SB-21(5-6)	MDOT-21(11-12)
Depth Interval (Feet below ground surface)									9 - 10	16 - 17	8 - 9	19 - 20	6 - 7	19 - 20	5 - 6	14 - 15	5 - 6	11 - 12
Laboratory Sample ID(s)									TJ30010-012	TJ30010-013	TJ30010-014	TJ30010-015	TJ26056-004	TJ26056-005	TJ30010-016	TJ30010-017	TJ31048-002	TJ31048-003
Sample Date									10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/25/2018	10/25/2018	10/29/2018	10/29/2018	10/30/2018	10/30/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<340	<340	<360	<330	<390	<400	<340	<330	<330	<410
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<340	<340	<360	<330	<390	<400	<340	<330	<330	<410
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<130	<140	<140	<130	<150	<160	<140	<130	<130	<160
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<340	<340	<360	<330	<390	<400	<340	<330	<330	<410
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<130	<140	<140	<130	<150	<160	<140	<130	<130	<160
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<130	<140	<140	<130	<150	<160	<140	<130	<130	<160
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<340	<340	<360	<330	<390	<400	<340	<330	<330	<410
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<13	<14	<14	<13	<15	<16	<14	<13	<13	<16
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<69	<70	<74	<67	<78	<82	<70	<66	<66	<84

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-22	MDOT-SB-22	MDOT-SB-23	MDOT-SB-23	MDOT-SB-24	MDOT-SB-24	MDOT-SB-25	MDOT-SB-25	MDOT-SB-26	MDOT-SB-26
Sample Name									MDOT-SB-22(0-1)	MDOT-SB-22(16-17)	MDOT-SB-23(1-2)	MDOT-SB-23(17-18)	MDOT-SB-24 (4-5)	MDOT-SB-24 (10-11)	MDOT-SB-25 (2-3)	MDOT-SB-25 (10-11)	MDOT-SB-26(2-3)	MDOT-SB-26(2-3)DUP
Depth Interval (Feet below ground surface)									0 - 1	16 - 17	1 - 2	17 - 18	4 - 5	10 - 11	2 - 3	10 - 11	2 - 3	2 - 3
Laboratory Sample ID(s)									TJ31048-004	TJ31048-005	TJ31048-006	TJ31048-007	TK01042-004	TK01042-005	TK01042-002	TK01042-003	TJ31048-018	TJ31048-020
Sample Date									10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/30/2018	10/30/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<1,800	<320	<340	<350	<340	<390	<340	<410	<340	<340
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<72	<13	<13	<14	<13	<15	<13	6.2 [J]	<13	<13
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<72	<13	<13	<14	<13	<15	<13	15 [J]	<13	<13
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<72	<13	<13	<14	<13	<15	<13	6.6 [J]	<13	<13
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<72	<13	<13	<14	<13	<15	<13	5 [J]	<13	<13
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<1,800	<320	<340	<350	<340	<390	<340	<410	<340	<340
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<720	<130	<130	<140	<130	<150	<130	<160	<130	<130
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<1,800	<320	<340	<350	<340	<390	<340	<410	<340	<340
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<72	<13	<13	<14	<13	<15	<13	12 [J]	<13	<13
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<720	<130	<130	<140	<130	<150	<130	<160	<130	<130
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<720	<130	<130	<140	<130	<150	<130	<160	<130	<130
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<1,800	<320	<340	<350	<340	<390	<340	<410	<340	<340
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<72	<13	<13	<14	<13	<15	<13	5.5 [J]	<13	<13
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<72	<13	<13	<14	<13	<15	<13	<16	<13	<13
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<370	<65	<69	<72	<69	<79	<69	<83	<69	<69

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-26	MDOT-SB-27	MDOT-SB-27	MDOT-SB-28	MDOT-SB-28	MDOT-SB-29	MDOT-SB-29	MDOT-SB-3	MDOT-SB-3	MDOT-SB-30
Sample Name									MDOT-SB-26(10-11)	MDOT-SB-27(9-10)	MDOT-SB-27(19-20)	MDOT-SB-28(4-5)	MDOT-SB-28(10-11)	MDOT-SB-29(7-8)	MDOT-SB-29(12-13)	MDOT-SB-3 2-3	MDOT-SB-3 18-19	MDOT-SB-30(8-9)
Depth Interval (Feet below ground surface)									10 - 11	9 - 10	19 - 20	4 - 5	10 - 11	7 - 8	12 - 13	2 - 3	18 - 19	8 - 9
Laboratory Sample ID(s)									TJ31048-019	TJ31048-016	TJ31048-017	TJ31048-014	TJ31048-015	TJ31048-012	TJ31048-013	TJ26056-006	TJ26056-007	TJ31048-010
Sample Date									10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/25/2018	10/25/2018	10/30/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<350	<390	<330	<340	<410	<330	<350	<340	<380	<340
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	11 [J]	<13	<14	9.9 [J]	<13	<14	<13	<15	<13
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	8.7 [J]	<13	<14	<16	<13	<14	<13	<15	<13
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<390	<330	<340	<410	<330	<350	<340	<380	<340
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<150	<130	<140	<160	<130	<140	<130	<150	<130
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<390	<330	<340	<410	<330	<350	<340	<380	<340
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	11 [J]	<13	<14	<16	<13	<14	<13	<15	<13
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<150	<130	<140	<160	<130	<140	<130	<150	<130
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<150	<130	<140	<160	<130	<140	<130	<150	<130
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<390	<330	<340	<410	<330	<350	<340	<380	<340
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<14	<15	<13	<14	<16	<13	<14	<13	<15	<13
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<70	<79	<67	<70	<83	<68	<70	<69	<77	<70

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-30	MDOT-SB-31	MDOT-SB-31	MDOT-SB-32	MDOT-SB-32	MDOT-SB-33	MDOT-SB-33	MDOT-SB-34	MDOT-SB-34	MDOT-SB-35
Sample Name									MDOT-SB-30(19-20)	MDOT-SB-31(1-2)	MDOT-SB-31(7-8)	MDOT-SB-32 (6-7)	MDOT-SB-32 (12-13)	MDOT-SB-33(6-7)	MDOT-SB-33(18-19)	MDOT-SB-34 (4-5)	MDOT-SB-34 (15-16)	MDOT-SB-35 (4-5)
Depth Interval (Feet below ground surface)									19 - 20	1 - 2	7 - 8	6 - 7	12 - 13	6 - 7	18 - 19	4 - 5	15 - 16	4 - 5
Laboratory Sample ID(s)									TJ31048-011	TJ31048-008	TJ31048-009	TK01042-006	TK01042-007	TK02072-012	TK02072-013	TK03016-002	TK03016-003	TK01042-008
Sample Date									10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018	10/31/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<350	<330	<330	<340	<340	<340	<330	<330	<350	<340
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<330	<330	<340	<340	<340	<330	<330	<350	<340
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<130	<130	<130	<140	<130	<130	<130	<140	<130
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<330	<330	<340	<340	<340	<330	<330	<350	<340
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<130	<130	<130	<140	<130	<130	<130	<140	<130
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<130	<130	<130	<140	<130	<130	<130	<140	<130
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<330	<330	<340	<340	<340	<330	<330	<350	<340
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<14	<13	<13	<13	<14	<13	<13	<13	<14	<13
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<71	<68	<67	<69	<70	<69	<68	<67	<70	<69

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-35	MDOT-SB-36	MDOT-SB-36	MDOT-SB-36	MDOT-SB-37	MDOT-SB-37	MDOT-SB-38	MDOT-SB-38	MDOT-SB-39	MDOT-SB-39
Sample Name									MDOT-SB-35 (18-19)	MDOT-SB-36 (0-1)	MDOT-SB-36 (0-1) DUP	MDOT-SB-36 (9-10)	MDOT-SB-37 (3-4)	MDOT-SB-37 (11-12)	MDOT-SB-38 (2-3)	MDOT-SB-38 (12-13)	MDOT-SB-39(7-8)	MDOT-SB-39(7-8)DUP
Depth Interval (Feet below ground surface)									18 - 19	0 - 1	0 - 1	9 - 10	3 - 4	11 - 12	2 - 3	12 - 13	7 - 8	7 - 8
Laboratory Sample ID(s)									TK01042-009	TK01042-012	TK01042-013	TK01042-014	TK01042-015	TK01042-016	TK01042-010	TK01042-011	TK02072-014	TK02072-015
Sample Date									10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<340	<20,000	<21,000	<350	<340	<340	<340	<340	<330	<350
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<340	<20,000	<21,000	<350	<340	<340	<340	<340	<330	<350
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<130	<8,000	<8,100	<140	<130	<140	<130	<130	<130	<140
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<340	<20,000	<21,000	<350	<340	<340	<340	<340	<330	<350
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<130	<8,000	<8,100	<140	<130	<140	<130	<130	<130	<140
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<130	<8,000	<8,100	<140	<130	<140	<130	<130	<130	<140
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<340	<20,000	<21,000	<350	<340	<340	<340	<340	<330	<350
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<13	<800	<810	<14	<13	<14	<13	<13	<13	<14
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<69	<4,100	<4,200	<70	<68	<70	<69	<69	<68	<70

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-39	MDOT-SB-4	MDOT-SB-4	MDOT-SB-40	MDOT-SB-40	MDOT-SB-41	MDOT-SB-41	MDOT-SB-41	MDOT-SB-42	MDOT-SB-42
Sample Name									MDOT-SB-39(12-13)	MDOT-SB-4 2-3	MDOT-SB-4 14-15	MDOT-SB-40 (1-2)	MDOT-SB-40 (19-20)	MDOT-SB-41(3-4)	MDOT-SB-41(19-20)	MDOT-SB-41(19-20)DUP	MDOT-SB-42(1-2)	MDOT-SB-42(11-12)
Depth Interval (Feet below ground surface)									12 - 13	2 - 3	14 - 15	1 - 2	19 - 20	3 - 4	19 - 20	19 - 20	1 - 2	11 - 12
Laboratory Sample ID(s)									TK02072-016	TJ26056-008	TJ26056-009	TK01042-017	TK01042-018	TK02072-017	TK02072-018	TK02072-019	TK02072-004	TK02072-005
Sample Date									11/01/2018	10/25/2018	10/25/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<340	<360	<400	<340	<330	<360	<370	<360	<350	<420
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<340	<360	<400	<340	<330	<360	<370	<360	<350	<420
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<130	<140	<160	<130	<130	<140	<150	<140	<140	<170
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<340	<360	<400	<340	<330	<360	<370	<360	<350	<420
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<130	<140	<160	<130	<130	<140	<150	<140	<140	<170
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<130	<140	<160	<130	<130	<140	<150	<140	<140	<170
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<340	<360	<400	<340	<330	<360	<370	<360	<350	<420
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<13	<14	<16	<13	<13	<14	<15	<14	<14	<17
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<69	<74	<82	<69	<67	<73	<75	<74	<71	<86

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-43	MDOT-SB-43	MDOT-SB-44	MDOT-SB-44	MDOT-SB-45	MDOT-SB-45	MDOT-SB-46	MDOT-SB-46	MDOT-SB-47	MDOT-SB-47
Sample Name									MDOT-SB-43(6-7)	MDOT-SB-43(16-17)	MDOT-SB-44(2-3)	MDOT-SB-44(14-15)	MDOT-SB-45(8-9)	MDOT-SB-45(18-19)	MDOT-SB-46(2-3)	MDOT-SB-46-(18-19)	MDOT-SB-47 (0-1)	MDOT-SB-47 (14-15)
Depth Interval (Feet below ground surface)									6 - 7	16 - 17	2 - 3	14 - 15	8 - 9	18 - 19	2 - 3	18 - 19	0 - 1	14 - 15
Laboratory Sample ID(s)									TK02072-003	TK02072-002	TK02072-006	TK02072-007	TK02072-008	TK02072-009	TK02072-010	TK02072-011	TK03016-004	TK03016-005
Sample Date									11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<350	<330	<330	<330	<380	<340	<330	<340	<1,900	<330
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<330	<330	<330	<380	<340	<330	<340	<1,900	<330
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<130	<130	<130	<150	<130	<130	<130	<740	<130
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<330	<330	<330	<380	<340	<330	<340	<1,900	<330
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<130	<130	<130	<150	<130	<130	<130	<740	<130
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<130	<130	<130	<150	<130	<130	<130	<740	<130
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<330	<330	<330	<380	<340	<330	<340	<1,900	<330
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<14	<13	<13	<13	<15	<13	<13	<13	<74	<13
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<72	<67	<66	<66	<76	<68	<67	<69	<380	<67

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-48	MDOT-SB-48	MDOT-SB-5	MDOT-SB-5	MDOT-SB-6	MDOT-SB-6	MDOT-SB-7	MDOT-SB-7	MDOT-SB-8	MDOT-SB-8
Sample Name									MDOT-SB-48 (1-2)	MDOT-SB-48 (19-20)	MDOT-SB-5 7-8	MDOT-SB-5 18-19	MDOT-SB-6 7-8	MDOT-SB-6 15-16	MDOT-SB-7 2-3	MDOT-SB-7 12-13	MDOT-SB-8 6-7	MDOT-SB-8 13-14
Depth Interval (Feet below ground surface)									1 - 2	19 - 20	7 - 8	18 - 19	7 - 8	15 - 16	2 - 3	12 - 13	6 - 7	13 - 14
Laboratory Sample ID(s)									TK03016-006	TK03016-007	TJ26056-010	TJ26056-011	TJ26056-012	TJ26056-013	TJ27022-002	TJ27022-003	TJ27022-004	TJ27022-005
Sample Date									11/02/2018	11/02/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<350	<330	<340	<330	<340	<320	<360	<330	<370	<350
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<330	<340	<330	<340	<320	<360	<330	<370	<350
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<130	<140	<130	<140	<130	<140	<130	<150	<140
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<330	<340	<330	<340	<320	<360	<330	<370	<350
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<130	<140	<130	<140	<130	<140	<130	<150	<140
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<130	<140	<130	<140	<130	<140	<130	<150	<140
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<330	<340	<330	<340	<320	<360	<330	<370	<350
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<14	<13	<14	<13	<14	<13	<14	<13	<15	<14
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<71	<68	<70	<68	<70	<65	<73	<67	<75	<71

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-9	MDOT-SB-9	MDOT-SB-B3	MDOT-SB-B3	MDOT-SB-C2	MDOT-SB-C2	MDOT-SB-D1	MDOT-SB-D1	MDOT-SB-E1	MDOT-SB-E1
Sample Name									MDOT-SB-9 2-3	MDOT-SB-9 17-18	SB-B3 (2-4)	SB-B3 (16-18)	SB-C2 (2-4)	SB-C2 (16-18)	SB-D1 (12-14)	SB-D1 (16-18)	SB-E1 (0-2)	SB-E1 (0-2) DUP
Depth Interval (Feet below ground surface)									2 - 3	17 - 18	2 - 4	16 - 18	2 - 4	16 - 18	12 - 14	16 - 18	0 - 2	0 - 2
Laboratory Sample ID(s)									TJ27022-006	TJ27022-007	TF26024-021	TF26024-001	TF26024-004	TF26024-005	TF26024-002	TF26024-003	TF26024-006	TF26024-007
Sample Date									10/26/2018	10/26/2018	06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/23/2018	06/23/2018	06/25/2018	06/25/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<15	<18	47 [J]	<71	<68	<16	<13	<15	<69	<70
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<15	<18	<64	<71	<68	<16	<13	<15	<69	<70
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<15	<18	99	<71	<68	<16	<13	<15	<69	32 [J]
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<370	<460	<640	<1,800	<1,700	<160	<340	<390	<690	<700
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<15	<18	420	38 [J]	68	<16	<13	<15	110	160
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<15	<18	570	25 [J]	41 [J]	<16	<13	<15	100	170
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<15	<18	810	<71	<68	<16	<13	<15	120	240
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<15	<18	150	46 [J]	29 [J]	<16	<13	<15	65 [J]	98
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<15	<18	270	<71	<68	<16	<13	<15	52 [J]	110
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<76	<93	94 [J]	<370	<350	<84	<69	<80	<360	<360
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<15	<18	430	19 [J]	38 [J]	<16	<13	<15	74	170
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<15	<18	<64	<71	<68	<16	<13	<15	<69	<70
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<370	<460	<1,600	<1,800	<1,700	<420	<340	<390	<1,800	<1,800
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<150	<180	<640	<710	<680	<160	<130	<150	<690	<700
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<15	<18	1,100	33 [J]	80	<16	<13	<15	130	340
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<15	<18	51 [J]	<71	<68	<16	<13	<15	<69	<70
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<370	<460	<1,600	<1,800	<1,700	<420	<340	<390	<1,800	<1,800
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<15	<18	160	26 [J]	25 [J]	<16	<13	<15	62 [J]	69 [J]
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<15	<18	<64	<71	<68	<16	<13	<15	<69	55 [J]
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<150	<180	<640	<710	<680	<160	<130	<150	<690	<700
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<15	<18	44 [J]	<71	<68	<16	<13	<15	<69	29 [J]
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<150	<180	<640	<710	<680	<160	<130	<150	<690	<700
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<370	<460	<1,600	<1,800	<1,700	<420	<340	<390	<1,800	<1,800
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<15	<18	660	<71	37 [J]	<16	<13	<15	73	150
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<15	<18	800	35 [J]	69	<16	<13	<15	120	220
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<76	<93	<330	<370	<350	<84	<69	<80	<360	<360

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-E1	MDOT-V-1	MDOT-V-10	MDOT-V-11	MDOT-V-2	MDOT-V-3	MDOT-V-4	MDOT-V-5	MDOT-V-6	MDOT-V-7
Sample Name									SB-E1 (16-18)	V-1	V-10	V-11	V-2	V-3	V-4	V-5	V-6	V-7
Depth Interval (Feet below ground surface)									16 - 18	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
Laboratory Sample ID(s)									TF26024-008	TF26024-010	TF26024-019	TF26024-020	TF26024-011	TF26024-012	TF26024-013	TF26024-014	TF26024-015	TF26024-016
Sample Date									06/25/2018	06/16/2018	06/23/2018	06/23/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018
Parameter (µg/kg)																		
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<15	<14	<14	<14	<16	<14	<16	<16	<13	<16
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<15	<14	<14	<14	<16	<14	<16	<16	<13	<16
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	<15	<14	<14	<14	<16	<14	12 [J]	<16	<13	<16
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<150	<350	<140	<140	<390	<360	<410	<410	<340	<400
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<15	9.4 [J]	5.3 [J]	6.3 [J]	14 [J]	<14	22	<16	13	<16
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<15	11 [J]	9.8 [J]	9 [J]	16	<14	22	<16	22	<16
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<15	21	17	11 [J]	22	<14	28	<16	31	7.7 [J]
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<15	7.2 [J]	<14	<14	11 [J]	<14	10 [J]	<16	17	<16
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<15	<14	20	15	13 [J]	<14	10 [J]	<16	12 [J]	<16
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<15	10 [J]	7.9 [J]	5.7 [J]	13 [J]	<14	21	<16	20	<16
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<15	<14	<14	<14	<16	<14	<16	<16	<13	<16
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<380	<350	<360	<360	<390	<360	<410	<410	<340	<400
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<150	<140	<140	<140	<160	<140	<160	<160	<130	<160
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	<15	20	17	11 [J]	26	<14	47	<16	24	<16
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<15	<14	<14	<14	<16	<14	<16	<16	<13	<16
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<380	<350	<360	<360	<390	<360	<410	<410	<340	<400
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<15	7.3 [J]	<14	<14	<16	<14	<16	<16	14	<16
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<15	<14	<14	<14	<16	<14	<16	<16	<13	<16
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<150	<140	<140	<140	<160	<140	<160	<160	<130	<160
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<15	<14	<14	<14	<16	<14	10 [J]	<16	<13	<16
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<150	<140	<140	<140	<160	<140	<160	<160	<130	<160
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<380	<350	<360	<360	<390	<360	<410	<410	<340	<400
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<15	13 [J]	10 [J]	5.9 [J]	15 [J]	<14	43	<16	12 [J]	<16
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	<15	16	12 [J]	8.8 [J]	24	<14	39	<16	26	<16
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<76	<70	<73	<74	<80	<73	<84	<82	<69	<82

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-V-8	MDOT-V-9
Sample Name									V-8	V-9
Depth Interval (Feet below ground surface)									0 - 0.5	0 - 0.5
Laboratory Sample ID(s)									TF26024-017	TF26024-018
Sample Date									06/23/2018	06/23/2018
Parameter (µg/kg)										
Acenaphthene	300,000	8,700	190,000,000	81,000,000	14,000,000,000	41,000,000	NCL	11,000,000	<14	<66
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<66
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<71	<340
Anthracene	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	NCL	54,000,000	5.6 [J]	<66
Atrazine	60	150	NLV	NLV	ID	71000 (DD)	NCL	240,000	<71	<340
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<140	<660
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	28	<66
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	26	<66
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	26	<66
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	11 [J]	<66
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	27	<66
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<71	<340
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<71	<340
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<71	<340
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<71	<340
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<71	<340
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<71	<340
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<71	<340
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	20	<66
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<66
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	IDID	NCL	220,000	<71	<340
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<71	<340
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<71	<340
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<71	<340
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<71	<340
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<71	<340
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<71	<340
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<350	<1,700
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<660
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<71	<340
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<71	<340
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<71	<340
Fluoranthene	730,000	5,500	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NCL	7,200,000	36	<66
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<66
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<71	<340
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<71	<340
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<350	<1,700
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<71	<340
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	8.6 [J]	<66
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<71	<340
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<66
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<71	<340
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<660
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<66
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<71	<340
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<660
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<71	<340
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<71	<340
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<350	<1,700
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	20	<66
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<71	<340
Pyrene	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	NCL	5,400,000	28	<66
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<71	<340
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<71	<340

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-AS-1	MDOT-AS-2	MDOT-AS-3	MDOT-AS-4	MDOT-AS-5	MDOT-AS-6	MDOT-AS-7	MDOT-AS-8	MDOT-AS-9	MDOT-SB-B3
Sample Name										AS-1	AS-2	AS-3	AS-4	AS-5	AS-6	AS-7	AS-8	AS-9	SB-B3 (2-4)
Depth Interval (Feet below ground surface)										0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	2 - 4
Laboratory Sample ID(s)										TF26025-001	TF26025-002	TF26025-003	TF26025-004	TF26025-005	TF26025-006	TF26025-007	TF26025-008	TF26025-009	TF26024-021
Sample Date										06/23/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000										1,500,000 [B]
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000										<390
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	870	1,100	770	900	840	1,500	1,100	1,100	750	810
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000										20,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000										37 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000										<10,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL										260
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL										***26,000***
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000										25,000
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000										740 [J]
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000										750 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000										19,000
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000										2,800,000 [B]
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000										9,800
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL										350,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000										***350***
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000										<1,900
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000										2,900
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000										<1,000
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000										390
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL										<77,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300										25 [J]
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL										62,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000										4,000
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000										51,000

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-B3	MDOT-SB-C2	MDOT-SB-C2	MDOT-SB-D1	MDOT-SB-D1	MDOT-SB-E1	MDOT-SB-E1	MDOT-SB-E1	MDOT-V-1	MDOT-V-2
Sample Name										SB-B3 (16-18)	SB-C2 (2-4)	SB-C2 (16-18)	SB-D1 (12-14)	SB-D1 (16-18)	SB-E1 (0-2)	SB-E1 (0-2) DUP	SB-E1 (16-18)	V-1	V-2
Depth Interval (Feet below ground surface)										16 - 18	2 - 4	16 - 18	12 - 14	16 - 18	0 - 2	0 - 2	16 - 18	0 - 0.5	0 - 0.5
Laboratory Sample ID(s)										TF26024-001	TF26024-004	TF26024-005	TF26024-002	TF26024-003	TF26024-006	TF26024-007	TF26024-008	TF26024-010	TF26024-011
Sample Date										06/23/2018	06/25/2018	06/25/2018	06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/25/2018	06/16/2018	06/16/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	980,000 [B]	2,400,000 [B]	***8,800,000 [B]***	530,000 [B]	***7,700,000 [B]***	2,700,000 [B]	2,700,000 [B]	540,000 [B]	3,300,000 [B]	2,500,000 [B]
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<460	<480	<580	<410	<580	230 [J]	210 [J]	<400	230 [J]	<520
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	800	1,000	2,600	400 [J]	4,900	2,200	1,700	280 [J]	1,700	1,000
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	23,000	20,000	70,000	2,600	74,000	76,000	56,000	2,900	22,000	15,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	44 [J]	69 [J]	110 [J]	35 [J]	110 [J]	67 [J]	69 [J]	33 [J]	80 [J]	64 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	2,500 [J]	3,100 [J]	***27,000***	<11,000	***26,000***	4,800 [J]	3,800 [J]	<10,000	5,100 [J]	<14,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	380	160	81 [J]	<110	83 [J]	1,400	970	<100	48 [J]	51 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	***92,000***	***24,000***	***25,000***	1,600	***22,000***	***850,000***	***630,000***	1,300	***21,000***	11,000
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	89,000	24,000	25,000	1,600	22,000	850,000	630,000	1,300	21,000	11,000
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	3,200	<1,100	<1,300	<1,000	<1,200	1,000 [J]	<1,100	<1,200	<1,100	<1,200
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	720 [J]	1,300	***7,000***	520 [J]	6,600	2,400	3,000	470 [J]	1,900	1,000 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	23,000	5,800	15,000	1,100	13,000	82,000	82,000	850 [J]	3,300	2,100
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	3,000,000 [B]	4,100,000 [B]	***19,000,000 [B]***	1,800,000 [B]	***17,000,000 [B]***	9,500,000 [B]	8,500,000 [B]	1,300,000 [B]	6,200,000 [B]	4,000,000 [B]
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	12,000	6,500	7,800	740	6,500	44,000	36,000	560	4,100	3,500
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	930,000	520,000	***13,000,000***	200,000	***13,000,000***	2,100,000	1,400,000	180,000	790,000	410,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	***420***	***140***	32 [J]	<77	30 [J]	***980***	***2,000***	<90	<81	<93
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,300	<2,400	<2,900	<2,100	<2,900	<2,300	760 [J]	<2,000	<2,400	<2,600
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	2,300	3,500	20,000	1,200	18,000	7,200	8,600	1,100	5,400	2,800
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,200	<1,200	<1,500	<1,100	<1,500	<1,200	<1,200	<1,000	<1,300	<1,400
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	710	140 [J]	<290	<210	<290	***2,500***	***1,900***	<200	<240	<260
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<92,000	<96,000	190,000	<82,000	160,000	120,000	67,000 [J]	39,000 [J]	<97,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	51 [J]	44 [J]	190	<110	160	68 [J]	55 [J]	<100	60 [J]	42 [J]
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	62,000	93,000	330,000	64,000	320,000	96,000	170,000	33,000	140,000	120,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	3,700	6,200	33,000	3,300	29,000	<1,200	<1,200	1,900	9,300	6,400
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	53,000	22,000	38,000	3,000	35,000	200,000	150,000	2,400	16,000	15,000

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-V-3	MDOT-V-4	MDOT-V-5	MDOT-V-6	MDOT-V-7	MDOT-V-8	MDOT-V-9	MDOT-V-10	MDOT-V-11	MDOT-SB-1
Sample Name										V-3	V-4	V-5	V-6	V-7	V-8	V-9	V-10	V-11	MDOT-SB-1 6-7
Depth Interval (Feet below ground surface)										0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	6 - 7
Laboratory Sample ID(s)										TF26024-012	TF26024-013	TF26024-014	TF26024-015	TF26024-016	TF26024-017	TF26024-018	TF26024-019	TF26024-020	TJ26056-002
Sample Date										06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018	10/25/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	1,300,000 [B]	2,000,000 [B]	***9,500,000 [B]***	1,700,000 [B]	2,200,000 [B]	1,800,000 [B]	2,100,000 [B]	2,100,000 [B]	1,900,000 [B]	2,500,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	160 [J]	<450	<480	<370	<540	<440	<510	<520	<450	<510
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	990	760	4,200	960	950	930	1,400	960	700	1,300
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	7,300	12,000	79,000	19,000	20,000	16,000	20,000	7,000	8,500	15,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	45 [J]	44 [J]	110	43 [J]	130	46 [J]	54 [J]	44 [J]	46 [J]	51 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	2,100 [J]	<12,000	***26,000***	2,600 [J]	<14,000	<11,000	<13,000	<13,000	<12,000	5,600 [J]
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<110	40 [J]	120 [J]	240	86 [J]	57 [J]	83 [J]	<130	40 [J]	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	***19,000***	16,000	***31,000***	13,000	4,300	***42,000***	***86,000***	5,700	***24,000***	5,000
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	19,000	15,000	31,000	13,000	4,300	42,000	84,000	5,700	24,000	5,000
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,100	600 [J]	300 [J]	<1,100	<1,200	360 [J]	2,500	<1,100	<1,100	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	770 [J]	760 [J]	***8,400***	1,100	890 [J]	850 [J]	1,400	620 [J]	690 [J]	1,200 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,800	1,500	16,000	9,300	1,400	2,200	4,100	1,300	1,700	2,800
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	3,100,000 [B]	3,300,000 [B]	***21,000,000 [B]***	4,000,000 [B]	4,700,000 [B]	3,300,000 [B]	4,300,000 [B]	3,000,000 [B]	2,800,000 [B]	4,500,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	1,600	3,000	8,600	8,300	6,900	6,100	7,000	7,400	4,800	2,200
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	290,000	320,000	***13,000,000***	2,500,000	310,000	350,000	580,000	280,000	280,000	420,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<82	<110	35 [J]	***210***	<97	36 [J]	31 [J]	25 [J]	27 [J]	<88
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,000	<2,200	<2,400	<1,800	<2,700	<2,200	<2,600	<2,600	<2,200	<2,500
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,900	2,400	23,000	3,200	2,600	2,400	3,600	2,100	2,100	3,500
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,100	<1,200	<1,300	<960	<1,400	<1,100	<1,300	<1,300	<1,200	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<200	<220	<240	290	<270	<220	<260	<260	<220	<250
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<81,000	<89,000	130,000	<74,000	<110,000	<87,000	<100,000	<100,000	<90,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<110	28 [J]	190	32 [J]	<140	26 [J]	<130	33 [J]	<120	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	79,000	92,000	340,000	95,000	110,000	81,000	93,000	73,000	71,000	130,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	4,900	5,400	35,000	6,200	7,000	5,800	5,500	4,600	4,400	7,700
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	6,500	17,000	40,000	28,000	13,000	15,000	18,000	11,000	12,000	7,800

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-1	MDOT-SB-2	MDOT-SB-2	MDOT-SB-3	MDOT-SB-3	MDOT-SB-4	MDOT-SB-4	MDOT-SB-5	MDOT-SB-5	MDOT-SB-6
Sample Name										MDOT-SB-1 18-19	MDOT-SB-2 6-7	MDOT-SB-2 19-20	MDOT-SB-3 2-3	MDOT-SB-3 18-19	MDOT-SB-4 2-3	MDOT-SB-4 14-15	MDOT-SB-5 7-8	MDOT-SB-5 18-19	MDOT-SB-6 7-8
Depth Interval (Feet below ground surface)										18 - 19	6 - 7	19 - 20	2 - 3	18 - 19	2 - 3	14 - 15	7 - 8	18 - 19	7 - 8
Laboratory Sample ID(s)										TJ26056-003	TJ26056-004	TJ26056-005	TJ26056-006	TJ26056-007	TJ26056-008	TJ26056-009	TJ26056-010	TJ26056-011	TJ26056-012
Sample Date										10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	810,000	***17,000,000***	***15,000,000***	1,300,000	2,200,000	***12,000,000***	***13,000,000***	1,300,000	1,900,000	1,600,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<540	<560	<500	<520	<580	<540	<520	<480	320 [J]	<510
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	<540	5,800	***6,100***	350 [J]	1,100	4,600	5,100	370 [J]	3,700	840
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	3,700	100,000	89,000	4,300	11,000	100,000	110,000	6,200	23,000	7,100
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	39 [J]	130	120	49 [J]	64 [J]	120	120	45 [J]	48 [J]	47 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<14,000	***26,000***	***40,000***	<14,000	4,200 [J]	***26,000***	***34,000***	<12,000	8,000 [J]	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<140	49 [J]	120 [J]	<140	<150	90 [J]	96 [J]	<120	37 [J]	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,700	***41,000***	***39,000***	2,500	5,200	***30,000***	***34,000***	3,300	6,900	3,100
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,700	41,000	39,000	2,500	5,200	30,000	34,000	3,300	6,900	3,100
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,100	<1,200	<1,300	<1,000	<1,200	250 [J]	<1,300	<1,100	<1,000	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	590 [J]	***12,000***	***11,000***	680 [J]	1,400 [J]	***8,800***	***9,000***	840 [J]	2,600	900 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,300 [J]	20,000	21,000	1,000 [J]	3,200	18,000	19,000	1,000 [J]	7,100	1,700
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	2,600,000	***32,000,000***	***23,000,000***	1,800,000	3,900,000	***24,000,000***	***26,000,000***	2,600,000	12,000,000	2,700,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	960	13,000	11,000	940	1,500	8,900	9,100	1,100	3,000	1,200
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	210,000	4,100,000	***18,000,000***	250,000	530,000	***12,000,000***	***18,000,000***	290,000	***21,000,000***	320,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<83	33 [J]	<100	<85	<92	<88	<97	<83	<77	<80
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,700	<2,800	<2,500	<2,600	<2,900	<2,700	<2,600	<2,400	<2,500	<2,600
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,300 [J]	31,000	29,000	1,700	3,700	25,000	26,000	2,000	6,400	2,100
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,400	***590 [J]***	***570 [J]***	<1,400	<1,500	<1,400	<1,400	<1,200	<1,300	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<270	69 [J]	76 [J]	<260	<290	<270	69 [J]	<240	<250	<260
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	47,000 [J]	130,000	<100,000	67,000 [J]	61,000 [J]	120,000	<95,000	74,000 [J]	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<140	240	240	<140	<150	190	210	<120	44 [J]	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	110,000	580,000	430,000	63,000	140,000	450,000	500,000	130,000	180,000	94,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	5,100	49,000	52,000	3,000	6,300	39,000	44,000	5,000	17,000	5,700
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	3,700	48,000	52,000	3,400	8,800	38,000	44,000	3,700	28,000	4,900

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-6	MDOT-SB-7	MDOT-SB-7	MDOT-SB-8	MDOT-SB-8	MDOT-SB-9	MDOT-SB-9	MDOT-SB-10	MDOT-SB-10	MDOT-SB-11
Sample Name										MDOT-SB-6 15-16	MDOT-SB-7 2-3	MDOT-SB-7 12-13	MDOT-SB-8 6-7	MDOT-SB-8 13-14	MDOT-SB-9 2-3	MDOT-SB-9 17-18	MDOT-SB-10 3-4	MDOT-SB-10 13-14	MDOT-SB-11 0-1
Depth Interval (Feet below ground surface)										15 - 16	2 - 3	12 - 13	6 - 7	13 - 14	2 - 3	17 - 18	3 - 4	13 - 14	0 - 1
Laboratory Sample ID(s)										TJ26056-013	TJ27022-002	TJ27022-003	TJ27022-004	TJ27022-005	TJ27022-006	TJ27022-007	TJ27022-008	TJ27022-009	TJ27022-010
Sample Date										10/25/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	750,000	***11,000,000***	700,000	***17,000,000***	920,000	***14,000,000***	***18,000,000***	2,400,000	4,300,000	3,300,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<500	<560	210 [J]	<500	<540	<520	<690	<510	<570	<510
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	620	4,200	410 [J]	***6,600***	440 [J]	4,400	***6,800***	1,000	1,100	1,200
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	3,400	87,000	3,000	140,000	3,500	100,000	120,000	11,000	19,000	14,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	<100	120	43 [J]	140	47 [J]	110	160	64 [J]	86 [J]	69 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<13,000	***26,000***	<12,000	***26,000***	<14,000	***25,000***	***37,000***	2,600 [J]	5,800 [J]	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<130	110 [J]	<120	160	<140	170	120 [J]	<130	<150	32 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,500	***26,000***	1,900	***40,000***	2,300	***32,000***	***46,000***	5,500	7,100	7,300
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,500	26,000	1,900	40,000	2,300	32,000	46,000	5,500	7,100	7,300
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000	<1,200	<1,000	<1,200	<1,100	<1,200	<1,400	<1,000	<1,200	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	610 [J]	***7,800***	530 [J]	***13,000***	630 [J]	***9,800***	***15,000***	1,700	1,700	1,200 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,200 [J]	15,000	1,200	25,000	1,300 [J]	19,000	27,000	2,000	3,800	2,200
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	2,000,000	***22,000,000***	1,600,000	***35,000,000***	2,200,000	***26,000,000***	***36,000,000***	4,500,000	5,600,000	4,700,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	770	8,000	720	12,000	930	9,500	13,000	1,600	1,900	6,600
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	3,300,000	***21,000,000***	3,200,000	5,000,000	1,900,000	***12,000,000***	5,800,000	500,000	650,000	410,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<78	<90	<86	27 [J]	<84	<95	<110	<79	<91	<76
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,500	<2,800	<2,400	<2,500	<2,700	<2,600	<3,400	<2,600	<2,900	<2,500
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,700	22,000	1,300	38,000	1,400	27,000	41,000	3,500	5,100	3,400
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,300	<1,400	<1,200	***530 [J]***	<1,400	<1,400	<1,800	<1,300	<1,500	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<250	<280	<240	76 [J]	<270	<260	93 [J]	<260	<290	<250
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	68,000 [J]	<96,000	50,000 [J]	<110,000	55,000 [J]	170,000	<100,000	<110,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<130	190	<120	220	<140	210	260	<130	35 [J]	33 [J]
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	84,000	460,000	71,000	470,000	90,000	500,000	600,000	150,000	150,000	160,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	3,900	37,000	3,400	49,000	4,400	43,000	55,000	8,200	8,800	8,200
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	3,800	36,000	3,300	54,000	4,000	39,000	62,000	6,000	10,000	17,000

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-11	MDOT-SB-12	MDOT-SB-12	MDOT-SB-13	MDOT-SB-13	MDOT-SB-14	MDOT-SB-14	MDOT-SB-15	MDOT-SB-15	MDOT-SB-15
Sample Name										MDOT-SB-11 12-13	MDOT-SB-12 2-3	MDOT-SB-12 15-16	MDOT-SB-13 5-6	MDOT-SB-13 13-14	MDOT-SB-14 2-3	MDOT-SB-14 13-14	MDOT-SB-15 1-2	MDOT-SB-15 1-2 DUP	MDOT-SB-15 11-12
Depth Interval (Feet below ground surface)										12 - 13	2 - 3	15 - 16	5 - 6	13 - 14	2 - 3	13 - 14	1 - 2	1 - 2	11 - 12
Laboratory Sample ID(s)										TJ27022-011	TJ27022-012	TJ27022-013	TJ27022-014	TJ27022-015	TJ30010-002	TJ30010-003	TJ30010-004	TJ30010-005	TJ30010-006
Sample Date										10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	950,000	1,700,000	***17,000,000***	3,100,000	940,000	1,800,000	810,000	1,700,000	1,700,000	***11,000,000***
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<500	<510	<560	220 [J]	280 [J]	<500	<500	<470	<450	<440
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	280 [J]	830	***6,500***	930	420 [J]	660	610	610	620	3,400
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	4,000	6,800	120,000	16,000	3,900	10,000	3,800	8,200	8,600	110,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	46 [J]	49 [J]	140	62 [J]	55 [J]	54 [J]	51 [J]	52 [J]	52 [J]	85 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<13,000	<13,000	***33,000***	4,000 [J]	<15,000	<13,000	<13,000	<12,000	<12,000	***30,000***
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<130	<130	120 [J]	30 [J]	<150	26 [J]	<130	33 [J]	<120	100 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,100	3,300	***42,000***	7,400	3,700	3,900	3,100	3,800	3,700	***33,000***
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	3,100	3,300	42,000	7,400	3,700	3,900	3,100	3,800	3,700	33,000
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000	<1,000	<1,300	<1,100	<1,200	<1,100	<1,200	<1,100	<1,100	<1,200
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	650 [J]	840 [J]	***12,000***	1,600	670 [J]	1,300	760 [J]	1,300	1,300	***9,500***
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,600	1,400	25,000	3,700	1,300 [J]	1,500	1,400	1,600	1,600	19,000
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	2,300,000	2,200,000	***31,000,000***	4,700,000	2,900,000	3,000,000 [B]	3,500,000 [B]	3,100,000 [B]	3,200,000 [B]	***26,000,000 [B]***
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	910	1,000	12,000	2,200	1,100	1,400	1,400	1,500	1,500	9,700
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	1,000,000	290,000	***9,100,000***	560,000	230,000	530,000	290,000	550,000	550,000	***40,000,000***
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<86	<78	<92	<79	<85	<85	<86	<76	<78	<100
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,500	<2,500	<2,800	<2,500	<2,800	<2,500	<2,500	<2,400	<2,300	<2,200
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,600	1,900	37,000	4,300	1,600	2,700	1,600	3,100	2,800	26,000
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,300	<1,300	<1,500	<1,300	<1,500	<1,300	<1,300	<1,200	<1,200	<1,100
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<250	<250	79 [J]	<250	<280	<250	<250	<240	<230	61 [J]
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<100,000	71,000 [J]	<100,000	<110,000	<100,000	<100,000	<94,000	<90,000	75,000 [J]
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<130	<130	230	33 [J]	<150	51 [J]	<130	<120	<120	210
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	83,000	86,000	580,000	110,000	110,000	110,000	120,000	110,000	110,000	530,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	4,000	3,900	54,000	7,500	5,800	5,700	8,000	5,800	5,900	45,000
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	4,600	3,900	59,000	10,000	4,100	5,400	4,200	5,400	5,500	43,000

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-16	MDOT-SB-16	MDOT-SB-17	MDOT-SB-17	MDOT-SB-17	MDOT-SB-18	MDOT-SB-18	MDOT-SB-19	MDOT-SB-19	MDOT-SB-20
Sample Name										MDOT-SB-16 5-6	MDOT-SB-16 16-17	MDOT-SB-17 1-2	MDOT-SB-17 11-12	MDOT-SB-17 11-12 DUP	MDOT-SB-18 9-10	MDOT-SB-18 16-17	MDOT-SB-19 8-9	MDOT-SB-19 19-20	MDOT-SB-20 5-6
Depth Interval (Feet below ground surface)										5 - 6	16 - 17	1 - 2	11 - 12	11 - 12	9 - 10	16 - 17	8 - 9	19 - 20	5 - 6
Laboratory Sample ID(s)										TJ30010-007	TJ30010-008	TJ30010-009	TJ30010-010	TJ30010-011	TJ30010-012	TJ30010-013	TJ30010-014	TJ30010-015	TJ30010-016
Sample Date										10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	1,400,000	560,000	2,300,000	1,300,000	1,500,000	990,000	650,000	1,000,000	610,000	2,500,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<470	<470	<470	<430	<590	250 [J]	260 [J]	300 [J]	<480	<490
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	740	<470	920	500	750	2,800	830	470 [J]	600	590
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	7,300	4,600	13,000	7,800	8,900	8,100	3,700	5,100	3,200	14,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	46 [J]	<94	52 [J]	34 [J]	48 [J]	79	<100	59 [J]	<97	53 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<12,000	<12,000	<12,000	<11,000	<15,000	<10,000	<13,000	<14,000	<13,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<120	<120	40 [J]	<110	<150	48 [J]	<130	<140	<130	27 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,900	1,600	***650,000***	3,600	3,700	3,500	2,200	3,500	2,200	4,400
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,900	1,600	650,000	3,600	3,700	3,500	2,200	3,500	2,200	4,400
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,100	<1,000	***4,600***	<1,200	<1,200	<1,100	<1,000	<1,100	<1,000	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	1,300	510 [J]	980 [J]	890 [J]	1,100 [J]	1,300	650 [J]	740 [J]	660 [J]	1,200 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,600	950 [J]	2,100	2,700	3,000	5,500	1,800	1,600	1,300	1,500
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	2,600,000 [B]	1,500,000 [B]	3,900,000 [B]	2,400,000 [B]	2,600,000 [B]	6,700,000 [B]	1,900,000 [B]	2,400,000 [B]	2,100,000 [B]	3,400,000 [B]
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	1,100	600	3,400	1,100	1,200	1,600	930	1,000	880	1,700
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	390,000	3,400,000	510,000	490,000	540,000	370,000	1,800,000	330,000	3,400,000	530,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<77	<76	<76	<88	<97	<87	<79	<85	<82	<78
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,300	<2,300	<2,300	<2,100	<2,900	520 [J]	<2,500	<2,700	<2,400	<2,400
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	2,300	1,300	2,500	2,500	2,900	3,300	1,600	1,700	1,500	3,300
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,200	<1,200	<1,200	<1,100	<1,500	<1,000	<1,300	<1,400	<1,300	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<230	<230	<230	<210	<290	<200	<250	<270	<240	<240
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<94,000	35,000 [J]	<93,000	<86,000	<120,000	<78,000	<100,000	<110,000	<97,000	<97,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<120	<120	<120	<110	<150	40 [J]	<130	<140	<130	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	82,000	59,000	140,000	65,000	84,000	57,000	72,000	100,000	81,000	130,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	4,800	2,900	<12,000	4,500	4,800	10,000	3,800	5,300	4,400	6,700
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	3,900	2,900	14,000	6,300	7,100	11,000	3,800	3,900	3,800	8,000

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-20	MDOT-SB-21	MDOT-SB-21	MDOT-SB-22	MDOT-SB-22	MDOT-SB-23	MDOT-SB-23	MDOT-SB-24	MDOT-SB-24	MDOT-SB-25
Sample Name										MDOT-SB-20 14-15	MDOT-SB-21(5-6)	MDOT-21(11-12)	MDOT-SB-22(0-1)	MDOT-SB-22(16-17)	MDOT-SB-23(1-2)	MDOT-SB-23(17-18)	MDOT-SB-24 (4-5)	MDOT-SB-24 (10-11)	MDOT-SB-25 (2-3)
Depth Interval (Feet below ground surface)										14 - 15	5 - 6	11 - 12	0 - 1	16 - 17	1 - 2	17 - 18	4 - 5	10 - 11	2 - 3
Laboratory Sample ID(s)										TJ30010-017	TJ31048-002	TJ31048-003	TJ31048-004	TJ31048-005	TJ31048-006	TJ31048-007	TK01042-004	TK01042-005	TK01042-002
Sample Date										10/29/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	1,500,000	1,800,000	***27,000,000***	4,500,000	1,200,000	4,700,000	6,100,000	950,000	970,000	2,400,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	180 [J]	<520	<510	<490	<490	220 [J]	<530	<500	<510	<510
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	2,300	530	4,400	1,100	770	470 [J]	1,800	340 [J]	590	590
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	14,000	7,200	110,000	34,000	5,500	19,000	25,000	5,100	4,600	8,600
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	34 [J]	60 [J]	170	80 [J]	56 [J]	81 [J]	120	41 [J]	44 [J]	61 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	4,100 [J]	<13,000	7,900 [J]	<13,000	<13,000	<13,000	3,000 [J]	<13,000	<13,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	56 [J]	<130	130	100 [J]	<130	<130	<140	<130	<130	28 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	8,400	3,100	***41,000***	6,300	2,800	5,200	11,000	2,200	3,700	4,200
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	8,400	3,100	41,000	6,300	2,800	5,200	11,000	2,200	3,700	4,200
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000	<1,000	<1,300	<1,100	<1,000	<1,100	<1,100	<1,100	<1,200	<1,000
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	2,600	920 [J]	***12,000***	1,400	780 [J]	1,700	2,500	550 [J]	710 [J]	860 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	6,200	1,100 [J]	22,000	2,700	1,500	1,000 [J]	4,300	1,100 [J]	2,100	1,100 [J]
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	7,600,000 [B]	2,500,000	***30,000,000***	4,200,000	3,000,000	3,900,000	7,500,000	1,700,000	2,800,000	2,800,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	3,000	1,100	12,000	11,000	1,100	2,300	3,200	850	1,200	1,600
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	***18,000,000***	450,000	***37,000,000***	640,000	***9,000,000***	700,000	1,600,000	260,000	310,000	330,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<76	<83	<110	<93	<79	<87	<92	<78	<92	<84
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,200	<2,600	<2,600	<2,400	<2,500	<2,500	<2,600	<2,500	<2,500	<2,600
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	8,700	2,300	32,000	2,900	1,900	3,300	6,900	1,300	1,600	2,100
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,100	<1,300	<1,300	<1,300	<1,300	<1,300	<1,400	<1,300	<1,300	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<220	<260	65 [J]	<240	<250	<250	<260	<250	<250	<260
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	61,000 [J]	<100,000	110,000	<98,000	39,000 [J]	<100,000	<110,000	<100,000	<100,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	47 [J]	67 [J]	250	56 [J]	<130	35 [J]	37 [J]	<130	<130	42 [J]
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	140,000	92,000	580,000	130,000	130,000	190,000	220,000	59,000	96,000	96,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	9,200	5,000	56,000	7,900	6,300	8,500	14,000	3,200	5,300	5,400
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	34,000	3,600	49,000	26,000	4,800	12,000	12,000	2,800	4,400	5,500

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-25	MDOT-SB-26	MDOT-SB-26	MDOT-SB-26	MDOT-SB-27	MDOT-SB-27	MDOT-SB-28	MDOT-SB-28	MDOT-SB-29	MDOT-SB-29
Sample Name										MDOT-SB-25 (10-11)	MDOT-SB-26(2-3)	MDOT-SB-26(2-3)DUP	MDOT-SB-26(10-11)	MDOT-SB-27(9-10)	MDOT-SB-27(19-20)	MDOT-SB-28(4-5)	MDOT-SB-28(10-11)	MDOT-SB-29(7-8)	MDOT-SB-29(12-13)
Depth Interval (Feet below ground surface)										10 - 11	2 - 3	2 - 3	10 - 11	9 - 10	19 - 20	4 - 5	10 - 11	7 - 8	12 - 13
Laboratory Sample ID(s)										TK01042-003	TJ31048-018	TJ31048-020	TJ31048-019	TJ31048-016	TJ31048-017	TJ31048-014	TJ31048-015	TJ31048-012	TJ31048-013
Sample Date										10/31/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	***14,000,000***	1,500,000	2,900,000	950,000	***23,000,000***	990,000	1,700,000	***35,000,000***	1,700,000	1,100,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<620	<470	<510	<540	<600	<350	<520	<600	<470	<520
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	1,700	590	860	470 [J]	3,900	600	430 [J]	4,100	530	210 [J]
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	100,000	7,100	13,000	3,700	110,000	4,800	6,200	140,000	9,100	4,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	120	46 [J]	71 [J]	40 [J]	190	37 [J]	47 [J]	230	59 [J]	41 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	6,700 [J]	<12,000	<13,000	<14,000	8,500 [J]	<9,100	<14,000	6,300 [J]	<12,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	95 [J]	<120	<130	<140	87 [J]	<91	<140	39 [J]	<120	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	***34,000***	16,000	6,500	3,100	***38,000***	2,200	2,600	***52,000***	3,100	2,500
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	34,000	15,000	6,200	3,100	38,000	2,200	2,600	52,000	3,100	2,500
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,300	580 [J]	290 [J]	<1,100	<1,200	<1,000	<1,000	<1,300	<1,000	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	***9,400***	740 [J]	1,100 [J]	560 [J]	***9,400***	700 [J]	750 [J]	***9,700***	1,000 [J]	540 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	12,000	1,000 [J]	1,800	1,200 [J]	19,000	1,100	1,000 [J]	27,000	1,500	980 [J]
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	***23,000,000***	2,000,000	3,700,000	2,100,000	***26,000,000***	2,300,000	2,200,000	***35,000,000***	3,100,000	2,100,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	12,000	1,100	2,200	860	9,900	920	1,300	14,000	1,200	790
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	***19,000,000***	320,000	570,000	280,000	***38,000,000***	6,600,000	370,000	***10,000,000***	490,000	310,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<110	<85	<75	<80	<89	<74	<85	<93	<81	<81
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<3,100	<2,300	<2,600	<2,700	<3,000	<1,800	<2,600	<3,000	<2,300	<2,600
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	25,000	1,600	2,700	1,300 [J]	26,000	1,600	1,800	35,000	2,100	1,400
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,600	<1,200	<1,300	<1,400	<1,600	<910	<1,400	***570 [J]***	<1,200	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	91 [J]	<230	<260	<270	<300	<180	<260	74 [J]	<230	<260
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	170,000	<94,000	<100,000	<110,000	120,000	30,000 [J]	<100,000	61,000 [J]	<93,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	270	<120	<130	<140	200	<91	<140	220	<120	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	530,000	68,000	130,000	88,000	560,000	92,000	81,000	580,000	120,000	100,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	46,000	4,600	7,200	4,200	50,000	4,700	4,100	63,000	6,800	4,600
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	32,000	3,600	7,800	3,100	44,000	3,700	3,400	58,000	4,100	2,800

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-30	MDOT-SB-30	MDOT-SB-31	MDOT-SB-31	MDOT-SB-32	MDOT-SB-32	MDOT-SB-33	MDOT-SB-33	MDOT-SB-34	MDOT-SB-34
Sample Name										MDOT-SB-30(8-9)	MDOT-SB-30(19-20)	MDOT-SB-31(1-2)	MDOT-SB-31(7-8)	MDOT-SB-32 (6-7)	MDOT-SB-32 (12-13)	MDOT-SB-33(6-7)	MDOT-SB-33(18-19)	MDOT-SB-34 (4-5)	MDOT-SB-34 (15-16)
Depth Interval (Feet below ground surface)										8 - 9	19 - 20	1 - 2	7 - 8	6 - 7	12 - 13	6 - 7	18 - 19	4 - 5	15 - 16
Laboratory Sample ID(s)										TJ31048-010	TJ31048-011	TJ31048-008	TJ31048-009	TK01042-006	TK01042-007	TK02072-012	TK02072-013	TK03016-002	TK03016-003
Sample Date										10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	1,400,000	1,500,000	3,800,000	1,900,000	1,100,000	830,000	2,800,000	970,000	1,800,000	1,600,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<480	<510	<500	<490	<510	<490	<450	<510	<480	<510
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	<480	270 [J]	500	290 [J]	440 [J]	590	740	540	610	560
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	4,900	6,200	10,000	7,300	4,100	3,100	14,000	4,400	7,500	6,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	35 [J]	52 [J]	70 [J]	47 [J]	48 [J]	43 [J]	58 [J]	42 [J]	38 [J]	44 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<13,000	<13,000	<13,000	<13,000	<13,000	<13,000	<12,000	<13,000	<13,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<130	<130	<130	<130	<130	<130	<120	<130	<130	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,100	2,900	5,900	4,000	2,500	2,900	6,100 [B]	2,500 [B]	3,900	3,200
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,100	2,900	5,900	4,000	2,500	2,900	6,100	2,500	3,900	3,200
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000	<1,100	<1,100	<1,000	<1,000	<1,100	<1,100	<1,000	<1,000	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	610 [J]	860 [J]	1,300	1,000 [J]	600 [J]	550 [J]	1,200	680 [J]	830 [J]	750 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,000 [J]	1,500	960 [J]	850 [J]	810 [J]	930 [J]	2,000	930 [J]	1,200 [J]	1,100 [J]
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	1,200,000	2,800,000	4,200,000	2,500,000	1,800,000	2,300,000	3,900,000	2,000,000	2,600,000	2,100,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	780	1,100	2,400	1,400	950	1,000	2,000	860	1,300	980
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	310,000	470,000	720,000	580,000	250,000	240,000	640,000	290,000	350,000	310,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<81	<80	<87	<75	<85	<86	<88	<80	<83	<87
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,400	<2,600	<2,500	<2,400	<2,600	<2,500	<2,300	<2,500	<2,400	<2,500
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,600	2,000	3,100	2,600	1,300	1,200 [J]	3,200	1,500	1,800	1,700
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,200	<1,300	<1,300	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<240	<260	<250	<240	<260	<250	<230	<250	<240	<250
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<97,000	<100,000	<100,000	<97,000	<100,000	<98,000	<91,000	<100,000	<97,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<130	<130	<130	<130	<130	<130	35 [J]	<130	<130	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	53,000	110,000	210,000	150,000	63,000	87,000	120,000	77,000	95,000	80,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	2,800	5,900	8,900	4,800	3,600	4,300	8,200	4,100	5,600	4,000
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	2,600	4,800	6,800	5,600	2,600	2,700	7,300	3,100	4,000	3,200

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-35	MDOT-SB-35	MDOT-SB-36	MDOT-SB-36	MDOT-SB-36	MDOT-SB-37	MDOT-SB-37	MDOT-SB-38	MDOT-SB-38	MDOT-SB-39
Sample Name										MDOT-SB-35 (4-5)	MDOT-SB-35 (18-19)	MDOT-SB-36 (0-1)	MDOT-SB-36 (0-1) DUP	MDOT-SB-36 (9-10)	MDOT-SB-37 (3-4)	MDOT-SB-37 (11-12)	MDOT-SB-38 (2-3)	MDOT-SB-38 (12-13)	MDOT-SB-39(7-8)
Depth Interval (Feet below ground surface)										4 - 5	18 - 19	0 - 1	0 - 1	9 - 10	3 - 4	11 - 12	2 - 3	12 - 13	7 - 8
Laboratory Sample ID(s)										TK01042-008	TK01042-009	TK01042-012	TK01042-013	TK01042-014	TK01042-015	TK01042-016	TK01042-010	TK01042-011	TK02072-014
Sample Date										10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	11/01/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	910,000	850,000	2,700,000	2,600,000	720,000	1,400,000	1,300,000	980,000	970,000	710,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	210 [J]	<470	<620	<610	240 [J]	<470	<460	<510	<500	<510
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	270 [J]	450 [J]	1,000	1,100	370 [J]	420 [J]	620	300 [J]	510	390 [J]
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	6,400	4,200	29,000	29,000	6,200	6,800	7,500	4,000	4,900	5,600
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	46 [J]	41 [J]	54 [J]	51 [J]	38 [J]	43 [J]	54 [J]	42 [J]	43 [J]	<100
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<13,000	<12,000	<16,000	<16,000	<13,000	<12,000	<12,000	<13,000	<13,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<130	<120	96 [J]	95 [J]	<130	<120	<120	<130	<130	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,400	2,400	5,900	5,800	2,100	2,700	3,700	2,100	2,600	1,800 [B]
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,400	2,400	5,900	5,800	2,100	2,700	3,700	2,100	2,600	1,800
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000	<1,000	<1,300	<1,300	<1,100	<1,000	<1,100	<1,000	<1,000	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	580 [J]	650 [J]	930 [J]	930 [J]	470 [J]	630 [J]	930 [J]	570 [J]	780 [J]	450 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	660 [J]	1,100 [J]	3,300	2,900	730 [J]	810 [J]	1,700	780 [J]	1,400	690 [J]
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	1,700,000	2,500,000	3,900,000	3,700,000	1,400,000	2,200,000	3,100,000	1,900,000	2,600,000	1,300,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	780	1,200	14,000	14,000	710	1,100	1,400	880	1,100	640
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	220,000	4,900,000	480,000	490,000	220,000	260,000	580,000	220,000	2,000,000	210,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<82	<81	26 [J]	<100	<76	<76	<83	<82	<79	<82
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,500	<2,400	<3,100	<3,000	<2,500	<2,400	<2,300	<2,500	<2,500	<2,500
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,300	1,600	2,600	2,600	1,200 [J]	1,700	2,200	1,400	1,700	1,100 [J]
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,300	<1,200	<1,600	<1,600	<1,300	<1,200	<1,200	<1,300	<1,300	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<250	<240	<310	<300	<250	<240	<230	<250	<250	<250
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<95,000	<120,000	<120,000	<100,000	<94,000	<91,000	<100,000	<100,000	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<130	<120	60 [J]	60 [J]	<130	<120	<120	<130	<130	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	71,000	100,000	130,000	120,000	47,000	90,000	110,000	71,000	110,000	46,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	3,400	5,200	7,400	7,000	2,600	4,300	5,600	3,700	5,000	2,300
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	2,400 [J]	3,500	22,000	22,000	2,300 [J]	2,900	4,800	2,300 [J]	4,000	2,300 [J]

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-39	MDOT-SB-39	MDOT-SB-40	MDOT-SB-40	MDOT-SB-41	MDOT-SB-41	MDOT-SB-41	MDOT-SB-42	MDOT-SB-42	MDOT-SB-43
Sample Name										MDOT-SB-39(7-8)DUP	MDOT-SB-39(12-13)	MDOT-SB-40 (1-2)	MDOT-SB-40 (19-20)	MDOT-SB-41(3-4)	MDOT-SB-41(19-20)	MDOT-SB-41(19-20)DUP	MDOT-SB-42(1-2)	MDOT-SB-42(11-12)	MDOT-SB-43(6-7)
Depth Interval (Feet below ground surface)										7 - 8	12 - 13	1 - 2	19 - 20	3 - 4	19 - 20	19 - 20	1 - 2	11 - 12	6 - 7
Laboratory Sample ID(s)										TK02072-015	TK02072-016	TK01042-017	TK01042-018	TK02072-017	TK02072-018	TK02072-019	TK02072-004	TK02072-005	TK02072-003
Sample Date										11/01/2018	11/01/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	3,400,000	830,000	1,100,000	610,000	2,700,000	940,000	910,000	4,100,000	***16,000,000***	990,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<530	<500	<520	<510	<550	<550	240 [J]	<520	<630	270 [J]
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	750	250 [J]	430 [J]	350 [J]	680	280 [J]	380 [J]	1,100	<3,200	360 [J]
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	18,000	4,000	5,500	3,000	15,000	4,700	4,900	25,000	120,000	4,600
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	59 [J]	38 [J]	44 [J]	<100	58 [J]	42 [J]	38 [J]	71 [J]	120 [J]	41 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<14,000	<13,000	<13,000	<13,000	<14,000	<14,000	<12,000	<13,000	4,700 [J]	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<140	<130	<130	<130	<140	<140	<120	36 [J]	<820	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,600 [B]	2,400 [B]	3,000	1,700	5,500 [B]	2,800 [B]	2,900 [B]	5,400 [B]	***41,000 [B]***	2,400 [B]
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	9,600	2,400	3,000	1,700	5,500	2,800	2,900	5,400	41,000	2,400
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,100	<1,100	<1,100	<1,000	<1,100	<1,100	<1,100	<1,100	<1,300	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	2,200	580 [J]	700 [J]	500 [J]	1,100 [J]	620 [J]	650 [J]	1,100 [J]	***6,900 [J]***	480 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	3,000	1,000 [J]	1,000 [J]	840 [J]	1,600	770 [J]	850 [J]	1,300	20,000	810 [J]
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	5,700,000	1,600,000	1,900,000	1,500,000	4,200,000	1,700,000	1,900,000	4,400,000	***20,000,000***	1,900,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	2,600	770	1,000	700	2,400	740	810	2,500	13,000	780
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	1,500,000	230,000	310,000	3,200,000	510,000	300,000	300,000	470,000	4,000,000	240,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<87	<78	<81	<85	<81	<85	<88	<80	29 [J]	<92
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,700	<2,500	<2,600	<2,500	<2,800	<2,800	<2,400	<2,600	<16,000	<2,600
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	5,100	1,200 [J]	1,600	1,200 [J]	2,800	1,600	1,500	3,500	24,000	1,300
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,400	<1,300	<1,300	<1,300	<1,400	<1,400	<1,200	<1,300	<8,200	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<270	<250	<260	<250	<280	<280	<240	<260	<1,600	<260
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<99,000	<100,000	<100,000	<110,000	<110,000	<96,000	<100,000	49,000 [J]	<100,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	44 [J]	<130	<130	<130	35 [J]	<140	<120	44 [J]	310	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	210,000	69,000	69,000	74,000	130,000	76,000	90,000	160,000	490,000	76,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	11,000	3,200	3,700	3,000	8,900	3,300	4,000	8,400	45,000	3,300
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	8,400	2,000 [J]	3,300	2,400 [J]	7,400	2,400 [J]	2,600	15,000	40,000	2,200 [J]

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-43	MDOT-SB-44	MDOT-SB-44	MDOT-SB-45	MDOT-SB-45	MDOT-SB-46	MDOT-SB-46	MDOT-SB-47	MDOT-SB-47	MDOT-SB-48
Sample Name										MDOT-SB-43(16-17)	MDOT-SB-44(2-3)	MDOT-SB-44(14-15)	MDOT-SB-45(8-9)	MDOT-SB-45(18-19)	MDOT-SB-46(2-3)	MDOT-SB-46-(18-19)	MDOT-SB-47 (0-1)	MDOT-SB-47 (14-15)	MDOT-SB-48 (1-2)
Depth Interval (Feet below ground surface)										16 - 17	2 - 3	14 - 15	8 - 9	18 - 19	2 - 3	18 - 19	0 - 1	14 - 15	1 - 2
Laboratory Sample ID(s)										TK02072-002	TK02072-006	TK02072-007	TK02072-008	TK02072-009	TK02072-010	TK02072-011	TK03016-004	TK03016-005	TK03016-006
Sample Date										11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018	11/02/2018
Parameter (µg/kg)																			
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	580,000	1,100,000	690,000	1,000,000	670,000	1,100,000	760,000	4,600,000	1,000,000	4,800,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<480	<500	200 [J]	<490	210 [J]	200 [J]	<510	<530	<500	<480
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	410 [J]	350 [J]	340 [J]	360 [J]	430 [J]	460 [J]	250 [J]	1,300	550	780
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	3,400	3,800	3,100	5,100	3,600	4,400	4,400	38,000	3,600	23,000
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	<96	39 [J]	34 [J]	36 [J]	35 [J]	43 [J]	39 [J]	55 [J]	43 [J]	65 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<12,000	<13,000	<12,000	<13,000	<13,000	<13,000	<13,000	<14,000	<13,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<120	<130	<120	<130	<130	<130	<130	88 [J]	<130	26 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,500 [B]	2,700 [B]	2,200 [B]	2,400 [B]	2,600 [B]	2,600 [B]	2,100 [B]	6,500	2,400	5,500
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,500	2,700	2,200	2,400	2,600	2,600	2,100	6,500	2,400	5,500
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000	<1,000	<1,000	<1,100	<1,000	<1,000	<1,000	<1,100	<1,000	<1,100
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	520 [J]	620 [J]	620 [J]	520 [J]	570 [J]	630 [J]	610 [J]	1,300 [J]	710 [J]	1,300
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	890 [J]	710 [J]	1,100 [J]	830 [J]	950 [J]	830 [J]	960 [J]	2,900	1,400	1,600
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	1,500,000	1,900,000	2,100,000	1,500,000	1,700,000	2,100,000	1,800,000	5,000,000	2,000,000	4,000,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	780	880	890	870	740	1,200	820	13,000	880	1,900
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	3,200,000	240,000	960,000	260,000	260,000	240,000	3,400,000	510,000	3,600,000	520,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<81	<78	<77	<89	<78	<79	<77	<88	<75	<83
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,400	<2,500	<2,400	<2,500	<2,600	<2,500	<2,600	<2,600	<2,500	<2,400
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,400	1,400	1,300	1,400	1,400	1,400	1,600	3,200	1,800	3,800
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,200	<1,300	<1,200	<1,300	<1,300	<1,300	<1,300	<1,400	<1,300	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<240	<250	<240	<250	<260	<250	<260	<260	<250	<240
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<96,000	<100,000	<95,000	<98,000	<100,000	<100,000	<100,000	<110,000	<100,000	<96,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	33 [J]	<130	<120	<130	<130	<130	<130	59 [J]	<130	31 [J]
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	61,000	74,000	99,000	50,000	70,000	91,000	79,000	160,000	78,000	170,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	3,100	3,800	4,200	2,500	3,100	4,500	3,800	9,400	4,100	9,500
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	2,300 [J]	2,600	2,700	2,600	2,700	2,600	3,000	22,000	3,100	8,800

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-48
Sample Name										MDOT-SB-48 (19-20)
Depth Interval (Feet below ground surface)										19 - 20
Laboratory Sample ID(s)										TK03016-007
Sample Date										11/02/2018
Parameter (µg/kg)										
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	1,000,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<480
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	690
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	3,700
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	<97
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<13,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<130
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	2,500
Chromium III (Calculated: Total - Hexavalent)	18,000	1,000,000,000	1,000,000,000 (G,D)	NLV	NLV	330,000,000	790,000,000	NCL	350,000,000	2,500
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,000
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	730 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,500
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	2,300,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	920
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	5,800,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<79
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,400
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	1,800
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,300
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<240
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<97,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<130
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	94,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	4,200
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	3,400

TABLE 4
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-B3	MDOT-SB-B3	MDOT-SB-C2	MDOT-SB-C2	MDOT-SB-D1	MDOT-SB-D1	MDOT-SB-E1	MDOT-SB-E1	MDOT-SB-E1	MDOT-V-1
Sample Name										SB-B3 (2-4)	SB-B3 (16-18)	SB-C2 (2-4)	SB-C2 (16-18)	SB-D1 (12-14)	SB-D1 (16-18)	SB-E1 (0-2)	SB-E1 (0-2) DUP	SB-E1 (16-18)	V-1
Depth Interval (Feet below ground surface)										2 - 4	16 - 18	2 - 4	16 - 18	12 - 14	16 - 18	0 - 2	0 - 2	16 - 18	0 - 0.5
Laboratory Sample ID(s)										TF26024-021 & 18061936-13A	TF26024-001 & 18061936-12A	TF26024-004 & 18061936-16A	TF26024-005 & 18061936-17A	TF26024-002 & 18061936-14A	TF26024-003 & 18061936-15A	TF26024-006 & 18061936-18A	TF26024-007 & 18061936-19A	TF26024-008 & 18061936-20A	TF26024-010 & 18061936-01A
Sample Date										06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/25/2018	06/16/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<19,000	<21,000	<21,000	<23,000	<20,000	<24,000	<23,000	<22,000	<23,000	<21,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<19,000	<21,000	<21,000	<23,000	<20,000	<24,000	<23,000	<22,000	<23,000	<21,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	120 [B]	93 [BJ]	96 [BJ]	45 [BJ]	54 [BJ]	23 [BJ]	280 [B]	250 [B]	44 [BJ]	110 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<41	<44	<43	<50	<42	<49	<48	<45	63	<43
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,000	450 [J]	<1,100	<1,300	<1,000	<1,200	<1,100	<1,100	<1,200	<1,100
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	100 [J]	100 [J]	160 [J]	170 [J]	67 [J]	120 [J]	680	170 [J]	330	66 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	100	550	160	170	67	120	680	170	330	66
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	17	ND	ND	ND	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<10,000	<11,000	<11,000	3,000 [J]	<10,000	2,700 [J]	<11,000	<11,000	28,000	<11,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***460,000***	***580,000***	***260,000***	***520,000***	***40,000***	***340,000***	***970,000***	***1,300,000***	***50,000***	***210,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<10,000	<11,000	<11,000	<13,000	<10,000	<12,000	6,200 [J]	<11,000	970,000	<11,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<110,000	<110,000	<130,000	<100,000	<130,000	<120,000	<110,000	<120,000	<110,000

TABLE 4
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-V-2	MDOT-V-3	MDOT-V-4	MDOT-V-5	MDOT-V-6	MDOT-V-7	MDOT-V-8	MDOT-V-9	MDOT-V-10	MDOT-V-11
Sample Name										V-2	V-3	V-4	V-5	V-6	V-7	V-8	V-9	V-10	V-11
Depth Interval (Feet below ground surface)										0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
Laboratory Sample ID(s)										TF26024-011 & 18061936-02A	TF26024-012 & 18061936-03A	TF26024-013 & 18061936-04A	TF26024-014 & 18061936-05A	TF26024-015 & 18061936-06A	TF26024-016 & 18061936-07A	TF26024-017 & 18061936-08A	TF26024-018 & 18061936-09A	TF26024-019 & 18061936-10A	TF26024-020 & 18061936-11A
Sample Date										06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<24,000	<23,000	<25,000	<24,000	<22,000	<25,000	<21,000	<20,000	<21,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<24,000	<23,000	<25,000	<24,000	<22,000	<25,000	<21,000	<20,000	<21,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	87 [BJ]	89 [BJ]	130 [BJ]	17 [BJ]	110 [BJ]	74 [BJ]	76 [BJ]	75 [BJ]	91 [BJ]	77 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<50	<47	<52	<53	<45	<51	<43	<42	<43	<44
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,200	<1,100	<1,300	<1,300	<1,100	850 [J]	<1,100	<1,100	<1,100	<1,100
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	84 [J]	64 [J]	83 [J]	180 [J]	35 [J]	55 [J]	<220	<210	<220	49 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	84	64	83	180	35	910	ND	ND	ND	49
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	32	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<12,000	<11,000	<13,000	<13,000	<11,000	<12,000	<11,000	<11,000	<11,000	<11,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***210,000***	***110,000***	***220,000***	***450,000***	***370,000***	***260,000***	***150,000***	***150,000***	***150,000***	***190,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<12,000	<11,000	<13,000	<13,000	<11,000	<12,000	<11,000	<11,000	<11,000	<11,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<130,000	<120,000	<130,000	<130,000	<110,000	<130,000	<110,000	<100,000	<110,000	<110,000

TABLE 4
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-1	MDOT-SB-1	MDOT-SB-2	MDOT-SB-2	MDOT-SB-3	MDOT-SB-3	MDOT-SB-4	MDOT-SB-4	MDOT-SB-5	MDOT-SB-5
Sample Name										MDOT-SB-1 6-7	MDOT-SB-1 18-19	MDOT-SB-2 6-7	MDOT-SB-2 19-20	MDOT-SB-3 2-3	MDOT-SB-3 18-19	MDOT-SB-4 2-3	MDOT-SB-4 14-15	MDOT-SB-5 7-8	MDOT-SB-5 18-19
Depth Interval (Feet below ground surface)										6 - 7	18 - 19	6 - 7	19 - 20	2 - 3	18 - 19	2 - 3	14 - 15	7 - 8	18 - 19
Laboratory Sample ID(s)										TJ26056-002 & 18101846-01A	TJ26056-003 & 18101846-02A	TJ26056-004 & 18101846-03A	TJ26056-005 & 18101846-04A	TJ26056-006 & 18101846-05A	TJ26056-007 & 18101846-06A	TJ26056-008 & 18101846-07A	TJ26056-009 & 18101846-08A	TJ26056-010 & 18101846-09A	TJ26056-011 & 18101846-10A
Sample Date										10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<21,000	<21,000	<23,000	<24,000	<20,000	<23,000	<23,000	<25,000	<20,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<21,000	<21,000	<23,000	<24,000	<20,000	<23,000	<23,000	<25,000	<20,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	16 [BJ]	15 [BJ]	85 [BJ]	51 [BJ]	21 [BJ]	27 [BJ]	58 [BJ]	73 [BJ]	30 [BJ]	26 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<43	<44	<48	<49	<42	<47	<47	<50	<42	<41
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	580 [J]	<1,100	790 [J]	930 [J]	<1,000	<1,200	1,300	<1,300	<1,100	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	320	<220	820	1,100	<210	420	470	430	93 [J]	99 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	900	ND	1,600	2,000	ND	420	1,800	430	93	99
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	22	ND	30	36	ND	ND	50	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<11,000	<11,000	2,400 [J]	6,500 [J]	<10,000	4,200 [J]	4,500 [J]	18,000	<11,000	4,800 [J]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***60,000***	***52,000***	***330,000***	***390,000***	***56,000***	***160,000***	***69,000***	***380,000***	***58,000***	***140,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<11,000	<12,000	<13,000	<10,000	<12,000	<11,000	<13,000	<11,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<110,000	<120,000	<120,000	<100,000	<120,000	<120,000	<130,000	<110,000	<100,000

TABLE 4
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1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-6	MDOT-SB-6	MDOT-SB-7	MDOT-SB-7	MDOT-SB-8	MDOT-SB-8	MDOT-SB-9	MDOT-SB-9	MDOT-SB-10	MDOT-SB-10
Sample Name										MDOT-SB-6 7-8	MDOT-SB-6 15-16	MDOT-SB-7 2-3	MDOT-SB-7 12-13	MDOT-SB-8 6-7	MDOT-SB-8 13-14	MDOT-SB-9 2-3	MDOT-SB-9 17-18	MDOT-SB-10 3-4	MDOT-SB-10 13-14
Depth Interval (Feet below ground surface)										7 - 8	15 - 16	2 - 3	12 - 13	6 - 7	13 - 14	2 - 3	17 - 18	3 - 4	13 - 14
Laboratory Sample ID(s)										TJ26056-012 & 18101846-11A	TJ26056-013 & 18101846-12A	TJ27022-002 & 18101854-01A	TJ27022-003 & 18101854-02A	TJ27022-004 & 18101854-03A	TJ27022-005 & 18101854-04A	TJ27022-006 & 18101854-05A	TJ27022-007 & 18101854-06A	TJ27022-008 & 18101854-07A	TJ27022-009 & 18101854-08A
Sample Date										10/25/2018	10/25/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<21,000	<19,000	<22,000	<20,000	<21,000	<20,000	<22,000	<27,000	<19,000	<23,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<21,000	<19,000	<22,000	<20,000	<21,000	<20,000	<22,000	<27,000	<19,000	<23,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	31 [BJ]	160 [B]	47 [BJ]	<120	48 [BJ]	0.66 [BJ]	45 [BJ]	8.8 [BJ]	4.6 [BJ]	<140
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<42	<41	<46	<41	<46	<41	<45	<58	<40	<48
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,000	<1,200	570 [J]	<1,200	<1,100	510 [J]	670 [J]	460 [J]	<1,200
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	45 [J]	84 [J]	170 [J]	140 [J]	130 [J]	43 [J]	860	230 [J]	51 [J]	690
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	45	84	170	710	130	43	1,400	900	510	690
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	22	ND	ND	19	26	18	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<11,000	4,200 [J]	3,200 [J]	3,300 [J]	4,000 [J]	<11,000	2,900 [J]	7,500 [J]	<10,000	3,200 [J]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***45,000***	***60,000***	***300,000***	***35,000***	***450,000***	***47,000***	***200,000***	***420,000***	***41,000***	***76,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000	<12,000	<10,000	<12,000	<11,000	<12,000	<14,000	<10,000	<12,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<100,000	<120,000	<100,000	<110,000	<100,000	<110,000	<140,000	<100,000	<120,000

TABLE 4
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Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-11	MDOT-SB-11	MDOT-SB-12	MDOT-SB-12	MDOT-SB-13	MDOT-SB-13	MDOT-SB-14	MDOT-SB-14	MDOT-SB-15	MDOT-SB-15
Sample Name										MDOT-SB-11 0-1	MDOT-SB-11 12-13	MDOT-SB-12 2-3	MDOT-SB-12 15-16	MDOT-SB-13 5-6	MDOT-SB-13 13-14	MDOT-SB-14 2-3	MDOT-SB-14 13-14	MDOT-SB-15 1-2	MDOT-SB-15 1-2 DUP
Depth Interval (Feet below ground surface)										0 - 1	12 - 13	2 - 3	15 - 16	5 - 6	13 - 14	2 - 3	13 - 14	1 - 2	1 - 2
Laboratory Sample ID(s)										TJ27022-010 & 18101854-09A	TJ27022-011 & 18101854-10A	TJ27022-012 & 18101854-11A	TJ27022-013 & 18101854-12A	TJ27022-014 & 18101854-13A	TJ27022-015 & 18101854-14A	TJ30010-002 & 18101987-01A	TJ30010-003 & 18101987-02A	TJ30010-004 & 18101987-03A	TJ30010-005 & 18101987-09A
Sample Date										10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<20,000	<19,000	<19,000	<25,000	<19,000	<23,000	<21,000	<22,000	<20,000	<21,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<20,000	<19,000	<19,000	<25,000	<19,000	<23,000	<21,000	<22,000	<20,000	<21,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	61 [BJ]	48 [BJ]	31 [BJ]	72 [BJ]	70 [BJ]	<140	<130	8.6 [BJ]	20 [BJ]	6.8 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<42	<42	<41	<51	<42	<46	<42	<46	<42	<42
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	450 [J]	430 [J]	<1,000	<1,300	<1,100	<1,200	<1,100	<1,200	<1,100	<1,100
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<210	<210	<210	170 [J]	370	<230	70 [J]	83 [J]	88 [J]	<210
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	450	430	ND	170	370	ND	70	83	88	ND
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	17	16	ND	ND	ND	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<11,000	<10,000	<10,000	3,900 [J]	<11,000	<12,000	<11,000	<12,000	<11,000	<11,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***110,000***	***51,000***	***32,000***	***440,000***	***110,000***	***55,000***	***43,000***	***53,000***	***50,000***	***47,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000	<10,000	<13,000	<11,000	<12,000	<11,000	<12,000	<11,000	<11,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<100,000	<100,000	<130,000	<110,000	<120,000	<110,000	<110,000	<110,000	<110,000

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Sample Name										MDOT-SB-15 11-12	MDOT-SB-16 5-6	MDOT-SB-16 16-17	MDOT-SB-17 1-2	MDOT-SB-17 11-12	MDOT-SB-17 11-12 DUP	MDOT-SB-18 9-10	MDOT-SB-18 16-17	MDOT-SB-19 8-9	MDOT-SB-19 19-20
Depth Interval (Feet below ground surface)										11 - 12	5 - 6	16 - 17	1 - 2	11 - 12	11 - 12	9 - 10	16 - 17	8 - 9	19 - 20
Laboratory Sample ID(s)										TJ30010-006 & 18101987-04A	TJ30010-007 & 18101987-05A	TJ30010-008 & 18101987-06A	TJ30010-009 & 18101987-07A	TJ30010-010 & 18101987-08A	TJ30010-011 & 18101987-10A	TJ30010-012 & 18101987-11A	TJ30010-013 & 18101987-12A	TJ30010-014 & 18101987-13A	TJ30010-015 & 18101987-14A
Sample Date										10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<23,000	<19,000	<20,000	<20,000	<22,000	<22,000	<20,000	<21,000	<22,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<23,000	<19,000	<20,000	<20,000	<22,000	<22,000	<20,000	<21,000	<22,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	16 [BJ]	<130	39 [BJ]	100 [BJ]	1.1 [BJ]	19 [BJ]	31 [BJ]	41 [BJ]	25 [BJ]	11 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<50	<42	<41	<42	<47	<47	<43	<43	90	<41
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	610 [J]	<1,100	<1,000	1,200	5,100	3,400	<1,100	<1,000	<1,100	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230 [J]	<210	130 [J]	190 [J]	96 [J]	130 [J]	55 [J]	140 [J]	61 [J]	140 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	840	ND	130	1,400	5,200	3,500	55	140	61	140
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	23	ND	ND	46	190	130	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	5,600 [J]	<11,000	3,300 [J]	2,700 [J]	<12,000	<12,000	<11,000	3,400 [J]	2,300 [J]	4,000 [J]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***380,000***	***67,000***	***32,000***	***210,000***	***49,000***	***52,000***	***47,000***	***33,000***	***55,000***	***49,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<12,000	<11,000	16,000	5,800 [J]	<12,000	<12,000	<11,000	<10,000	<11,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<120,000	<110,000	<100,000	<110,000	<120,000	<120,000	<110,000	<110,000	<110,000	<100,000

TABLE 4
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-20	MDOT-SB-20	MDOT-SB-21	MDOT-SB-21	MDOT-SB-22	MDOT-SB-22	MDOT-SB-23	MDOT-SB-23	MDOT-SB-24	MDOT-SB-24
Sample Name										MDOT-SB-20 5-6	MDOT-SB-20 14-15	MDOT-SB-21(5-6)	MDOT-21(11-12)	MDOT-SB-22(0-1)	MDOT-SB-22(16-17)	MDOT-SB-23(1-2)	MDOT-SB-23(17-18)	MDOT-SB-24 (4-5)	MDOT-SB-24 (10-11)
Depth Interval (Feet below ground surface)										5 - 6	14 - 15	5 - 6	11 - 12	0 - 1	16 - 17	1 - 2	17 - 18	4 - 5	10 - 11
Laboratory Sample ID(s)										TJ30010-016 & 18101987-15A	TJ30010-017 & 18101987-16A	TJ31048-002 & 1811097-01A	TJ31048-003 & 1811097-02A	TJ31048-004 & 1811097-03A	TJ31048-005 & 1811097-04A	TJ31048-006 & 1811097-05A	TJ31048-007 & 1811097-06A	TK01042-004 & 1811097-22A	TK01042-005 & 1811097-23A
Sample Date										10/29/2018	10/29/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<20,000	<20,000	<20,000	<23,000	<21,000	<20,000	<20,000	<20,000	<20,000	<21,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<20,000	<20,000	<20,000	<23,000	<21,000	<20,000	<20,000	<20,000	<20,000	<21,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	44 [BJ]	23 [BJ]	34 [BJ]	54 [BJ]	160 [B]	12 [BJ]	40 [BJ]	57 [BJ]	70 [BJ]	61 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<42	<41	<41	<49	69	<41	49	<44	<42	<47
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,000	<1,000	<1,300	1,400	<1,000	<1,100	<1,100	<1,100	<1,200
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	57 [J]	97 [J]	<210	71 [J]	<230	63 [J]	<220	290	100 [J]	350
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	57	97	ND	71	1,400	63	ND	290	100	350
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	53	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<11,000	5,600 [J]	2,200 [J]	6,300 [J]	<11,000	<10,000	2,300 [J]	3,000 [J]	2,700 [BJ]	12,000 [B]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***81,000***	***85,000***	***56,000***	***450,000***	***200,000***	***80,000***	***57,000***	***150,000***	***35,000***	***59,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000	<10,000	<13,000	<11,000	<10,000	<11,000	<11,000	<11,000	<12,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<100,000	<100,000	<130,000	<110,000	<100,000	<110,000	<110,000	<100,000	<120,000

TABLE 4
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1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-25	MDOT-SB-25	MDOT-SB-26	MDOT-SB-26	MDOT-SB-26	MDOT-SB-27	MDOT-SB-27	MDOT-SB-28	MDOT-SB-28	MDOT-SB-29
Sample Name										MDOT-SB-25 (2-3)	MDOT-SB-25 (10-11)	MDOT-SB-26(2-3)	MDOT-SB-26(2-3)DUP	MDOT-SB-26(10-11)	MDOT-SB-27(9-10)	MDOT-SB-27(19-20)	MDOT-SB-28(4-5)	MDOT-SB-28(10-11)	MDOT-SB-29(7-8)
Depth Interval (Feet below ground surface)										2 - 3	10 - 11	2 - 3	2 - 3	10 - 11	9 - 10	19 - 20	4 - 5	10 - 11	7 - 8
Laboratory Sample ID(s)										TK01042-002 & 1811097-20A	TK01042-003 & 1811097-21A	TJ31048-018 & 1811097-17A	TJ31048-020 & 1811097-19A	TJ31048-019 & 1811097-18A	TJ31048-016 & 1811097-15A	TJ31048-017 & 1811097-16A	TJ31048-014 & 1811097-13A	TJ31048-015 & 1811097-14A	TJ31048-012 & 1811097-11A
Sample Date										10/31/2018	10/31/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<19,000	<25,000	<20,000	<21,000	<19,000	<23,000	<20,000	<21,000	<25,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<19,000	<25,000	<20,000	<21,000	<19,000	<23,000	<20,000	<21,000	<25,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	100 [BJ]	68 [BJ]	24 [BJ]	50 [BJ]	31 [BJ]	130 [BJ]	26 [BJ]	3.9 [BJ]	100 [BJ]	35 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	90	<52	<42	47	<44	<48	<41	<42	<51	<41
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,000	210,000	<1,100	420 [J]	<1,100	640 [J]	<1,000	<1,000	<1,300	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	98 [J]	30,000	<210	<210	<220	170 [J]	110 [J]	<210	630	<210
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	98	***240,000***	ND	420	ND	810	110	ND	630	ND
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	***8,000***	ND	16	ND	24	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	4,300 [BJ]	31,000 [B]	<11,000	<10,000	<11,000	5,800 [J]	4,000 [J]	<10,000	3,200 [J]	<10,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***120,000***	***400,000***	***120,000***	***91,000***	***52,000***	***390,000***	***70,000***	***25,000***	***510,000***	***78,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<10,000	26,000	<11,000	<10,000	<11,000	<12,000	<10,000	<10,000	<13,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<130,000	<100,000	<100,000	<110,000	<120,000	<100,000	<100,000	<130,000	<100,000

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1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-29	MDOT-SB-30	MDOT-SB-30	MDOT-SB-31	MDOT-SB-31	MDOT-SB-32	MDOT-SB-32	MDOT-SB-33	MDOT-SB-33	MDOT-SB-34
Sample Name										MDOT-SB-29(12-13)	MDOT-SB-30(8-9)	MDOT-SB-30(19-20)	MDOT-SB-31(1-2)	MDOT-SB-31(7-8)	MDOT-SB-32 (6-7)	MDOT-SB-32 (12-13)	MDOT-SB-33(6-7)	MDOT-SB-33(18-19)	MDOT-SB-34 (4-5)
Depth Interval (Feet below ground surface)										12 - 13	8 - 9	19 - 20	1 - 2	7 - 8	6 - 7	12 - 13	6 - 7	18 - 19	4 - 5
Laboratory Sample ID(s)										TJ31048-013 & 1811097-12A	TJ31048-010 & 1811097-09A	TJ31048-011 & 1811097-10A	TJ31048-008 & 1811097-07A	TJ31048-009 & 1811097-08A	TK01042-006 & 1811097-24A	TK01042-007 & 1811097-25A	TK02072-012 & 1811174-11A	TK02072-013 & 1811174-12A	TK03016-002 & 1811174-19A
Sample Date										10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/02/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<21,000	<21,000	<21,000	<19,000	<20,000	<20,000	<20,000	<21,000	<21,000	<21,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<21,000	<21,000	<21,000	<19,000	<20,000	<20,000	<20,000	<21,000	<21,000	<21,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	14 [BJ]	9 [BJ]	34 [BJ]	<130	21 [BJ]	63 [BJ]	75 [BJ]	49 [BJ]	33 [BJ]	27 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<43	<41	<43	<42	<41	49	<42	<43	<42	<42
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,000	<1,100	<1,100	<1,000	<1,000	<1,100	<1,100	<1,000	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<210	<210	<210	<210	<210	160 [J]	160 [J]	670	180 [J]	160 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	ND	ND	ND	ND	ND	160	160	670	180	160
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	<11,000	<10,000	<11,000	<11,000	<10,000	3,500 [BJ]	2,500 [BJ]	20,000 [B]	2,700 [BJ]	5,900 [BJ]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***50,000***	***27,000***	***65,000***	***69,000***	***46,000***	***48,000***	***29,000***	***72,000***	***49,000***	***55,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000	<11,000	<11,000	<10,000	<10,000	<11,000	<11,000	<10,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<100,000	<110,000	<110,000	<100,000	<100,000	<100,000	<110,000	<100,000	<110,000

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Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-34	MDOT-SB-35	MDOT-SB-35	MDOT-SB-36	MDOT-SB-36	MDOT-SB-36	MDOT-SB-37	MDOT-SB-37	MDOT-SB-38	MDOT-SB-38
Sample Name										MDOT-SB-34 (15-16)	MDOT-SB-35 (4-5)	MDOT-SB-35 (18-19)	MDOT-SB-36 (0-1)	MDOT-SB-36 (0-1) DUP	MDOT-SB-36 (9-10)	MDOT-SB-37 (3-4)	MDOT-SB-37 (11-12)	MDOT-SB-38 (2-3)	MDOT-SB-38 (12-13)
Depth Interval (Feet below ground surface)										15 - 16	4 - 5	18 - 19	0 - 1	0 - 1	9 - 10	3 - 4	11 - 12	2 - 3	12 - 13
Laboratory Sample ID(s)										TK03016-003 & 1811174-20A	TK01042-008 & 1811097-26A	TK01042-009 & 1811097-27A	TK01042-012 & 1811097-30A	TK01042-013 & 1811097-31A	TK01042-014 & 1811097-32A	TK01042-015 & 1811097-33A	TK01042-016 & 1811097-34A	TK01042-010 & 1811097-28A	TK01042-011 & 1811097-29A
Sample Date										11/02/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<20,000	<21,000	<20,000	<26,000	<26,000	<21,000	<20,000	<20,000	<20,000	<19,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<20,000	<21,000	<20,000	<26,000	<26,000	<21,000	<20,000	<20,000	<20,000	<19,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	45 [BJ]	70 [BJ]	56 [BJ]	200 [B]	220 [B]	46 [BJ]	78 [BJ]	52 [BJ]	53 [BJ]	67 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	46	<41	<41	<53	<52	<42	<41	<42	<41	<41
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,000	<1,000	1,000 [J]	1,100 [J]	<1,100	<1,000	<1,100	<1,000	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	140 [J]	160 [J]	580	450	450	190 [J]	150 [J]	110 [J]	180 [J]	210
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	140	160	580	1,500	1,600	190	150	110	180	210
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	38	42	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	5,400 [BJ]	3,100 [BJ]	10,000 [B]	13,000 [B]	14,000 [B]	2,300 [BJ]	2,400 [BJ]	5,300 [BJ]	2,500 [BJ]	7,100 [BJ]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***45,000***	***95,000***	***64,000***	***210,000***	***200,000***	***36,000***	***61,000***	***89,000***	***120,000***	***91,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000	<10,000	18,000	<13,000	<11,000	<10,000	<11,000	<10,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<100,000	<100,000	<130,000	<130,000	<110,000	<100,000	<100,000	<100,000	<100,000

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1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-39	MDOT-SB-39	MDOT-SB-39	MDOT-SB-40	MDOT-SB-40	MDOT-SB-41	MDOT-SB-41	MDOT-SB-41	MDOT-SB-42	MDOT-SB-42
Sample Name										MDOT-SB-39(7-8)	MDOT-SB-39(7-8)DUP	MDOT-SB-39(12-13)	MDOT-SB-40 (1-2)	MDOT-SB-40 (19-20)	MDOT-SB-41(3-4)	MDOT-SB-41(19-20)	MDOT-SB-41(19-20)DUP	MDOT-SB-42(1-2)	MDOT-SB-42(11-12)
Depth Interval (Feet below ground surface)										7 - 8	7 - 8	12 - 13	1 - 2	19 - 20	3 - 4	19 - 20	19 - 20	1 - 2	11 - 12
Laboratory Sample ID(s)										TK02072-014 & 1811174-13A	TK02072-015 & 1811174-14A	TK02072-016 & 1811174-15A	TK01042-017 & 1811097-35A	TK01042-018 & 1811097-36A	TK02072-017 & 1811174-16A	TK02072-018 & 1811174-17A	TK02072-019 & 1811174-18A	TK02072-004 & 1811174-03A	TK02072-005 & 1811174-04A
Sample Date										11/01/2018	11/01/2018	11/01/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<21,000	<21,000	<20,000	<21,000	<19,000	<19,000	<22,000	<22,000	<20,000	<26,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<21,000	<21,000	<20,000	<21,000	<19,000	<19,000	<22,000	<22,000	<20,000	<26,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	48 [BJ]	59 [BJ]	30 [BJ]	42 [BJ]	23 [BJ]	56 [BJ]	50 [BJ]	15 [BJ]	50 [BJ]	130 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<43	<46	<42	<43	<41	<43	<45	<46	79	67
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,100	<1,100	<1,100	<1,000	530 [J]	<1,100	<1,100	<1,100	560 [J]
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	330	400	220	100 [J]	590	720	260	210 [J]	200 [J]	530
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	330	400	220	100	590	1,300	260	210	200	1,100
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	20	ND	ND	ND	21
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	2,200 [BJ]	14,000 [B]	3,700 [BJ]	3,600 [BJ]	9,600 [BJ]	4,800 [BJ]	4,700 [BJ]	3,900 [BJ]	4,000 [BJ]	12,000 [BJ]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***36,000***	***86,000***	***38,000***	***22,000***	***32,000***	***100,000***	***44,000***	***41,000***	***240,000***	***210,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<11,000	<11,000	<11,000	<10,000	<11,000	<11,000	<11,000	<11,000	<13,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<120,000	<110,000	<110,000	<100,000	<110,000	<110,000	<120,000	<110,000	<130,000

TABLE 4
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-43	MDOT-SB-43	MDOT-SB-44	MDOT-SB-44	MDOT-SB-45	MDOT-SB-45	MDOT-SB-46	MDOT-SB-46	MDOT-SB-47	MDOT-SB-47
Sample Name										MDOT-SB-43(6-7)	MDOT-SB-43(16-17)	MDOT-SB-44(2-3)	MDOT-SB-44(14-15)	MDOT-SB-45(8-9)	MDOT-SB-45(18-19)	MDOT-SB-46(2-3)	MDOT-SB-46-(18-19)	MDOT-SB-47 (0-1)	MDOT-SB-47 (14-15)
Depth Interval (Feet below ground surface)										6 - 7	16 - 17	2 - 3	14 - 15	8 - 9	18 - 19	2 - 3	18 - 19	0 - 1	14 - 15
Laboratory Sample ID(s)										TK02072-003 & 1811174-02A	TK02072-002 & 1811174-01A	TK02072-006 & 1811174-05A	TK02072-007 & 1811174-06A	TK02072-008 & 1811174-07A	TK02072-009 & 1811174-08A	TK02072-010 & 1811174-09A	TK02072-011 & 1811174-10A	TK03016-004 & 1811174-21A	TK03016-005 & 1811174-22A
Sample Date										11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018
Parameter (µg/kg)																			
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<21,000	<20,000	<20,000	<19,000	<22,000	<18,000	<20,000	<19,000	<22,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<21,000	<20,000	<20,000	<19,000	<22,000	<18,000	<20,000	<19,000	<22,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	6 [BJ]	21 [BJ]	48 [BJ]	65 [BJ]	33 [BJ]	43 [BJ]	<120	21 [BJ]	160 [B]	32 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<45	<41	<41	<41	<47	<42	<42	<41	<46	<41
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,000	<1,000	1,100	<1,100	<1,000	<1,000	<1,000	860 [J]	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	180 [J]	600	180 [J]	210	100 [J]	200 [J]	200 [J]	540	160 [J]	480
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	180	600	180	1300	100	200	200	540	1,000	480
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	42	ND	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	2,600 [BJ]	12,000 [B]	2,400 [BJ]	9,200 [BJ]	2,900 [BJ]	4,900 [BJ]	2,100 [BJ]	9,900 [BJ]	3,900 [BJ]	11,000 [B]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***50,000***	***34,000***	***81,000***	***46,000***	***54,000***	***44,000***	***61,000***	***50,000***	***150,000***	***42,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000	<10,000	<10,000	<11,000	<10,000	<10,000	<10,000	<11,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<100,000	<100,000	<100,000	<120,000	<100,000	<100,000	<100,000	<110,000	<100,000

TABLE 4
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-48	MDOT-SB-48
Sample Name										MDOT-SB-48 (1-2)	MDOT-SB-48 (19-20)
Depth Interval (Feet below ground surface)										1 - 2	19 - 20
Laboratory Sample ID(s)										TK03016-006 & 1811174-23A	TK03016-007 & 1811174-24A
Sample Date										11/02/2018	11/02/2018
Parameter (µg/kg)											
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<21,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<21,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	120 [BJ]	29 [BJ]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<43	<41
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	290	470
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	290	470
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND
Chloride (soluble)	NA	5,000,000	1,000,000	NLV	NLV	ID	500,000 (F)	NCL	NCL	4,200 [BJ]	10,000 [B]
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	***180,000***	***48,000***
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<110,000	<100,000

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-B3	MDOT-SB-B3	MDOT-SB-C2	MDOT-SB-C2	MDOT-SB-D1	MDOT-SB-D1	MDOT-SB-E1	MDOT-SB-E1	MDOT-SB-E1	MDOT-V-1
Sample Name									SB-B3 (2-4)	SB-B3 (16-18)	SB-C2 (2-4)	SB-C2 (16-18)	SB-D1 (12-14)	SB-D1 (16-18)	SB-E1 (0-2)	SB-E1 (0-2) DUP	SB-E1 (16-18)	V-1
Depth Interval (Feet below ground surface)									2 - 4	16 - 18	2 - 4	16 - 18	12 - 14	16 - 18	0 - 2	0 - 2	16 - 18	0 - 0.5
Laboratory Sample ID(s)									TF26024-021	TF26024-001	TF26024-004	TF26024-005	TF26024-002	TF26024-003	TF26024-006	TF26024-007	TF26024-008	TF26024-010
Sample Date									06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/23/2018	06/23/2018	06/25/2018	06/25/2018	06/25/2018	06/16/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.7	<10	<9.5	<12	<9.2	<11	<55	<10	<10	<11
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.7	<10	<9.5	<12	<9.2	<11	<55	<10	<10	<11
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	4.2	<1.9	<2.3	<1.8	<2.2	<11	2.8	<2.1	<2.2
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2	<1.9	<2.3	<1.8	<2.2	<11	<2.1	<2.1	<2.2
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	7.3	<4.7	<5.8	<4.6	<5.5	34	<100	<5.2	<5.5
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	8.3	<28	<100	<5.2	<5.5
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<100	<5.2	<5.5
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	350	24	<5.8	<4.6	<5.5	800	470	<5.2	<5.5
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	9.3	<28	<5.2	<5.2	<5.5
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<100	<5.2	<5.5
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	14	<4.7	15	7.7	22	<28	18	<5.2	<5.5
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	***1,100***	***95***	***8.5***	<4.6	***9.3***	***2,000***	***1,100***	***37***	***9.8***
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	1,100	95	24	7.7	31	2,000	1,100	37	9.8
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.7	<5.8	<4.6	<5.5	<28	<5.2	<5.2	<5.5
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	1,500	120	24	7.7	49	2,800	1,600	37	9.8

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-V-2	MDOT-V-3	MDOT-V-4	MDOT-V-5	MDOT-V-6	MDOT-V-7	MDOT-V-8	MDOT-V-9	MDOT-V-10	MDOT-V-11
Sample Name									V-2	V-3	V-4	V-5	V-6	V-7	V-8	V-9	V-10	V-11
Depth Interval (Feet below ground surface)									0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
Laboratory Sample ID(s)									TF26024-011	TF26024-012	TF26024-013	TF26024-014	TF26024-015	TF26024-016	TF26024-017	TF26024-018	TF26024-019	TF26024-020
Sample Date									06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/23/2018	06/23/2018	06/23/2018	06/23/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<10	<12	<12	<9.9	<12	<10	<10	<9.8	<11
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<10	<12	<12	<9.9	<12	<10	<10	<9.8	<11
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.3	<2.1	<2.3	<2.4	<2	<2.4	<2	<2	<2	<2.1
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.3	<2.1	<2.3	<2.4	<2	<2.4	<2	<2	<2	<2.1
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	23	<6.1	<5.1	<5	<4.9	<5.3
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	***17***	***31***	***72***	***6***	***110***	***17***	***16***	***14***	***9.7***	***7.4***
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	17	31	72	6	110	17	16	14	9.7	7.4
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.6	<5.1	<5.8	<5.9	<4.9	<6.1	<5.1	<5	<4.9	<5.3
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	17	31	72	6	130	17	16	14	9.7	7.4

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-1	MDOT-SB-1	MDOT-SB-2	MDOT-SB-2	MDOT-SB-3	MDOT-SB-3	MDOT-SB-4	MDOT-SB-4	MDOT-SB-5	MDOT-SB-5
Sample Name									MDOT-SB-1 6-7	MDOT-SB-1 18-19	MDOT-SB-2 6-7	MDOT-SB-2 19-20	MDOT-SB-3 2-3	MDOT-SB-3 18-19	MDOT-SB-4 2-3	MDOT-SB-4 14-15	MDOT-SB-5 7-8	MDOT-SB-5 18-19
Depth Interval (Feet below ground surface)									6 - 7	18 - 19	6 - 7	19 - 20	2 - 3	18 - 19	2 - 3	14 - 15	7 - 8	18 - 19
Laboratory Sample ID(s)									TJ26056-002	TJ26056-003	TJ26056-004	TJ26056-005	TJ26056-006	TJ26056-007	TJ26056-008	TJ26056-009	TJ26056-010	TJ26056-011
Sample Date									10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.6	<11	<11	<13	<8.9	<12	<12	<11	<10	<11
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.6	<11	<11	<13	<8.9	<12	<12	<11	<10	<11
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2.2	<2.1	<2.7	<1.8	<2.4	<2.4	<2.1	<2.1	<2.2
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2.2	<2.1	<2.7	<1.8	<2.4	<2.4	<2.1	<2.1	<2.2
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	***43***	***9.5***	***35***	<6.7	***36***	***6.1***	***47***	***8.5***	***27***	<5.5
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	43	9.5	35	ND	36	6.1	47	8.5	27	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.4	<5.3	<6.7	<4.4	<6.1	<6.1	<5.4	<5.2	<5.5
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	43	9.5	35	ND	36	6.1	47	8.5	27	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-6	MDOT-SB-6	MDOT-SB-7	MDOT-SB-7	MDOT-SB-8	MDOT-SB-8	MDOT-SB-9	MDOT-SB-9	MDOT-SB-10	MDOT-SB-10
Sample Name									MDOT-SB-6 7-8	MDOT-SB-6 15-16	MDOT-SB-7 2-3	MDOT-SB-7 12-13	MDOT-SB-8 6-7	MDOT-SB-8 13-14	MDOT-SB-9 2-3	MDOT-SB-9 17-18	MDOT-SB-10 3-4	MDOT-SB-10 13-14
Depth Interval (Feet below ground surface)									7 - 8	15 - 16	2 - 3	12 - 13	6 - 7	13 - 14	2 - 3	17 - 18	3 - 4	13 - 14
Laboratory Sample ID(s)									TJ26056-012	TJ26056-013	TJ27022-002	TJ27022-003	TJ27022-004	TJ27022-005	TJ27022-006	TJ27022-007	TJ27022-008	TJ27022-009
Sample Date									10/25/2018	10/25/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<10	<13	<9.2	<11	<9.3	<12	<14	<10	<11
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<10	<13	<9.2	<11	<9.3	<12	<14	<10	<11
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.1	<2	<2.6	<1.8	<2.3	<1.9	<2.4	<2.9	<2.1	<2.2
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.1	<2	<2.6	<1.8	<2.3	<1.9	<2.4	<2.9	<2.1	<2.2
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	20	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	11	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	11	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	17	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	***450***	<4.6	***6.1***	<4.7	***43***	<7.1	***17***	<5.5
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	470	ND	6.1	ND	43	ND	17	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<5	<6.4	<4.6	<5.7	<4.7	<5.9	<7.1	<5.2	<5.5
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	510	ND	6.1	ND	43	ND	17	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-11	MDOT-SB-11	MDOT-SB-12	MDOT-SB-12	MDOT-SB-13	MDOT-SB-13	MDOT-SB-14	MDOT-SB-14	MDOT-SB-15	MDOT-SB-15
Sample Name									MDOT-SB-11 0-1	MDOT-SB-11 12-13	MDOT-SB-12 2-3	MDOT-SB-12 15-16	MDOT-SB-13 5-6	MDOT-SB-13 13-14	MDOT-SB-14 2-3	MDOT-SB-14 13-14	MDOT-SB-15 1-2	MDOT-SB-15 1-2 DUP
Depth Interval (Feet below ground surface)									0 - 1	12 - 13	2 - 3	15 - 16	5 - 6	13 - 14	2 - 3	13 - 14	1 - 2	1 - 2
Laboratory Sample ID(s)									TJ27022-010	TJ27022-011	TJ27022-012	TJ27022-013	TJ27022-014	TJ27022-015	TJ30010-002	TJ30010-003	TJ30010-004	TJ30010-005
Sample Date									10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/26/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<9.3	<10	<13	<9.8	<9.9	<9.2	<11	<9.8	<10
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<9.3	<10	<13	<9.8	<9.9	<9.2	<11	<9.8	<10
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.2	<1.9	<2	<2.5	<2	<2	<1.8	<2.3	<2	<2
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.2	<1.9	<2	<2.5	<2	<2	<1.8	<2.3	<2	<2
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	8.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	7.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	12	5.7	<4.9	<4.6	<5.7	<4.9	<5
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	***13***	<4.6	<5	<6.3	***200***	***11***	<4.6	<5.7	<4.9	***20***
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	13	ND	ND	12	210	11	ND	ND	ND	20
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.4	<4.6	<5	<6.3	<4.9	<4.9	<4.6	<5.7	<4.9	<5
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	13	ND	ND	12	220	11	ND	ND	ND	20

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-15	MDOT-SB-16	MDOT-SB-16	MDOT-SB-17	MDOT-SB-17	MDOT-SB-17	MDOT-SB-18	MDOT-SB-18	MDOT-SB-19	MDOT-SB-19
Sample Name									MDOT-SB-15 11-12	MDOT-SB-16 5-6	MDOT-SB-16 16-17	MDOT-SB-17 1-2	MDOT-SB-17 11-12	MDOT-SB-17 11-12 DUP	MDOT-SB-18 9-10	MDOT-SB-18 16-17	MDOT-SB-19 8-9	MDOT-SB-19 19-20
Depth Interval (Feet below ground surface)									11 - 12	5 - 6	16 - 17	1 - 2	11 - 12	11 - 12	9 - 10	16 - 17	8 - 9	19 - 20
Laboratory Sample ID(s)									TJ30010-006	TJ30010-007	TJ30010-008	TJ30010-009	TJ30010-010	TJ30010-011	TJ30010-012	TJ30010-013	TJ30010-014	TJ30010-015
Sample Date									10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018	10/29/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<14	<9.5	<10	<12	<10	<10	<9.2	<9	<11	<9.6
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<14	<9.5	<10	<12	<10	<10	<9.2	<9	<11	<9.6
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.8	<1.9	<2	<2.3	<2.1	<2	<1.8	<1.8	<2.3	<1.9
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.8	<1.9	<2	<2.3	<2.1	<2	<1.8	<1.8	<2.3	<1.9
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	***24***	<5.1	<5	***14***	<4.5	***18***	<4.8
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	24	ND	ND	14	ND	18	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<7	<4.7	<5	<5.8	<5.1	<5	<4.6	<4.5	<5.7	<4.8
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	24	ND	ND	14	ND	18	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-20	MDOT-SB-20	MDOT-SB-21	MDOT-SB-21	MDOT-SB-22	MDOT-SB-22	MDOT-SB-23	MDOT-SB-23	MDOT-SB-24	MDOT-SB-24
Sample Name									MDOT-SB-20 5-6	MDOT-SB-20 14-15	MDOT-SB-21(5-6)	MDOT-21(11-12)	MDOT-SB-22(0-1)	MDOT-SB-22(16-17)	MDOT-SB-23(1-2)	MDOT-SB-23(17-18)	MDOT-SB-24 (4-5)	MDOT-SB-24 (10-11)
Depth Interval (Feet below ground surface)									5 - 6	14 - 15	5 - 6	11 - 12	0 - 1	16 - 17	1 - 2	17 - 18	4 - 5	10 - 11
Laboratory Sample ID(s)									TJ30010-016	TJ30010-017	TJ31048-002	TJ31048-003	TJ31048-004	TJ31048-005	TJ31048-006	TJ31048-007	TK01042-004	TK01042-005
Sample Date									10/29/2018	10/29/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<9.7	<9	<13	<10	<10	<11	<10	<11	<10
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<9.7	<9	<13	<10	<10	<11	<10	<11	<10
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.1	<1.9	<1.8	<2.7	<2.1	<2	<2.2	<2	<2.2	<2.1
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.1	<1.9	<1.8	<2.7	<2.1	<2	<2.2	<2	<2.2	<2.1
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	***52***	<4.8	<4.5	<6.7	***12***	<5.1	***14***	<5.1	<5.6	<5.2
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	52	ND	ND	ND	12	ND	14	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.3	<4.8	<4.5	<6.7	<5.2	<5.1	<5.4	<5.1	<5.6	<5.2
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	52	ND	ND	ND	12	ND	14	ND	ND	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-25	MDOT-SB-25	MDOT-SB-26	MDOT-SB-26	MDOT-SB-26	MDOT-SB-27	MDOT-SB-27	MDOT-SB-28	MDOT-SB-28	MDOT-SB-29
Sample Name									MDOT-SB-25 (2-3)	MDOT-SB-25 (10-11)	MDOT-SB-26(2-3)	MDOT-SB-26(2-3)DUP	MDOT-SB-26(10-11)	MDOT-SB-27(9-10)	MDOT-SB-27(19-20)	MDOT-SB-28(4-5)	MDOT-SB-28(10-11)	MDOT-SB-29(7-8)
Depth Interval (Feet below ground surface)									2 - 3	10 - 11	2 - 3	2 - 3	10 - 11	9 - 10	19 - 20	4 - 5	10 - 11	7 - 8
Laboratory Sample ID(s)									TK01042-002	TK01042-003	TJ31048-018	TJ31048-020	TJ31048-019	TJ31048-016	TJ31048-017	TJ31048-014	TJ31048-015	TJ31048-012
Sample Date									10/31/2018	10/31/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<10	<11	<11	<11	<10	<11	<11	<11	<12	<9.1
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<10	<11	<11	<11	<10	<11	<11	<11	<12	<9.1
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2	<2.2	<2.1	<2.3	<2	<2.2	<2.2	<2.2	<2.4	<1.8
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2	<2.2	<2.1	<2.3	<2	<2.2	<2.2	<2.2	<2.4	<1.8
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	***13***	<5.4	<5.3	<5.7	***77***	<5.5	<5.4	<5.6	***20***	<4.6
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	13	ND	ND	ND	77	ND	ND	ND	20	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.4	<5.3	<5.7	<5	<5.5	<5.4	<5.6	<5.9	<4.6
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	13	ND	ND	ND	77	ND	ND	ND	20	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-29	MDOT-SB-30	MDOT-SB-30	MDOT-SB-31	MDOT-SB-31	MDOT-SB-32	MDOT-SB-32	MDOT-SB-33	MDOT-SB-33	MDOT-SB-34
Sample Name									MDOT-SB-29(12-13)	MDOT-SB-30(8-9)	MDOT-SB-30(19-20)	MDOT-SB-31(1-2)	MDOT-SB-31(7-8)	MDOT-SB-32 (6-7)	MDOT-SB-32 (12-13)	MDOT-SB-33(6-7)	MDOT-SB-33(18-19)	MDOT-SB-34 (4-5)
Depth Interval (Feet below ground surface)									12 - 13	8 - 9	19 - 20	1 - 2	7 - 8	6 - 7	12 - 13	6 - 7	18 - 19	4 - 5
Laboratory Sample ID(s)									TJ31048-013	TJ31048-010	TJ31048-011	TJ31048-008	TJ31048-009	TK01042-006	TK01042-007	TK02072-012	TK02072-013	TK03016-002
Sample Date									10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/30/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/02/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<10	<9.2	<9.9	<10	<9.8	<9.6	<9.3	<11	<11	<12
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<10	<9.2	<9.9	<10	<9.8	<9.6	<9.3	<11	<11	<12
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.1	<1.8	<2	<2	<2	<1.9	<1.9	<2.1	<2.2	<2.3
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.1	<1.8	<2	<2	<2	<1.9	<1.9	<2.1	<2.2	<2.3
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	***5***	***170***	<5.5	***37***
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	5	170	ND	37
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.2	<4.6	<5	<5	<4.9	<4.8	<4.7	<5.3	<5.5	<5.8
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	5	170	ND	37

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-34	MDOT-SB-35	MDOT-SB-35	MDOT-SB-36	MDOT-SB-36	MDOT-SB-36	MDOT-SB-37	MDOT-SB-37	MDOT-SB-38	MDOT-SB-38
Sample Name									MDOT-SB-34 (15-16)	MDOT-SB-35 (4-5)	MDOT-SB-35 (18-19)	MDOT-SB-36 (0-1)	MDOT-SB-36 (0-1) DUP	MDOT-SB-36 (9-10)	MDOT-SB-37 (3-4)	MDOT-SB-37 (11-12)	MDOT-SB-38 (2-3)	MDOT-SB-38 (12-13)
Depth Interval (Feet below ground surface)									15 - 16	4 - 5	18 - 19	0 - 1	0 - 1	9 - 10	3 - 4	11 - 12	2 - 3	12 - 13
Laboratory Sample ID(s)									TK03016-003	TK01042-008	TK01042-009	TK01042-012	TK01042-013	TK01042-014	TK01042-015	TK01042-016	TK01042-010	TK01042-011
Sample Date									11/02/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018	10/31/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.3	<10	<9.3	<11	<11	<10	<9.2	<10	<9.6	<11
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.3	<10	<9.3	<11	<11	<10	<9.2	<10	<9.6	<11
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2.1	<1.9	<2.2	<2.2	<2.1	<1.8	<2	<1.9	<2.1
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2.1	<1.9	<2.2	<2.2	<2.1	<1.8	<2	<1.9	<2.1
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	***7.3***	***58***	<5.2	<4.6	<5.1	<4.8	<5.3
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	7.3	58	ND	ND	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.6	<5.2	<4.7	<5.5	<5.6	<5.2	<4.6	<5.1	<4.8	<5.3
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	7.3	58	ND	ND	ND	ND	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-39	MDOT-SB-39	MDOT-SB-39	MDOT-SB-40	MDOT-SB-40	MDOT-SB-41	MDOT-SB-41	MDOT-SB-41	MDOT-SB-42	MDOT-SB-42
Sample Name									MDOT-SB-39(7-8)	MDOT-SB-39(7-8)DUP	MDOT-SB-39(12-13)	MDOT-SB-40 (1-2)	MDOT-SB-40 (19-20)	MDOT-SB-41(3-4)	MDOT-SB-41(19-20)	MDOT-SB-41(19-20)DUP	MDOT-SB-42(1-2)	MDOT-SB-42(11-12)
Depth Interval (Feet below ground surface)									7 - 8	7 - 8	12 - 13	1 - 2	19 - 20	3 - 4	19 - 20	19 - 20	1 - 2	11 - 12
Laboratory Sample ID(s)									TK02072-014	TK02072-015	TK02072-016	TK01042-017	TK01042-018	TK02072-017	TK02072-018	TK02072-019	TK02072-004	TK02072-005
Sample Date									11/01/2018	11/01/2018	11/01/2018	10/31/2018	10/31/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.5	<10	<9.6	<10	<9.9	<9.7	<11	<11	<9.4	<13
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.5	<10	<9.6	<10	<9.9	<9.7	<11	<11	<9.4	<13
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2	<1.9	<2.1	<2	<1.9	<2.2	<2.2	<1.9	<2.6
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2	<1.9	<2.1	<2	<1.9	<2.2	<2.2	<1.9	<2.6
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	***21***	<6.4
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.8	<5.1	<4.8	<5.2	<4.9	<4.8	<5.4	<5.4	<4.7	<6.4
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	21	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-43	MDOT-SB-43	MDOT-SB-44	MDOT-SB-44	MDOT-SB-45	MDOT-SB-45	MDOT-SB-46	MDOT-SB-46	MDOT-SB-47	MDOT-SB-47
Sample Name									MDOT-SB-43(6-7)	MDOT-SB-43(16-17)	MDOT-SB-44(2-3)	MDOT-SB-44(14-15)	MDOT-SB-45(8-9)	MDOT-SB-45(18-19)	MDOT-SB-46(2-3)	MDOT-SB-46-(18-19)	MDOT-SB-47 (0-1)	MDOT-SB-47 (14-15)
Depth Interval (Feet below ground surface)									6 - 7	16 - 17	2 - 3	14 - 15	8 - 9	18 - 19	2 - 3	18 - 19	0 - 1	14 - 15
Laboratory Sample ID(s)									TK02072-003	TK02072-002	TK02072-006	TK02072-007	TK02072-008	TK02072-009	TK02072-010	TK02072-011	TK03016-004	TK03016-005
Sample Date									11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/01/2018	11/02/2018	11/02/2018
Parameter (µg/kg)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.9	<11	<9.8	<11	<10	<9.7	<9.5	<9.2	<12	<9.3
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.9	<11	<9.8	<11	<10	<9.7	<9.5	<9.2	<12	<9.3
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2	<2.1	<2	<2.1	<2	<1.9	<1.9	<1.8	<2.4	<1.9
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2	<2.1	<2	<2.1	<2	<1.9	<1.9	<1.8	<2.4	<1.9
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5	<5.3	<4.9	<5.3	<5.1	<4.9	<4.8	<4.6	<6	<4.6
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 5
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact	MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level	U.S. EPA Residential Soil Regional Removal Management Levels	MDOT-SB-48	MDOT-SB-48
Sample Name									MDOT-SB-48 (1-2)	MDOT-SB-48 (19-20)
Depth Interval (Feet below ground surface)									1 - 2	19 - 20
Laboratory Sample ID(s)									TK03016-006	TK03016-007
Sample Date									11/02/2018	11/02/2018
Parameter (µg/kg)										
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<9.3
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<11	<9.3
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.3	<1.9
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.3	<1.9
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<5.7	<4.6
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<5.7	<4.6
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND

NOTES:

1. Concentration and criteria units are micrograms per kilogram (µg/kg) or parts per billion (ppb). Calculated criteria and concentrations are rounded to two significant digits and "ND" indicates the parameters used in the calculation were not detected.
2. Michigan Part 201 Groundwater Cleanup Criteria are based on "Table 2, Soil: Residential Part 201 Generic Cleanup Criteria and Screening Levels/Part 213 Tier I Risk Based Screening Levels," Michigan Administrative Code, Cleanup Criteria Requirements for Response Activity, Rules 299.46 and 299.49, effective December 30, 2013; updated June 25, 2018.
   Abbreviations Include:
   "ID" indicates insufficient data to develop criterion.
   "NA" indicates a criterion or value is not available or, in the case of background, not applicable.
   "NCL" indicates no criterion listed in MDEQ Table 2.
   "NLL" indicates the substance is not likely to leach under most soil conditions.
   "NLV" indicates the substance is not likely to volatilize under most conditions.
   Footnotes Include:
   (B) - Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.
   (C) - The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (C_{sat}).
   (D) - The calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 ppb.
   (F) - Criterion is based on adverse impacts to plant life and phytotoxicity.
   (G) - Groundwater surface water interface protection (GSIP) criterion depends on the pH or water hardness, or both, of the receiving surface water.
   MDEQ's Footnote (G) GSI/GSIPC Calculation spreadsheet was utilized to calculate GSI criterion presented. The Rogue River is the receiving surface water for the Site. Hardness (220 mg CaCO3/L) and pH (7.5 standard units) used in the calculations were the lowest (most-conservative) of the calculated mean and median of the Rogue River surface water samples collected in Rockford, MI at the former tannery (TA-SW-01, TA-SW-02, TA-SW-03, TA-SW-05, and TA-SW-07) rounded to two significant digits and water hardness or pH for the Rogue River near Rockford published in United States Geological Survey Circular 323, "Water Resources of the Grand Rapids Area, Michigan," Table 1, 1954.
   (M) - Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
   (N) - Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5µg/kg.
   (P) - Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria.
   (W) - Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the drinking water protection criterion of 1,600µg/kg.
   (CC) - The generic soil GSI protection criteria for unionized ammonia are 580 µg/kg and 1,100 µg/kg for cold water and warm water surface water, respectively. The percent conversion factor in the table for cold water (20°C or 68°F) and pH (8.0 standard units) is 3.82%.
   (DD) - Residential direct contact criteria are protective of both prenatal and postnatal exposure.
   (EE) - The applicable GSI criteria for phosphorus is 1,000 µg/L. The footnote does not specify a GSIP criterion, however, the GSIP for phosphorus refers to Footnote EE. Conservatively, a value of 20 times the GSI criterion (20,000µg/kg) was used.
3. MDEQ Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Levels for were based on MDEQ's Toxics Steering Group's "Media-Specific Interim Action Screening Levels," published in August 2017.
   Abbreviations Include:
   "NCL" indicates no value listed in the Media-Specific Interim Action Screening Levels table.
   Footnotes Include:
   (M) - Site-specific criterion may be below target detection limits (TDL).
4. U.S. EPA Residential Soil Regional Removal Management Levels (RMLs) were based on "Generic RML Tables," updated November 2018.
5. Bold, italic number with thick line border or italic parameter name indicates that parameter was detected above the Michigan Part 201 Soil Cleanup Criteria or Media-Specific Interim Action Screening Levels. For metals, bold, italic number indicates that the parameter was detected at a concentration greater than both the statewide default background, if available, and the most-restrictive Michigan Part 201 Cleanup Criteria in accordance with Footnote B. U.S. EPA RMLs are provided for reference only and results detected above the EPA RMLs are not bolded or italicized.
6. Abbreviations include:
   "< RL" indicates the parameter was analyzed for but not detected above the method detection limit; RL = Reporting Limit.
   "DUP" indicates a duplicate sample.
   "B" indicates the parameter was also detected in the method blank.
   "J" indicates the parameter was detected at a concentration greater than the limit of quantitation (LOQ) but less than the detection limit (DL) and the result is estimated.
7. Sample names presented are from Shealy Environmental Services, Inc. laboratory reports. Sample names presented in ALS Environmental lab reports may have minor differences based on laboartory interpretation of the chains of custody.

TABLE 6
SUMMARY OF SOIL SAMPLE ANALYSIS - TCLP METALS
1758 House Street NE
Plainfield Township, Kent County, MI

Sample Location	RCRA Maximum Concentration	MDOT-SB-E1	MDOT-SB-E1	MDOT-SB-17
Sample Name		SB-E1 (0-2)	SB-E1 (0-2) DUP	MDOT-SB-17 1-2
Depth Interval (Feet below ground surface)		0 - 2	0 - 2	1 - 2
Laboratory Sample ID(s)		TF26024-006	TF26024-007	TJ30010-009
Sample Date		06/25/2018	06/25/2018	10/29/2018
Parameter (µg/L)				
Chromium	5,000	<100	5.2 [J]	1,400

TABLE 6 NOTES
1758 House Street NE
Plainfield Township, Kent County, MI

NOTES:

1. Concentration and criteria units are micrograms per Liter (µg/L) or parts per billion (ppb).
2. RCRA Maximum Concentration criteria are based on "Table 1, Maximum Concentration of Contaminants for the Toxicity Characteristic," 40 CFR 261.24, last amended March 13, 2002.
3. Bold, italic number with thick line border or italic parameter name indicates that parameter was detected above the RCRA Maximum Concentration.
4. Abbreviations include:

   "< RL" indicates the parameter was analyzed for but not detected above the method detection limit; RL = Reporting Limit.

   "DUP" indicates a duplicate sample.

   "J" indicates the parameter was detected at a concentration greater than the limit of quantitation (LOQ) but less than the detection limit (DL) and the result is estimated.

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-1** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	39		ND	C-1:	1		
	S-1	0-1				ND	S-1: 0-7": Dark brown, TOPSOIL.		TOPSOIL 0.6	
1							7-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				ND	S-2: Tan-orange, fine SAND, little Silt.			No Equipment Installed
2	S-3	2-3				ND	S-3: Tan-orange, fine SAND, little Silt.			
3	S-4	3-4				ND	S-4: 0-3": Tan-orange, fine SAND, little Silt.		SAND	
							3-12": No recovery.			
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	58		ND	C-2:			
	S-6	5-6				0.1	S-6: 0-2": No recovery.		5.7	
							2-9": Tan-orange, fine SAND, little Silt.		TOPSOIL 5.8	
6	S-7	6-7			6-7	ND	9-10": Dark brown, TOPSOIL.		SAND 6.3	
							10-12": Tan-orange, fine to medium SAND, little Silt.			
							S-7: 0-4": Tan-orange, fine to medium SAND, little Silt.		SILT AND SAND 6.8	
7	S-8	7-8				ND	4-9": Brown-red, SILT and SAND.			
							9-12": Brown, CLAY.		CLAY	
							S-8: 0-10": Brown, CLAY.		7.8	
8	S-9	8-9				ND	10-12": Tan, fine SAND (1-1.5" lenses of tan-orange Silty SAND).			
							S-9: Tan, fine SAND (1-1.5" lenses of tan-orange Silty SAND).			
9	S-10	9-10				ND	S-10: Tan, fine SAND (1-1.5" lenses of tan-orange Silty SAND).			
10	C-3	10-15	60	48		ND	C-3:		SAND	
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				ND	S-12: Tan, fine SAND (1-1.5 lenses of tan-orange Silty SAND).			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-1

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.:** MDOT-SB-1 **SHEET:** 2 of 2 **PROJECT NO:** 16.0062335.53 **REVIEWED BY:** SJB/NJC

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				ND	S-13: Tan, fine SAND (1-1.5 lenses of tan-orange Silty SAND).			
14	S-14	13-14				0.1	S-14: Tan, fine SAND (1-1.5 lenses of tan-orange Silty SAND).			
15	S-15	14-15				ND	S-15: Tan, fine SAND (1-1.5 lenses of tan-orange Silty SAND).			
	C-4	15-20	60	51		-	C-4:		SAND	
	S-16	15-16				ND	S-16: 0-9": No recovery. 9-12': Tan, fine SAND.			
16	S-17	16-17				0.1	S-17: Tan, fine SAND.			
17	S-18	17-18				ND	S-18: Tan, fine SAND.			
18	S-19	18-19			18-19	ND	S-19: 0-7": Tan, fine SAND. 7-12": Brown, Silty CLAY.			18.6
19	S-20	19-20				ND	S-20: Brown, Silty CLAY.		SILTY CLAY	
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-1

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-2** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	27		ND	C-1:	1		
	S-1	0-1				ND	S-1: 0-10": Dark brown, TOPSOIL.		TOPSOIL	
							10-12": Tan-orange, fine SAND, little Silt.		0.8	
1	S-2	1-2				ND	S-2: 0-6": Tan-orange, fine SAND, little Silt.			No Equipment Installed
							6-12": Tan, fine SAND.			
2	S-3	2-3				0.1	S-3: 0-3": Tan, fine SAND.			
							3-12": No recovery.			
3	S-4	3-4				NA	S-4: No recovery.		SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	60		-	C-2:			
	S-6	5-6				0.1	S-6: 0-8": Tan, fine SAND.		5.7	
							8-10": Dark brown, TOPSOIL.		TOPSOIL 5.8	
6	S-7	6-7			6-7	ND	10-12": Tan-brown, fine to medium SAND.		SAND 6	
							S-7: Brown, CLAY.			
7									CLAY	
	S-8	7-8				ND	S-8: 0-6": Brown, CLAY.			
							6-12": Tan, fine SAND (lenses of tan-orange, Silty SAND).		7.5	
8	S-9	8-9				ND	S-9: Tan, fine SAND (lenses of tan-orange, Silty SAND).			
9	S-10	9-10				ND	S-10: Tan, fine SAND (1" lens of Clayey Silt).			
10									SAND	
	C-3	10-15	60	48		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				0.1	S-12: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-2

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-2** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
13	S-13	12-13				ND	S-13: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).		
14	S-14	13-14				ND	S-14: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).		
15	S-15	14-15				0.1	S-15: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).		
	C-4	15-20	60	48		ND	C-4:		SAND
	S-16	15-16				-	S-16: No recovery.		
16	S-17	16-17				0.1	S-17: Tan, fine SAND.		
17	S-18	17-18				ND	S-18: Tan, fine SAND.		
18	S-19	18-19				0.1	S-19: Brown, Silty CLAY.		18
19	S-20	19-20			19-20	ND	S-20: Brown, Silty CLAY.		SILTY CLAY
20							End of exploration at 20 feet.	2	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-2

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-3** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1			
	S-1	0-1				0.1	S-1: 0-8": Dark brown, TOPSOIL.		TOPSOIL	0.7	
1							8-12": Tan-orange, fine SAND, little Silt.				
	S-2	1-2				0.1	S-2: 0-8": Tan-orange, fine SAND, little Silt, trace Gravel.				No Equipment Installed
							8-12": Tan, fine SAND.		SAND		
2					2-3						
	S-3	2-3				ND	S-3: 0-6": Tan, fine SAND.				
							6-12": Brown-orange, SILT and SAND.			2.5	
3											
	S-4	3-4				NA	S-4: No recovery.		SILT AND SAND		
4											
	S-5	4-5				NA	S-5: No recovery.			4.3	
5											
	C-2	5-10	60	54		ND	C-2:		SAND		
	S-6	5-6				ND	S-6: 0-6": No recovery.				
							6-10": Tan, fine SAND.			5.8	
6									TOPSOIL	6	
	S-7	6-7				ND	10-12": Dark brown, TOPSOIL.		SILTY CLAY	6.3	
							S-7: 0-3": Brown, Silty CLAY.			6.5	
							3-6": Tan, fine SAND.		SAND	6.7	
7									SILTY CLAY	6.9	
	S-8	7-8				ND	6-8": Brown, Silty CLAY.				
							8-11": Tan-orange, fine SAND, little Silt.		SAND	7.3	
							11-12": Brown, CLAY.		CLAY	7.6	
8							S-8: 0-4": Brown, CLAY.		SAND	7.8	
	S-9	8-9				0.2	4-7": Tan, fine SAND.		SILTY CLAY		
							7-9": Brown, Silty CLAY.				
9							9-12": Tan, fine SAND (1-1.5" lenses of tan-orange, Silty				
	S-10	9-10				ND	SAND).				
							S-9: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty				
10							SAND).				
	C-3	10-15	60	41		ND	S-10: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty		SAND		
	S-11	10-11				NA	SAND).				
							C-3:				
11							S-11: No recovery.				
	S-12	11-12				ND	S-12: 0-7": No recovery.				
							7-12": Tan, fine SAND (1-1.5" lenses of tan-orange, Silty				
12							SAND).				

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-3

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-3** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
13	S-13	12-13				0.1	S-13: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).		
14	S-14	13-14				ND	S-14: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).		
15	S-15	14-15				ND	S-15: Tan, fine SAND (1-1.5" lenses of tan-orange, Silty SAND).		
	C-4	15-20	60	32		-	C-4:		
	S-16	15-16				NA	S-16: No recovery.		SAND
16	S-17	16-17				NA	S-17: No recovery.		
17	S-18	17-18				-	S-18: 0-4": No recovery. 4-12": Tan, fine SAND.		
18	S-19	18-19			18-19	ND	S-19: Tan, fine SAND.		
19	S-20	19-20				ND	S-20: 0-4": Tan, fine SAND. 4-12": Brown, Silty CLAY.		19.3 SILTY CLAY
20							End of exploration at 20 feet.	2	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-3

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-4** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/18/2018 **Finish Date:** 10/18/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				0.1	S-1: 0-5": Dark brown, TOPSOIL. 5-12": Brown, fine SAND, little Silt.		SAND	
1	S-2	1-2				0.1	S-2: 0-4": Brown, fine SAND, little Silt. 4-12": Brown, Silty CLAY.		1.3	No Equipment Installed
2	S-3	2-3			2-3	0.3	S-3: Brown, Silty CLAY.			
3	S-4	3-4				NA	S-4: No recovery.		SILTY CLAY	
4	S-5	4-5				NA	S-5: No recovery.		4.5	
5	C-2	5-10	60	48		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.		SAND	
6	S-7	6-7				0.3	S-7: 0-6": Brown, fine SAND, little Silt. 6-7": Dark brown, TOPSOIL.		6.5	
7							7-12": Tan, fine to medium SAND.		TOPSOIL 6.6	
	S-8	7-8				0.3	S-8: Tan, fine to medium SAND.			
8	S-9	8-9				0.4	S-9: Tan, fine to medium SAND.			
9	S-10	9-10				0.4	S-10: Tan, fine to medium SAND.		SAND	
10	C-3	10-15	60	53		-	C-3:			
	S-11	10-11				0.3	S-11: 0-7": No recovery. 7-12": Tan, fine to medium SAND.			
11	S-12	11-12				0.3	S-12: Tan, fine to medium SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-4

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-4** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/18/2018
Finish Date: 10/18/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.3	S-13: Tan, fine to medium SAND.			
	S-14	13-14				0.3	S-14: Tan, fine to medium SAND.		SAND	
14	S-15	14-15			14-15	0.3	S-15: 0-4": Tan, fine to medium SAND.			14.3
							4-12": Brown, Silty CLAY.			
15	C-4	15-20	60	52		-	C-4:			
	S-16	15-16				0.2	S-16: 0-8": No recovery.			
							8-12": Brown, Silty CLAY.		SILTY CLAY	
16	S-17	16-17				0.3	S-17: Brown, Silty CLAY.			
17	S-18	17-18				0.3	S-18: 0-5": Brown, Silty CLAY.			17.4
							5-12": Tan, fine to medium SAND.			
18	S-19	18-19				0.3	S-19: Tan, fine to medium SAND.			
19									SAND	
	S-20	19-20				0.2	S-20: Tan, fine to medium SAND.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-4

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-5** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/18/2018 **Finish Date:** 10/18/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	34		ND	C-1:	1	TOPSOIL	0.3	
	S-1	0-1				0.3	S-1: 0-4": Dark brown, TOPSOIL.				
							4-9": Tan-orange, fine SAND, little Silt.		SAND		
1	S-2	1-2				0.3	9-12": Tan, fine SAND.			1.2	No Equipment Installed
							S-2: 0-2": Tan, fine SAND.		SILT	1.6	
							2-7": Brown, SILT, little fine Sand.		SAND	2	
2	S-3	2-3				0.3	7-12": Tan, fine SAND.		SAND	2.3	
							S-3: 0-3": Brown, SILT, little fine Sand.		SILT		
							3-10": Brown, Silty CLAY.				
3							10-12": No recovery.				
	S-4	3-4				NA	S-4: No recovery.		SILTY CLAY		
4											
	S-5	4-5				NA	S-5: No recovery.			4.4	
5											
	C-2	5-10	60	48		ND	C-2:				
	S-6	5-6				NA	S-6: No recovery.		SAND		
6											
	S-7	6-7				0.2	S-7: 0-3": Tan, fine SAND, little Silt.			6.3	
							3-5": Brown, SILT and SAND.		SILT AND SAND	6.4	
							5-7": Tan, fine SAND.		SAND	6.9	
7	S-8	7-8			7-8	0.3	7-11": Tan-orange, fine SAND, little Silt.		TOPSOIL	7.1	
							11-12": Dark brown, TOPSOIL.				
							S-8: 0-1": Dark brown, TOPSOIL.				
8	S-9	8-9				0.3	1-12": Tan, fine SAND (0-1" lenses of tan-orange, Silty SAND).				
							S-9: Tan, fine SAND (0-1" lenses of tan-orange, Silty SAND).		SAND		
9	S-10	9-10				-	S-10: Tan, fine SAND (0-1" lenses of tan-orange, Silty SAND).				
10											
	C-3	10-15	60	58		ND	C-3:			10.1	
	S-11	10-11				0.3	S-11: 0-2": No recovery.				
							2-12": Brown, Silty CLAY.				
11	S-12	11-12				0.4	S-12: Brown, Silty CLAY.		SILTY CLAY		
12											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-5

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-5** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/18/2018
Finish Date: 10/18/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.4	S-13: Brown, Silty CLAY.		SILTY CLAY	
	S-14	13-14				0.5	S-14: 0-2": Brown, Silty CLAY. 2-12": Tan, fine SAND.			13.2
14	S-15	14-15				0.4	S-15: Tan, fine SAND, trace Silt.			
15	C-4	15-20	60	45		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.4	S-17: 0-3": No recovery. 3-12": Tan, fine SAND.		SAND	
17	S-18	17-18				0.3	S-18: Tan, fine SAND.			
18	S-19	18-19			18-19	0.3	S-19: 0-5": Tan, fine SAND. 5-12": Tan, fine to coarse SAND, some Gravel.			
19	S-20	19-20				0.3	S-20: 0-1": Brown, Silty CLAY. 1-4": Tan, fine to coarse SAND, some Gravel. 4-5": Brown, Silty CLAY.		SILTY CLAY SAND SILTY CLAY	19 19.1 19.3 19.4
20							5-12": Tan, fine to coarse SAND, some Gravel. End of exploration at 20 feet.	2	SAND	20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-5

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-6** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	30		-	C-1:	1	TOPSOIL	0.4	
	S-1	0-1				3.2	S-1: 0-5": Dark brown, TOPSOIL.				
1							5-10": Tan-orange, fine SAND, little Silt.				
	S-2	1-2				2.8	10-12": Tan, fine SAND.				No Equipment Installed
							S-2: Tan, fine SAND.				
2											
	S-3	2-3				0.6	S-3: 0-6": Tan, fine SAND.				
							6-12": No recovery.				
3											
	S-4	3-4				NA	S-4: No recovery.		SAND		
4											
	S-5	4-5				NA	S-5: No recovery.				
5											
	C-2	5-10	60	52		-	C-2:				
	S-6	5-6				0.6	S-6: 0-8": No recovery.				
							8-12": Tan, fine SAND, trace Silt.				
6					7-8						
	S-7	6-7				1.5	S-7: 0-4": Tan, fine SAND, trace Silt.			6.3	
							4-5": Dark brown, TOPSOIL.		TOPSOIL	6.4	
							5-7": Tan, fine SAND, trace Silt.		SAND	6.9	
7											
	S-8	7-8				0.6	7-11": Tan, fine SAND.		SILT AND SAND	7.3	
							11-12": Brown, SILT and SAND.				
							S-8: 0-3": Brown, SILT and SAND.				
8							3-9": Tan, fine SAND.				
	S-9	8-9				0.7	9-12": Tan, fine SAND (0-1" lenses of tan-orange, Silty SAND).				
9							S-9: Tan, fine SAND (0-1" lenses of tan-orange, Silty				
	S-10	9-10				0.8	SAND).				
							S-10: Tan, fine SAND (0-1" lenses of tan-orange, Silty SAND).		SAND		
10											
	C-3	10-15	60	48		-	C-3:				
	S-11	10-11				NA	S-11: No Recovery.				
11											
	S-12	11-12				0.5	S-12: Tan, fine SAND.				
12											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-6

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-6** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.4	S-13: Tan, fine SAND.			
	S-14	13-14				0.4	S-14: Tan, fine SAND.			
14	S-15	14-15				0.4	S-15: Tan, fine SAND.		SAND	
15	C-4	15-20	60	57	15-16	-	C-4:			
	S-16	15-16				0.4	S-16: 0-3" No recovery.			
							3-9": Tan, fine SAND.			15.8
16	S-17	16-17				0.4	9-12": Brown Silty CLAY. S-17: Brown, Silty CLAY.			
17	S-18	17-18				0.5	S-18: Brown, Silty CLAY.			
18	S-19	18-19				0.5	S-19: Brown, Silty CLAY.		SILTY CLAY	
19	S-20	19-20				0.5	S-20: Brown, Silty CLAY.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-6

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-7** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/18/2018 **Finish Date:** 10/18/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	42		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				0.7	S-1: 0-4": Dark brown, TOPSOIL. 4-12": Tan, fine SAND, little Silt.			
1	S-2	1-2				0.6	S-2: 0-5": Tan, fine SAND, little Silt. 5-9": Tan, fine SAND. 9-12": Brown, SILT, some fine Sand.		SAND 1.8	No Equipment Installed
2	S-3	2-3			2-3	0.8	S-3: 0-5": Tan, fine SAND. 5-12": Brown, CLAY.		2 SILT SAND 2.4	
3	S-4	3-4				0.7	S-4: 0-3": Brown, SILT and SAND. 3-6": Tan, fine SAND. 6-12": No recovery.		CLAY 3 SILT AND SAND 3.3	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	48		-	C-2:		SAND	
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				0.6	S-7: 0-7": Tan, fine SAND, little Silt. 7-8": Dark brown, TOPSOIL. 8-12": Tan, fine SAND (0-1" lenses of tan-orange, fine		6.6 6.7	
7	S-8	7-8				0.7	SAND, little Silt). S-8: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).		TOPSOIL	
8	S-9	8-9				1.0	S-9: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).			
9	S-10	9-10				1.0	S-10: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).		SAND	
10	C-3	10-15	60	45		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				0.3	S-12: 0-3": No recovery. 3-12": Tan, fine SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-7

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-7** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/18/2018
Finish Date: 10/18/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13			12-13	0.5	S-13: Tan, fine SAND.			
	S-14	13-14				0.4	S-14: Tan, fine SAND.		SAND	
14	S-15	14-15				0.4	S-15: Tan, fine SAND.			
15	C-4	15-20	60	60		-	C-4:			15.2
	S-16	15-16				0.5	S-16: 0-2": Tan, fine SAND. 2-12": Brown, CLAY.			
16	S-17	16-17				0.7	S-17: Brown, CLAY.			
17	S-18	17-18				0.7	S-18: Brown, CLAY.		CLAY	
18	S-19	18-19				0.4	S-19: Brown, CLAY.			
19	S-20	19-20				0.6	S-20: Brown, CLAY.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-7

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-8** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/18/2018 **Finish Date:** 10/18/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1		TOPSOIL		
	S-1	0-1				0.3	S-1: 0-6": Dark brown, TOPOSOIL.				0.5	
1							6-12": Tan-orange, fine to medium SAND, little Silt.					
	S-2	1-2				0.5	S-2: 0-5": Tan-orange, fine to medium SAND, little Silt.			SAND		No Equipment Installed
							5-7": Tan, fine to medium SAND.				1.6	
2							7-12": Brown, Silty CLAY.			SILTY CLAY	2	
	S-3	2-3				0.6	S-3: 0-6": Tan, fine to medium SAND.					
							6-9": Tan-orange, fine to medium SAND, little Silt.			SAND		
3							9-12": Brown, Silty CLAY.				2.8	
	S-4	3-4				NA	S-4: No recovery.					
										SILTY CLAY		
4												
	S-5	4-5				NA	S-5: No recovery.				4.3	
5												
	C-2	5-10	60	55		-	C-2:			SAND		
	S-6	5-6				0.8	S-6: 0-5": No recovery.					
							5-10": Tan-orange, fine to medium SAND.				5.8	
6										TOPSOIL	5.9	
	S-7	6-7			6-7	0.8	10-11": Dark brown, TOPSOIL.				6	
							11-12": Tan, fine to medium SAND.			SAND		
							S-7: 0-7": Brown, Silty CLAY.				6.6	
7										SILTY CLAY		
	S-8	7-8				0.9	7-12": Tan, fine to medium SAND, little Silt.					
							S-8: Tan, fine to medium SAND, little Silt.					
8												
	S-9	8-9				0.7	S-9: Tan, fine to medium SAND, little Silt.					
9												
	S-10	9-10				0.6	S-10: Tan, fine to medium SAND, little Silt.					
										SAND		
10												
	C-3	10-15	60	48		-	C-3:					
	S-11	10-11				NA	S-11: No recovery.					
11												
	S-12	11-12				0.5	S-12: Tan, fine to medium SAND.					
12												

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-8

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-8** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/18/2018
Finish Date: 10/18/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
13	S-13	12-13				0.5	S-13: Tan, fine to medium SAND.		
	S-14	13-14			13-14	0.6	S-14: Tan, fine to medium SAND.		
14	S-15	14-15				0.5	S-15: Tan, fine to medium SAND.		SAND
15	C-4	15-20	60	50		-	C-4:		
	S-16	15-16				0.5	S-16: 0-10": No recovery.		15.4
16	S-17	16-17				0.8	10-12": Brown, Silty CLAY. S-17: Brown, Silty CLAY.		
17	S-18	17-18				0.9	S-18: Brown, Silty CLAY.		SILTY CLAY
18	S-19	18-19				0.8	S-19: Brown, Silty CLAY.		
19	S-20	19-20				0.3	S-20: Tan, fine to medium SAND.		19 SAND
20							End of exploration at 20 feet.	2	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-8

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-9** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/18/2018 **Finish Date:** 10/18/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1		TOPSOIL		
	S-1	0-1				ND	S-1: 0-6": Dark brown, TOPSOIL.				0.5	
1							6-12": Brown, fine SAND, little Silt.					
	S-2	1-2				0.2	S-2: Tan, fine to medium SAND.					No Equipment Installed
										SAND		
2					2-3							
	S-3	2-3				0.1	S-3: 0-6": Tan, fine to medium SAND.					
							6-12": Brown, Silty CLAY.				2.5	
3												
	S-4	3-4				NA	S-4: No recovery.					
										SILTY CLAY		
4												
	S-5	4-5				NA	S-5: No recovery.					
											4.5	
5												
	C-2	5-10	60	48		-	C-2:					
	S-6	5-6				NA	S-6: No recovery.					
										SAND		
6												
	S-7	6-7				ND	S-7: 0-5": Tan, fine SAND, trace Silt.					
							5-8": Tan, fine SAND, little Silt.				6.7	
							8-9": Dark brown, TOPSOIL.				6.8	
7										TOPSOIL		
	S-8	7-8				ND	9-12": Brown-orange, fine SAND, some Silt.					
							S-8: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).					
8												
	S-9	8-9				ND	S-9: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).					
9												
	S-10	9-10				ND	S-10: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).			SAND		
10												
	C-3	10-15	60	44		-	C-3:					
	S-11	10-11				NA	S-11: No recovery.					
11												
	S-12	11-12				ND	S-12: 0-4": No recovery.					
							4-12": Tan, fine SAND.					
12												

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-9

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-9** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/18/2018
Finish Date: 10/18/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				ND	S-13: Tan, fine SAND.			
	S-14	13-14				ND	S-14: Tan, fine SAND.			
14	S-15	14-15				ND	S-15: Tan, fine SAND.		SAND	
15	C-4	15-20	60	42		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.2	S-17: 0-6": No recovery. 6-10": Tan-gray, fine SAND, little Silt. 10-12": Brown with gray mottling, Silty CLAY.			16.8
17	S-18	17-18			17-18	0.9	S-18: 0-7": Brown with gray mottling, Silty CLAY. 7-12": Tan-gray, fine SAND, little Silt.		SILTY CLAY	17.6
18	S-19	18-19				0.2	S-19: Brown, Silty CLAY.		SAND	18
19	S-20	19-20				0.4	S-20: Brown, Silty CLAY.		SILTY CLAY	
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-9

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-10** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/16/2018 **Finish Date:** 10/16/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	48		ND	C-1:	1		
	S-1	0-1				0.1	S-1: 0-10": Dark brown, TOPSOIL. 10-12": Tan, fine SAND, little Silt.		TOPSOIL 0.8	
1	S-2	1-2				0.2	S-2: Tan, fine SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.2	S-3: 0-2": Tan, fine SAND, little Silt. 2-10": Light tan, fine SAND. 10-12": Brown, SILT, trace fine Sand.		SAND 2.8	
3	S-4	3-4			3-4	0.3	S-4: 0-10": Brown, SILT, trace fine Sand. 10-12": Light tan, fine SAND.		SILT 3.8	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	48		ND	C-2:		SAND	
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				0.4	S-7: 0-4": Tan-orange, fine SAND, little Silt. 4-6": Dark brown, TOPSOIL. 6-12": Light tan, fine SAND.		6.3 TOPSOIL 6.5	
7	S-8	7-8				0.5	S-8: Light tan, fine SAND.			
8	S-9	8-9				0.1	S-9: Light tan, fine SAND.		SAND	
9	S-10	9-10				0.6	S-10: 0-2": Brown, CLAY & SILT. 2-12": Tan, fine SAND.		9 CLAY & SILT 9.2	
10	C-3	10-15	60	50		ND	C-3:			
	S-11	10-11				NA	S-11: 0-10": No recovery. 10-12": Tan, fine SAND.		SAND	
11	S-12	11-12				0.6	S-12: 0-10": Tan, fine SAND. 10-12": Tan-orange, fine SAND, little Silt.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-10

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-10** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/16/2018 **Finish Date:** 10/16/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
13	S-13	12-13				0.7	S-13: Tan-orange, fine SAND, little Silt.				
	S-14	13-14			13-14	0.3	S-14: 0-9": Tan-orange, fine SAND, little Silt. 9-12": Brown, Silty CLAY.			SAND	
14											13.8
	S-15	14-15				0.2	S-15: Brown, Silty CLAY.				
15	C-4	15-20	60	32		ND	C-4:			SILTY CLAY	
	S-16	15-16				NA	S-16: No recovery.				
16	S-17	16-17				NA	S-17: No recovery.				16.2
17	S-18	17-18				-	S-18: 0-4": No recovery. 4-12": Tan, fine to coarse SAND, some Gravel.				
18	S-19	18-19				-	S-19: Tan, fine to coarse SAND, some Gravel.			SAND	
19	S-20	19-20				-	S-20: Tan, fine to medium SAND.				
20							End of exploration at 20 feet.	2			20
21											
22											
23											
24											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-10

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-11** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36	0-1	-	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				66.2	S-1: 0-4": Dark brown, TOPSOIL.			
1							4-7": Tan, fine SAND, little Silt.			
	S-2	1-2				23.5	7-12": Tan, fine to medium SAND.			No Equipment Installed
							S-2: Tan, fine to medium SAND.			
2										
	S-3	2-3				20.8	S-3: Fine to medium SAND.			
3										
	S-4	3-4				NA	S-4: No recovery.			
									SAND	
4										
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	48		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6										
	S-7	6-7				2.8	S-7: 0-10": Tan, fine to medium SAND.			
							10-11": Dark brown, TOPSOIL.			
							11-12": Tan, fine to medium SAND (lens of orange, fine to		6.8	
7	S-8	7-8				1.7	medium SAND, trace Silt).		TOPSOIL 6.9	
							S-8: Tan, fine to medium SAND (lens of orange, fine to			
							medium SAND, trace Silt).			
8										
	S-9	8-9				0.9	S-9: Tan, fine to medium SAND (lens of orange, fine to			
							medium SAND, trace Silt).			
9										
	S-10	9-10				0.6	S-10: Tan, fine to medium SAND (lens of orange, fine to			
							medium SAND, trace Silt).		SAND	
10										
	C-3	10-15	60	46		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11										
	S-12	11-12				7.2	S-12: 0-2": No recovery.			
							2-12": Tan, fine to medium SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-11

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-11** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
13	S-13	12-13			12-13	11.9	S-13: Tan, fine to medium SAND.		SAND
	S-14	13-14				1.2	S-14: Brown, Silty CLAY.		13
14	S-15	14-15				0.7	S-15: Brown, Silty CLAY.		SILTY CLAY
15	C-4	15-20	60	36		-	C-4:		
	S-16	15-16				NA	S-16: No recovery.		
16	S-17	16-17				NA	S-17: No recovery.		16
17	S-18	17-18				0.3	S-18: 0-4": Tan, fine to medium SAND. 4-12": Brown, Silty CLAY.		SAND 17.3
18	S-19	18-19				0.3	S-19: Tan, fine to medium SAND.		SILTY CLAY 18.3
19	S-20	19-20				-	S-20: 0-3": Brown, Silty CLAY. 3-12": Tan, fine to medium SAND.		SAND
20							End of exploration at 20 feet.	2	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-11

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-12** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				-	S-1: 0-5": Dark brown, TOPSOIL.			
1							5-12": Tan-orange, fine SAND, some Silt, some Organics.			
	S-2	1-2				-	S-2: Tan, fine SAND.		SAND	No Equipment Installed
2					2-3				2	
	S-3	2-3				-	S-3: 0-7": Brown, SILT and SAND.		SILT AND SAND 2.6	
							7-12": Tan, fine SAND.			
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5				NA	S-5: No recovery.			
									SAND	
5	C-2	5-10	60	48		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				1.2	S-7: 0-7": Tan, fine SAND.			
							7-9": Dark brown, TOPSOIL.		6.6	
							9-12": Tan, fine SAND (0-1" lenses of tan-orange, SAND,		TOPSOIL 6.8	
7	S-8	7-8				0.4	little Silt).			
							S-8: Tan, fine SAND (0-1" lenses of tan-orange, SAND, little Silt).			
8	S-9	8-9				0.2	S-9: 0-4": Tan, fine SAND (0-1" lenses of tan-orange, SAND, little Silt).			
							4-12": Tan, fine SAND.			
9	S-10	9-10				0.1	S-10: Tan, fine SAND (0-1" lenses of tan-orange, SAND, little Silt).		SAND	
10	C-3	10-15	60	48		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				0.3	S-12: Tan, fine SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-12

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-12** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.3	S-13: Tan, fine SAND.			
	S-14	13-14				0.3	S-14: Tan, fine SAND.		SAND	
14	S-15	14-15				0.2	S-15: 0-9": Tan, fine SAND. 9-12": Brown, SAND, little Silt.			
15	C-4	15-20	60	58	15-16	-	C-4:			15.3
	S-16	15-16				0.4	S-16: 0-2": No recovery. 2-4": Tan, fine SAND.			
16	S-17	16-17				0.4	4-12": Brown, Silty CLAY. S-17: Brown, Silty CLAY.			
17	S-18	17-18				0.5	S-18: Brown, Silty CLAY.		SILTY CLAY	
18	S-19	18-19				0.4	S-19: 0-5": Brown, Silty CLAY. 5-12": Tan, fine SAND.			18.4
19	S-20	19-20				0.1	S-20: Tan, fine SAND.		SAND	
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-12

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-13** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	30		ND	C-1:	1	TOPSOIL 0.5	
	S-1	0-1				ND	S-1: 0-6": Dark brown, TOPSOIL.			
1							6-12": Brown-orange, fine SAND, some Silt.			
	S-2	1-2				0.1	S-2: Tan-orange, fine SAND, little Silt.		SAND	No Equipment Installed
2									2	
	S-3	2-3				0.1	S-3: 0-3": Brown, SILT and SAND.		SILT AND SAND 2.3	
							3-6": Brown, SILT, little fine Sand.			
3							6-12": No recovery.			
	S-4	3-4				NA	S-4: No recovery.		SILT	
4									3.8	
	S-5	4-5				NA	S-5: No recovery.		SAND	
5					5-6					
	C-2	5-10	60	60		ND	C-2:		5.3	
	S-6	5-6				0.3	S-6: 0-2": Tan-orange, fine SAND, little Silt.		TOPSOIL 5.8	
							2-4": Brown-orange, fine SAND, some Silt.			
6							4-9": Dark brown, TOPSOIL.		SILT 6.2	
	S-7	6-7				0.1	9-12": Brown, SILT, little fine Sand.		SAND 6.3	
							S-7: 0-3": Brown, SILT, little fine Sand.		6.4	
7							3-4": Tan-orange, fine SAND, little Silt.		SILTY CLAY 6.7	
	S-8	7-8				ND	4-5": Brown, Silty CLAY.		SAND 7	
							5-8": Tan-orange, fine SAND, little Silt.		SILTY CLAY	
8							8-12": Brown, Silty CLAY.			
	S-9	8-9				0.1	S-8: 0-4": Tan-orange, fine SAND, some Silt.			
							4-12": Tan, fine SAND.			
9							S-9: Tan, fine SAND (0-1.5" lenses of tan-orange, fine			
	S-10	9-10				0.1	SAND, little Silt).			
							S-10: Tan, fine SAND (0-1.5" lenses of tan-orange, fine		SAND	
10							SAND, little Silt).			
	C-3	10-15	60	48		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11										
	S-12	11-12				0.3	S-12: Tan, fine SAND (0-1.5" lenses of tan-orange, fine			
							SAND, little Silt).			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-13

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-13** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13			13-14	0.3	S-13: 0-2": Tan, fine SAND (0-1.5" lenses of tan-orange, fine SAND, little Silt). 2-12": Tan, fine SAND.		SAND	
	S-14	13-14				0.2	S-14: 0-10": Tan, fine SAND. 10-12": Brown, Silty CLAY.			13.8
14	S-15	14-15				0.1	S-15: Brown, Silty CLAY.		SILTY CLAY	
15	C-4	15-20	60	53		-	C-4:			15.3
	S-16	15-16				0.1	S-16: 0-7": No recovery. 7-9": Tan, fine SAND.		SAND	15.8
16	S-17	16-17				0.2	9-12": Brown-gray, SILT & CLAY, little fine Sand. S-17: Brown, Silty CLAY.		SILT & CLAY	16
17	S-18	17-18				0.1	S-18: 0-7": Brown, Silty CLAY. 7-12": Tan, fine SAND.		SILTY CLAY	17.6
18	S-19	18-19				0.1	S-19: 0-2": Tan, fine SAND. 2-8": Tan-brown, fine to coarse SAND, little Silt, little Gravel. 8-12": Tan, fine SAND.		SAND	
19	S-20	19-20				0.2	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-13

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-14** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
0	C-1	0-5	60	31		-	C-1:	1	TOPSOIL	0.5	No Equipment Installed
	S-1	0-1				0.8	S-1: 0-6": Dark brown, TOPSOIL. 6-12": Tan-orange, fine to medium SAND, some Silt.				
1	S-2	1-2				0.8	S-2: 0-4": Tan-orange, fine to medium SAND, some Silt. 4-12": Tan, fine to medium SAND, little Silt (Lens of tan-orange, fine to medium SAND, some Silt).				
2	S-3	2-3			2-3	0.7	S-3: 0-7": Tan, fine to medium SAND (Lens of tan-orange, fine to medium SAND, some Silt). 7-12": No recovery.				
3	S-4	3-4				NA	S-4: No recovery.		SAND		
4	S-5	4-5				NA	S-5: No recovery.				
5	C-2	5-10	60	58		-	C-2:				
	S-6	5-6				0.6	S-6: 0-2": No recovery. 2-6": Tan-orange, fine to coarse SAND, some Silt.				
6	S-7	6-7				0.6	6-9": Tan, fine to medium SAND, little Silt. 9-12": Brown, fine to medium SAND, some Silt. S-7: 0-1": Dark brown, TOPSOIL. 1-6": Brown, Silty CLAY.		TOPSOIL SILTY CLAY SAND	6 6.1 6.5 6.8	
7	S-8	7-8				0.5	6-9": Tan, fine to medium SAND, little Silt. 9-12": Brown, Silty CLAY.		SILTY CLAY	7.4	
8	S-9	8-9				0.6	S-8: 0-5": Brown, Silty CLAY. 5-6": Tan-orange, fine to medium SAND, some Silt. 6-12": Tan, fine to medium SAND, little Silt (lens of tan-orange, fine to medium SAND, some Silt).				
9	S-10	9-10				0.6	S-9: Tan, fine to medium SAND, little Silt (lens of tan-orange, fine to medium SAND, some Silt).				
10	C-3	10-15	60	42		-	S-10: Tan, fine to medium SAND, little Silt (Lens of tan-orange, fine to medium SAND, some Silt). C-3:		SAND		
	S-11	10-11				NA	S-11: No recovery.				
11	S-12	11-12				0.2	S-12: 0-6": No recovery. 6-12": Tan, fine to medium SAND, little Silt.				
12											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-14

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-14** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-13	12-13				0.6	S-13: Tan, fine to medium SAND, little Silt.			
13	S-14	13-14			13-14	0.9	S-14: 0-7": Tan, fine to medium SAND, little Silt. 7-12": Brown, Silty CLAY.		SAND	13.6
14	S-15	14-15				0.8	S-15: Brown, Silty CLAY.			
15	C-4	15-20	60	44		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.		SILTY CLAY	
16	S-17	16-17				0.6	S-17: 0-4": No recovery. 4-12": Brown, Silty CLAY.			
17	S-18	17-18				0.6	S-18: 0-8": Brown, Silty CLAY. 8-12": Tan, fine to medium SAND, little Silt.			17.7
18	S-19	18-19				0.7	S-19: 0-8": Tan, fine to medium SAND, little Silt. 8-10": Tan-orange, fine to medium SAND, some Silt. 10-12": Tan, fine to medium SAND, trace Gravel.			
19	S-20	19-20				0.8	S-20: Tan, fine to medium SAND, little Silt.		SAND	
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-14

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-15** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	30		-	C-1:	1	TOPSOIL	0.4	
	S-1	0-1				0.3	S-1: 0-5": Dark brown, TOPSOIL.				
1					1-2		5-12": Tan-orange, fine to medium SAND, little Silt.				
	S-2	1-2				0.2	S-2: 0-5": Tan and orange, fine to medium SAND, little Silt.		SAND		No Equipment Installed
							5-12": Tan, fine to medium SAND, some Silt.				
2										2	
	S-3	2-3				0.3	S-3: 0-6": Brown, Silty CLAY.				
							6-12": No recovery.				
3											
	S-4	3-4				NA	S-4: No recovery.		SILTY CLAY		
4											
	S-5	4-5				NA	S-5: No recovery.			4.3	
5											
	C-2	5-10	60	48		-	C-2:				
	S-6	5-6				NA	S-6: No recovery.		SAND		
6											
	S-7	6-7				0.3	S-7: 0-7": Tan, fine to medium SAND, little Silt.				
							7-8": Dark brown, TOPSOIL.			6.6	
							8-12": Tan, fine to medium SAND, little Silt.		TOPSOIL	6.7	
7	S-8	7-8				0.3	S-8: Tan, fine to medium SAND, little Silt.				
8											
	S-9	8-9				0.2	S-9: Tan, fine to medium SAND, little Silt.				
									SAND		
9											
	S-10	9-10				0.3	S-10: Tan, fine to medium SAND, little Silt.				
10											
	C-3	10-15	60	48		-	C-3:				
	S-11	10-11				NA	S-11: No recovery.			10.5	
11					11-12						
	S-12	11-12				0.3	S-12: Brown, Silty CLAY.		SILTY CLAY		
12											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-15

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-15** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.3	S-13: Brown, Silty CLAY.		SILTY CLAY	
	S-14	13-14				0.2	S-14: 0-7": Brown, Silty CLAY. 7-12": Tan, fine to medium SAND, little Silt.			13.6
14	S-15	14-15				0.2	S-15: Tan, fine to medium SAND, little Silt.			
15	C-4	15-20	60	42		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.2	S-17: 0-6": No recovery. 6-12": Tan, fine SAND.			
17	S-18	17-18				0.2	S-18: Tan, fine to coarse SAND.		SAND	
18	S-19	18-19				0.2	S-19: Tan, fine to medium SAND.			
19	S-20	19-20				0.3	S-20: Tan, fine to medium SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-15

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-16
SHEET: 1 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/15/2018
Finish Date: 10/15/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				0.6	S-1: 0-5": Dark brown, TOPSOIL.			
1							5-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				0.8	S-2: Tan, fine SAND.			No Equipment Installed
2	S-3	2-3				0.6	S-3: Tan, fine SAND.			
3	S-4	3-4				NA	S-4: No recovery.		SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	60	5-6	-	C-2:			
	S-6	5-6				0.2	S-6: 0-8": Tan, fine SAND.			
							8-12": Brown, SAND and SILT.		5.7	
6									SAND AND SILT 6	
	S-7	6-7				0.1	S-7: Brown-gray, Silty CLAY.			
7	S-8	7-8				0.4	S-8: Brown-gray, Silty CLAY.			
8									SILTY CLAY	
	S-9	8-9				0.3	S-9: Brown-gray, Silty CLAY.			
9	S-10	9-10				0.6	S-10: 0-2": Brown-gray, Silty CLAY.		9.2	
							2-12": Tan, fine SAND.			
10	C-3	10-15	60	48		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11									SAND	
	S-12	11-12				0.5	S-12: Tan, fine SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-16

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-16** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/15/2018
Finish Date: 10/15/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.4	S-13: 0-9": Tan, fine SAND. 9-12": Tan, fine to coarse SAND, little Gravel.			
14	S-14	13-14				0.7	S-14: Tan, fine to coarse SAND, little Gravel.			
15	S-15	14-15				0.3	S-15: Tan, fine to medium SAND, little Gravel.			
	C-4	15-20	60	51		-	C-4:			
	S-16	15-16				0.8	S-16: 0-9": No recovery. 9-12": Tan, fine SAND.			
16	S-17	16-17			16-17	0.8	S-17: Tan, fine SAND.		SAND	
17	S-18	17-18				0.8	S-18: Tan, fine SAND.			
18	S-19	18-19				0.8	S-19: Tan, fine SAND.			
19	S-20	19-20				0.9	S-20: Tan, fine SAND.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-16

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-17** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.5	
	S-1	0-1				15.8	S-1: 0-6": Dark brown, TOPSOIL.			
1							6-10": Tan-orange, fine to medium SAND, little Silt.			
	S-2	1-2			1-2	1.3	10-12": Tan, fine SAND			No Equipment Installed
							S-2: Tan, fine SAND.			
2	S-3	2-3				0.4	S-3: Tan, fine SAND.			
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	54		-	C-2:			
	S-6	5-6				4.0	S-6: 0-6": No recovery.			
							6-10": Brown, fine to medium SAND, little Silt.			
6	S-7	6-7				1.3	10-12": Tan, fine SAND.		SAND	
							S-7: Tan, fine SAND.			
7	S-8	7-8				0.2	S-8: 0-2": Tan, fine SAND.			
							2-12": Tan, fine to medium SAND, little Silt.			
8	S-9	8-9				0.3	S-9: Tan, fine to medium SAND, little Silt.			
9	S-10	9-10				0.2	S-10: Tan, fine to medium SAND, little Silt.			
10	C-3	10-15	60	36		-	C-3:			
	S-11	10-11				0.3	S-11: 0-2": No recovery.			
							2-12": Tan, fine to medium SAND, little Silt.			
11	S-12	11-12			11-12	0.1	S-12: 0-3.5": Tan, fine to medium SAND, little Silt.			
							3.5-6": Black, fine to medium SAND, little Silt.		11.5	
12							6-12": Brown, Silty CLAY.		SILTY CLAY	

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-17

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-17** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.2	S-13: Brown, Silty CLAY.			
	S-14	13-14				0.2	S-14: Brown, Silty CLAY.			
14	S-15	14-15				0.1	S-15: Brown, Silty CLAY.		SILTY CLAY	
15	C-4	15-20	60	58		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.			16
17	S-18	17-18				0.3	S-18: 0-2": Brown, fine to medium SAND, some Silt. 2-12": Tan, fine to medium SAND, little Silt.			
18	S-19	18-19				0.2	S-19: Tan, fine to medium SAND, little Silt.		SAND	
19	S-20	19-20				0.2	S-20: Tan, fine to medium SAND, little Silt.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-17

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-18** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	38		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				0.4	S-1: 0-3": Dark brown-tan, TOPSOIL, some fine Sand.			
1							3-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				0.3	S-2: Tan, fine SAND.			No Equipment Installed
2	S-3	2-3				0.4	S-3: Tan, fine SAND.			
3	S-4	3-4				NA	S-4: 0-2": Tan, fine SAND.			
							2-12": No recovery.		SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	51		-	C-2:			
	S-6	5-6				0.5	S-6: 0-9": No recovery.			
							9-12": Tan, fine SAND.			
6	S-7	6-7				0.3	S-7: 0-4": Tan, fine SAND.		6.3	
							4-5": Dark brown, TOPSOIL.		TOPSOIL 6.4	
							5-12": Tan, fine SAND.			
7	S-8	7-8				0.4	S-8: Tan, fine SAND.			
8	S-9	8-9				0.1	S-9: Tan, fine SAND.			
9	S-10	9-10			9-10	0.2	S-10: Tan, fine SAND.		SAND	
10	C-3	10-15	60	45		0.3	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				0.4	S-12: 0-3": No recovery.			
							3-12": Tan, fine SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-18

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-18** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.6	S-13: Tan, fine SAND.			
	S-14	13-14				0.7	S-14: Tan, fine SAND.			
14	S-15	14-15				0.3	S-15: Tan, fine SAND.			
15									SAND	
	C-4	15-20	60	40		1.2	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17			16-17	1.1	S-17: 0-8": No recovery. 8-12": Tan, fine SAND.			
17	S-18	17-18				0.9	S-18: 0-5": Tan, fine SAND. 5-12": Brown, CLAY.			17.4
18	S-19	18-19				1.1	S-19: Brown, CLAY.			
19									CLAY	
	S-20	19-20				1.0	S-20: Brown, CLAY.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-18

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-19** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Colin McGarry **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/19/2018 **Finish Date:** 10/19/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1		
	S-1	0-1				0.2	S-1: Brown, TOPSOIL.		TOPSOIL	
1									1	
	S-2	1-2				0.3	S-2: Light brown-tan, fine SAND.			No Equipment Installed
2	S-3	2-3				0.2	S-3: Light brown-tan, fine SAND.			
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	48		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				0.2	S-7: Light brown-tan, fine SAND (2" lens of brown, SILT from 3-5").		SAND	
7	S-8	7-8				0.1	S-8: Light brown-tan, fine SAND.			
8	S-9	8-9			8-9	0.1	S-9: Light brown-tan, fine SAND.			
9	S-10	9-10				0.2	S-10: Light brown-tan, fine SAND.			
10	C-3	10-15	60	60		ND	C-3:			
	S-11	10-11				0.3	S-11: Light brown-tan, fine SAND.			
11	S-12	11-12				0.2	S-12: 0-4": Light brown-tan, fine SAND. 4-12": Brown,CLAY.		11.3 CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Colin McGarry

Boring No.:
MDOT-SB-19

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-19** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Colin McGarry
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.3	S-13: Brown, CLAY.			
	S-14	13-14				0.2	S-14: Brown, CLAY.			
14	S-15	14-15				0.2	S-15: Brown, CLAY.		CLAY	
15	C-4	15-20	60	43		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			15.8
16	S-17	16-17				0.3	S-17: 0-5": No recovery. 5-12": Tan, fine SAND.			
17	S-18	17-18				0.2	S-18: Tan, fine SAND.			
18	S-19	18-19				0.2	S-19: Tan, fine SAND, trace Gravel.		SAND	
19	S-20	19-20			19-20	0.3	S-20: Tan, fine SAND, trace Gravel.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Colin McGarry

Boring No.:
MDOT-SB-19

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-20
SHEET: 1 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Conor Madison/Collin McGary
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				0.7	S-1: 0-5": Dark brown, TOPSOIL.			
1							5-12": Tan-orange, fine to medium SAND, little Silt.			
	S-2	1-2				0.6	S-2: 0-5": Tan-orange, fine to medium SAND, little Silt.			No Equipment Installed
							5-12": Tan, fine to medium SAND, little Silt.			
2										
	S-3	2-3				0.7	S-3: Tan, fine to medium SAND, little Silt.			
3										
	S-4	3-4				NA	S-4: No recovery.		SAND	
4										
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	56	5-6	ND	C-2:			
	S-6	5-6				0.6	S-6: 0-4": No recovery.			
							4-8": Tan, fine to medium SAND, little Silt.		5.7	
6							8-9": Tan-orange, fine to medium SAND, some Silt.		TOPSOIL 5.8	
	S-7	6-7				0.9	9-10": Dark brown, TOPSOIL.		SILTY CLAY	
							10-12": Brown, Silty CLAY.		6.6	
7							S-7: 0-7": Brown, Silty CLAY.			
	S-8	7-8				0.8	7-12": Tan, fine to medium SAND, little Silt (lens of			
							tan-orange, fine to medium SAND, some Silt).			
8							S-8: Tan, fine to medium SAND, little Silt (lens of			
	S-9	8-9				0.8	tan-orange, fine to medium SAND, some Silt).			
							S-9: Tan, fine to medium SAND, little Silt (lens of		SAND	
9							tan-orange, fine to medium SAND, some Silt).			
	S-10	9-10				0.7	S-10: Tan, fine to medium SAND, little Silt (lens of			
							tan-orange, fine to medium SAND, some Silt).			
10										
	C-3	10-15	60	48		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.		10.5	
11										
	S-12	11-12				0.5	S-12: Brown, CLAY.		CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Conor Madison/Collin McGary

Boring No.:
MDOT-SB-20

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-20
SHEET: 2 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Conor Madison/Collin McGary
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/19/2018
Finish Date: 10/19/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.7	S-13: Brown, CLAY.		CLAY	
	S-14	13-14				0.6	S-14: 0-6": Brown, CLAY. 6-12": Tan, fine SAND.			13.5
14	S-15	14-15			14-15	0.8	S-15: 0-4": Tan, fine SAND. 4-12": Light brown, fine SAND and GRAVEL.		SAND	14.3
15	C-4	15-20	60	42		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.6	S-17: 0-6": No recovery. 6-12": Light brown, fine SAND and GRAVEL.		SAND AND GRAVEL	
17	S-18	17-18				0.5	S-18: Light brown, fine SAND and GRAVEL.			
18	S-19	18-19				0.8	S-19: Tan, fine SAND.			18
19	S-20	19-20				0.7	S-20: Tan, fine SAND.		SAND	
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison/Collin McGary

Boring No.:
MDOT-SB-20

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-21** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1		
	S-1	0-1				ND	S-1: 0-7": Dark brown, TOPSOIL.		TOPSOIL 0.6	
1							7-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				0.1	S-2: 0-4": Tan-orange, fine SAND, little Silt.			No Equipment Installed
							4-12": Tan, fine SAND.			
2										
	S-3	2-3				ND	S-3: Tan, fine SAND.			
3										
	S-4	3-4				NA	S-4: No recovery.			
									SAND	
4										
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	48	5-6	ND	C-2:	2		
	S-6	5-6					S-6: No recovery.			
6										
	S-7	6-7				0.1	S-7: 0-4": Tan, fine SAND.		6.3	
							4-6": Dark brown, TOPSOIL.		TOPSOIL 6.5	
							6-12": Tan, fine SAND.			
7										
	S-8	7-8				ND	S-8: Tan, fine SAND.			
8										
	S-9	8-9				0.2	S-9: Tan, fine SAND.			
9									SAND	
	S-10	9-10				0.2	S-10: Tan, fine SAND.			
10										
	C-3	10-15	60	52		ND	C-3:			
	S-11	10-11					S-11: 0-8": No recovery.			
							8-12": Tan, fine SAND.			
11					11-12					
	S-12	11-12				ND	S-12: 0-3": Tan-orange, fine SAND, little Silt.		11.3	
							3-12": Brown, Silty CLAY.		SILTY CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected from second Geoprobe core run.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-21

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-21** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.1	S-13: Brown, Silty CLAY.		SILTY CLAY	
	S-14	13-14				0.1	S-14: 0-4": Brown, Silty CLAY. 4-9": Tan-orange, fine SAND, little Silt. 9-12": Tan, fine to coarse SAND, little Gravel.			13.3
14	S-15	14-15				0.1	S-15: 0-6": Tan, fine to coarse SAND, little Gravel. 6-12": Tan-orange, fine SAND, little Silt.			
15	C-4	15-20	60	36		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.			
17									SAND	
	S-18	17-18				-	S-18: 0-10": Tan-orange, fine SAND, little Silt. 10-12": Tan, fine SAND.			
18	S-19	18-19				-	S-19: Tan, fine SAND.			
19	S-20	19-20				-	S-20: Tan, fine SAND.			
20										20
							End of exploration at 20 feet.	3		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-21

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-22** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/16/2018 **Finish Date:** 10/16/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	24	0-1	ND	C-1:	1		
	S-1	0-1				0.2	S-1: Brown-gray, Silty CLAY.			
1	S-2	1-2				1.2	S-2: Brown-gray, Silty CLAY.			No Equipment Installed
2	S-3	2-3				NA	S-3: No recovery.			
3	S-4	3-4				NA	S-4: No recovery.			
									SILTY CLAY	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	60		ND	C-2:			
	S-6	5-6				1.1	S-6: Brown, Silty CLAY.			
6	S-7	6-7				1.2	S-7: Brown, Silty CLAY.			
7	S-8	7-8				1.3	S-8: 0-3": Brown, Silty CLAY.		7.3	
							3-12": Tan, fine SAND.			
8	S-9	8-9				1.2	S-9: Tan, fine SAND.		SAND	
9	S-10	9-10				1.3	S-10: 0-3": Tan, fine SAND.		9.3	
							3-5": Brown, CLAY & SILT.		9.4 CLAY & SILT	
10							5-12": Tan, fine to medium SAND, little Gravel.			
	C-3	10-15	60	44		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.		SAND	
11	S-12	11-12				1.3	S-12: 0-4": No recovery.			
							4-12": Tan, fine to medium SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-22

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/22/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-22** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/16/2018 **Finish Date:** 10/16/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-13	12-13				1.3	S-13: 0-8": Tan, fine to medium SAND. 8-12": Tan, fine SAND.			
13	S-14	13-14				1.3	S-14: Tan, fine SAND.			
14	S-15	14-15				1.4	S-15: Tan, fine SAND.			
15	C-4	15-20	60	48		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17			16-17	0.8	S-17: Tan, fine SAND.		SAND	
17	S-18	17-18				0.9	S-18: Tan, fine SAND.			
18	S-19	18-19				0.7	S-19: 0-3": Tan, fine SAND. 3-9": Tan, fine SAND, little Silt. 9-12": Light tan, fine SAND.			
19	S-20	19-20				0.6	S-20: Light tan, fine SAND.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-22

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/22/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.:** MDOT-SB-23 **SHEET:** 1 of 2 **PROJECT NO:** 16.0062335.53 **REVIEWED BY:** SJB/NJC

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1		
	S-1	0-1				1.0	S-1: 0-7": Dark brown, TOPSOIL. 7-12": Tan-orange, fine SAND, little Silt.		TOPSOIL 0.6	
1	S-2	1-2			1-2	1.1	S-2: 0-7": Tan-orange, fine SAND, little Silt. 7-12": Tan, fine SAND.		SAND	No Equipment Installed
2	S-3	2-3				1.1	S-3: 0-6": Tan-orange, SILT and SAND. 6-12": Brown, Silty CLAY.		2 SILT AND SAND 2.5	
3	S-4	3-4				NA	S-4: No recovery.		SILTY CLAY	
4	S-5	4-5				NA	S-5: No recovery.		4	
5	C-2	5-10	60	60		ND	C-2:			
	S-6	5-6				0.7	S-6: Brown, CLAY.			
6	S-7	6-7				0.8	S-7: Brown, CLAY.			
7	S-8	7-8				0.6	S-8: Brown, CLAY.			
									CLAY	
8	S-9	8-9				0.7	S-9: Brown, CLAY.			
9	S-10	9-10				0.8	S-10: Brown, CLAY.			
10	C-3	10-15	60	33		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				NA	S-12: No recovery.		11.2	
									SAND	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-23

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-23** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.9	S-13: 0-3": No recovery. 3-6": Tan, fine SAND. 6-9": Brown, SILT and fine SAND.		SAND SILT AND SAND	12.5 12.8
	S-14	13-14				0.1	9-12": Tan, fine SAND. S-14: Tan, fine SAND.			
14	S-15	14-15				0.7	S-15: Tan, fine SAND.			
15	C-4	15-20	60	41		ND	C-4:		SAND	
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.6	S-17: 0-7": No recovery. 7-12": Brown-orange, fine SAND, some Silt.			
17	S-18	17-18			17-18	0.4	S-18: 0-7": Brown-orange, fine SAND, some Silt. 7-12": Brown-orange, SILT and fine SAND.			17.6
18	S-19	18-19				0.5	S-19: 0-5": Brown, SILT, little fine Sand. 5-12": Brown-orange, SILT, some fine Sand.		SILT AND SAND	18
19	S-20	19-20				0.6	S-20: 0-8": Brown-orange, SILT, some fine Sand. 8-12": Tan, fine SAND, little Silt.		SILT	19.7
20							End of exploration at 20 feet.	2	SAND	20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-23

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-24** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/22/2018
Finish Date: 10/22/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
0	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				10.9	S-1: 0-3": Dark brown, TOPSOIL.			
							3-12": Tan, fine to medium SAND, little Silt.			
1	S-2	1-2				ND	S-2: Tan, fine to medium SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.4	S-3: Tan, fine to medium SAND, little Silt.			
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5			4-5	NA	S-5: No recovery.	2	SAND	
5	C-2	5-10	60	57		-	C-2:			
	S-6	5-6				0.4	S-6: 0-3": No recovery.			
							3-12": Tan, fine to medium SAND, little Silt.			
6	S-7	6-7				2.8	S-7: Tan, fine to medium SAND, little Silt.			
7	S-8	7-8				0.2	S-8: 0-3": Tan, fine to medium SAND, little Silt.		7.3	
							3-5": Dark brown, TOPSOIL.		7.4 TOPSOIL	
							5-12": Tan, fine to medium SAND, little Silt.			
8	S-9	8-9				0.3	S-9: Tan, fine to medium SAND, little Silt.			
9	S-10	9-10				0.3	S-10: Tan, fine to medium SAND, little Silt.		SAND	
10	C-3	10-15	60	60	10-11	-	C-3:		10.3	
	S-11	10-11				0.2	S-11: 0-3": Tan, fine to medium SAND, little Silt.			
							3-12": Brown, Silty CLAY.			
11	S-12	11-12				0.2	S-12: Brown, Silty CLAY.		SILTY CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected from the second Geoprobe core run.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-24

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-24** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				ND	S-13: Brown, Silty CLAY.			
	S-14	13-14				ND	S-14: Brown, Silty CLAY.			
14	S-15	14-15				ND	S-15: Brown, Silty CLAY.		SILTY CLAY	
15	C-4	15-20	60	40		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			15.8
16	S-17	16-17				-	S-17: 0-8": No recovery. 8-12": Tan, fine to medium SAND, little Silt.			
17	S-18	17-18				-	S-18: Tan, fine to medium SAND, little Silt.			
18	S-19	18-19				ND	S-19: Tan, fine to medium SAND, little Silt.		SAND	
19	S-20	19-20				ND	S-20: Tan, fine to medium SAND, little Silt.			
20							End of exploration at 20 feet.	3		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-24

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-25** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	30		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				4.6	S-1: 0-3": Dark brown, TOPSOIL, some fine Sand, some Organics.			
1	S-2	1-2				2.7	3-12": Tan-gray, fine SAND. S-2: Tan-gray, fine SAND.			No Equipment Installed
2	S-3	2-3			2-3	6.1	S-3: 0-4": Tan-gray, fine SAND. 4-6": Brown-gray, fine SAND, some Silt. 6-12": No recovery.		SAND	
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5				NA	S-5: No recovery.		4.2	
5	C-2	5-10	60	51		ND	C-2:		TOPSOIL AND SAND	
	S-6	5-6				0.3	S-6: 0-9": No recovery. 9-12": Dark brown-tan, TOPSOIL and fine SAND, little Silt.			
6	S-7	6-7				ND	S-7: 0-6": Tan, fine SAND. 6-12": Tan-brown, fine SAND, little Silt.		6	
7	S-8	7-8				0.6	S-8: Tan, fine SAND, little Silt.		SAND	
8	S-9	8-9				0.3	S-9: 0-8": Brown, Silty CLAY. 8-12": Brown, CLAY.		8 SILTY CLAY	
9	S-10	9-10				0.3	S-10: Brown, CLAY.		8.7 CLAY	
10	C-3	10-15	60	60	10-11	ND	C-3:		10	
	S-11	10-11				5.7	S-11: 0-5": Tan, fine SAND, little Silt. 5-12": Tan-gray, fine SAND, little Silt.		SAND	
11	S-12	11-12				6.4	S-12: 0-2": Tan-gray, fine SAND, little Silt. 2-12": Brown, Silty CLAY.		11.2 SILTY CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-25

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-25** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.4	S-13: Brown, Silty CLAY.		SILTY CLAY	
	S-14	13-14				0.3	S-14: 0-3": Brown, Silty CLAY. 3-12": Tan, fine SAND.			13.3
14	S-15	14-15				ND	S-15: Tan, fine SAND.			
15	C-4	15-20	60	38		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: 0-10": No recovery. 10-12": Tan, fine SAND.		SAND	
17	S-18	17-18				0.2	S-18: Tan, fine SAND.			
18	S-19	18-19				0.3	S-19: Tan, fine SAND.			
19	S-20	19-20				0.2	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-25

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-26** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	31		-	C-1:	1	TOPSOIL 0.1	
	S-1	0-1				ND	S-1: 0-1":Dark brown, TOPSOIL.			
1							1-10": Tan, fine to medium SAND.			
	S-2	1-2				0.1	10-12": Brown, fine to medium SAND, little Silt.			No Equipment Installed
							S-2: 0-6": Brown, fine to medium SAND, little Silt.			
2							6-12": Tan, fine to medium SAND, little Silt.			
	S-3	2-3			2-3	0.1	S-3: 0-7": Tan, fine to medium SAND, little Silt.			
							7-12": No recovery.			
3										
	S-4	3-4				NA	S-4: No recovery.			
4										
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	48		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.		SAND	
6										
	S-7	6-7				0.1	S-7: 0-8": Tan, fine to medium SAND, little Silt.			
							8-12": Brown, fine SAND.			
7										
	S-8	7-8				0.1	S-8: Tan, fine to medium SAND, little Silt.			
8										
	S-9	8-9				0.2	S-9: Tan, fine to medium SAND, little Silt.			
9										
	S-10	9-10				0.2	S-10: Tan, fine to medium SAND, little Silt.			
10					10-11					
	C-3	10-15	60	48		-	C-3:	2		
	S-11	10-11				NA	S-11: No recovery.			
11										
	S-12	11-12				0.1	S-12: 0-2": Tan, fine to medium SAND, little Silt.		11.2	
							2-12": Brown, Silty CLAY.		SILTY CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected from the second Geoprobe core run.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-26

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-26** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/22/2018
Finish Date: 10/22/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.1	S-13: Brown, Silty CLAY.			
	S-14	13-14				0.2	S-14: Brown, Silty CLAY.		SILTY CLAY	
14	S-15	14-15				0.1	S-15: 0-2": Brown, Silty CLAY.			14.2
							2-12": Tan, fine to medium SAND, little Silt.			
15	C-4	15-20	60	48		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.1	S-17: Tan, fine to medium SAND, little Silt.			
17	S-18	17-18				0.1	S-18: Tan, fine to medium SAND, little Silt.		SAND	
18	S-19	18-19				0.1	S-19: Tan, fine to medium SAND, little Silt.			
19	S-20	19-20				0.1	S-20: Tan, fine to medium SAND, little Silt.			
20										20
							End of exploration at 20 feet.	3		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-26

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-27** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				0.4	S-1: 0-3": Dark brown, TOPOSOIL.			
1							3-12": Tan, fine to medium SAND, little Silt.			
	S-2	1-2				0.5	S-2: Tan, fine to medium SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.5	S-3: Tan, fine to medium SAND, little Silt.			
3	S-4	3-4				NA	S-4: No recovery.			
4									SAND	
	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	48		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				0.2	S-7: Tan, fine to medium SAND, little Silt.			
7	S-8	7-8				0.2	S-8: 0-3": Tan, fine to medium SAND, little Silt.		7.3	
							3-4": Dark brown, TOPSOIL.		TOPSOIL 7.4	
							4-12": Tan, fine to medium SAND, little Silt.			
8	S-9	8-9				0.3	S-9: Tan, fine to medium SAND, little Silt.			
									SAND	
9	S-10	9-10			9-10	0.3	S-10: 0-7": Tan, fine to medium SAND, little Silt.			
							7-12": Brown, Silty CLAY.		9.6	
10	C-3	10-15	60	48		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.		SILTY CLAY	
11	S-12	11-12				0.4	S-12: 0-2": Brown, Silty CLAY.		11.2	
							2-12": Tan, fine SAND.			
12									SAND	

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-27

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-27** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.4	S-13: 0-6": Tan, fine SAND. 6-12": Tan, fine to medium SAND, little Gravel.			
14	S-14	13-14				0.3	S-14: Tan, fine to medium SAND, little Gravel.			
15	S-15	14-15				0.5	S-15: Tan, fine to medium SAND, little Gravel.			
	C-4	15-20	60	48		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.5	S-17: Tan, fine to medium SAND, little Silt.		SAND	
17	S-18	17-18				0.4	S-18: Tan, fine to medium SAND, little Silt.			
18	S-19	18-19				0.4	S-19: Tan, fine to medium SAND, little Silt.			
19	S-20	19-20			19-20	0.4	S-20: Tan, fine to medium SAND, little Silt.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-27

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-28** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				ND	S-1: 0-4": Dark brown, TOPSOIL.			
1							4-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				ND	S-2: Tan, fine SAND.			No Equipment Installed
2	S-3	2-3				0.1	S-3: Tan, fine SAND.			
3	S-4	3-4				NA	S-4: No recovery.		SAND	
4	S-5	4-5			4-5	NA	S-5: No recovery.	2		
5	C-2	5-10	60	51		ND	C-2:			
	S-6	5-6				ND	S-6: 0-9": No recovery.			
6							9-12": Tan-orange, fine SAND, little Silt.			
	S-7	6-7				ND	S-7: 0-5": Tan-orange, fine SAND, little Silt.		6.4	
							5-7": Dark brown, TOPSOIL.		TOPSOIL 6.6	
7							7-12": Tan, fine SAND.			
	S-8	7-8				ND	S-8: Tan, fine SAND.			
8	S-9	8-9				ND	S-9: 0-6": Tan, fine SAND.			
							6-12": Tan-brown, fine to medium SAND, little Silt.		SAND	
9	S-10	9-10				0.1	S-10: Tan, fine SAND.			
10	C-3	10-15	60	55	10-11	-	C-3:		10.3	
	S-11	10-11				0.1	S-11: 0-5": No recovery.			
							5-12": Brown, Silty CLAY.			
11	S-12	11-12				ND	S-12: Brown, Silty CLAY.		SILTY CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected from the second Geoprobe core run.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-28

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-28** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				ND	S-13: Brown, Silty CLAY.		SILTY CLAY	13
	S-14	13-14				0.1	S-14: 0-4": Tan, fine SAND, little Silt. 4-12": Fine to coarse SAND, little Gravel.			
14	S-15	14-15				0.1	S-15: Fine to coarse SAND, little Gravel.			
15	C-4	15-20	60	43		-	C-4:			
	S-16	15-16				0.1	S-16: No recovery.			
16	S-17	16-17				ND	S-17: 0-5": No recovery. 5-12": Fine to medium SAND.		SAND	
17	S-18	17-18				ND	S-18: Fine to medium SAND.			
18	S-19	18-19				ND	S-19: Fine to medium SAND.			
19	S-20	19-20				0.1	S-20: Fine to medium SAND.			
20							End of exploration at 20 feet.	3		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-28

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-29
SHEET: 1 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/16/2018
Finish Date: 10/16/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	33		ND	C-1:	1	TOPSOIL 0.5	
	S-1	0-1				0.5	S-1: 0-6": Dark brown, TOPSOIL			
1							6-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				0.6	S-2: Tan-orange, fine SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.6	S-3: 0-9": Tan, fine SAND.			
							9-12": No recovery.			
3	S-4	3-4				NA	S-4: No recovery.			
									SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	51		ND	C-2:			
	S-6	5-6				0.7	S-6: 0-9": No recovery.			
							9-12": Dark brown, fine to medium SAND, little Silt.			
6	S-7	6-7				0.9	S-7: 0-3": Tan, fine SAND.			
							3-7": Brown, fine SAND, little Silt.		6.6	
							7-10": Dark brown, fine SAND and SILT.		SAND AND SILT 6.8	
7	S-8	7-8			7-8	0.9	10-12": Tan, fine SAND.		SAND 7	
							S-8: 0-2": Brown-orange, SAND and SILT.		SAND AND SILT 7.2	
							2-4": Tan, fine SAND.		SAND 7.3	
8	S-9	8-9				0.9	4-8": Brown-orange, SAND and SILT.		SAND AND SILT 7.7	
							8-12": Tan, fine SAND.			
							S-9: Tan, fine SAND.			
9	S-10	9-10				0.9	S-10: Tan, fine SAND.			
10									SAND	
	C-3	10-15	60	50		ND	C-3:			
	S-11	10-11				0.8	S-11: 0-10": No recovery.			
							10-12": Tan, fine SAND.			
11	S-12	11-12				0.6	S-12: Tan, fine SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-29

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-29** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/16/2018 **Finish Date:** 10/16/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13			12-13	0.6	S-13: 0-10": Tan, fine SAND. 10-12": Brown, SILT and SAND.		SAND	12.8
	S-14	13-14				0.8	S-14: Brown, Silty CLAY.		SILT AND SAND	13
14	S-15	14-15				0.6	S-15: Brown, Silty CLAY.			
15									SILTY CLAY	
	C-4	15-20	60	36		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.			16
17									SAND	
	S-18	17-18				1.2	S-18: 0-2": Tan, fine SAND, little Silt. 2-4": Brown, SILT and SAND. 4-12": Tan, fine SAND.		SILT AND SAND	17.2 17.3
18	S-19	18-19				1.2	S-19: Tan, fine SAND.			
19									SAND	
	S-20	19-20				1.1	S-20: 0-5": Tan, fine SAND. 5-7": Brown-orange, fine to medium SAND, some Silt. 7-12": Fine to coarse SAND, little Gravel.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-29

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-30** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	34		ND	C-1:	1		
	S-1	0-1				0.7	S-1: 0-7": Dark brown, TOPSOIL 7-12": Tan-orange, fine SAND, little Silt.		TOPSOIL 0.6	
1	S-2	1-2				0.3	S-2: 0-5": Tan-orange, fine SAND, little Silt. 5-12": Tan, fine SAND.			No Equipment Installed
2	S-3	2-3				0.1	S-3: 0-10": Tan, fine SAND. 10-12": No recovery.			
3	S-4	3-4				NA	S-4: No recovery.		SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	52		-	C-2:			
	S-6	5-6				0.3	S-6: 0-8": No recovery. 8-12": Tan, fine SAND.			
6	S-7	6-7				0.2	S-7: 0-4": Tan-orange, fine SAND, little Silt. 4-6": Dark brown, TOPSOIL. 6-12": Tan, fine SAND.		6.3 TOPSOIL 6.5	
7	S-8	7-8				0.1	S-8: Tan, fine SAND.		SAND	
8	S-9	8-9			8-9	0.4	S-9: 0-6": Tan, fine SAND. 6-10": Brown-gray, fine SAND, little Silt. 10-12": Brown, CLAY.		8.8	
9	S-10	9-10				0.1	S-10: Brown, CLAY.		CLAY	
10	C-3	10-15	60	60		-	C-3:		10	
	S-11	10-11				0.5	S-11: 0-5": Tan, fine SAND. 5-12": Tan-orange, fine SAND.		SAND	
11	S-12	11-12				0.6	S-12: 0-3": Tan, fine SAND. 3-4": Brown, Silty CLAY. 4-5": Tan, fine SAND.		11.3 SILTY CLAY 11.4 11.5 SAND 11.6	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-30

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-30** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/23/2018
Finish Date: 10/23/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-13	12-13				0.2	5-7": Brown, Silty CLAY.		SILTY CLAY	11
							7-10": Tan, fine SAND.		SAND	12
13							10-12": Brown, CLAY.		CLAY	
	S-14	13-14				0.3	S-13: Tan, fine SAND, little Silt.			
							S-14: Tan, fine SAND, little Silt.			
14										
	S-15	14-15				0.4	S-15: Tan, fine SAND, little Silt.			
15										
	C-4	15-20	60	40		0.3	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16										
	S-17	16-17				0.2	S-17: 0-8": No recovery.		SAND	
							8-12": Tan, fine SAND.			
17										
	S-18	17-18				0.3	S-18: Tan, fine SAND.			
18										
	S-19	18-19				0.1	S-19: Tan, fine SAND.			
19					19-20					
	S-20	19-20				ND	S-20: Tan, fine SAND.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-30

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-31** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/23/2018
Finish Date: 10/23/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	33		-	C-1:	1	TOPSOIL	0.3	
	S-1	0-1				2.2	S-1: 0-3": Dark brown, TOPSOIL.				
1							3-10": Brown, fine to medium SAND, little Silt.				
	S-2	1-2			1-2	1.0	10-12": Brown, fine to medium SAND, some Silt.				No Equipment Installed
							S-2: Brown, fine to medium SAND, some Silt.		SAND		
2											
	S-3	2-3				0.7	S-3: 0-6": Tan, fine SAND.				
							6-9": Brown, Silty CLAY.			2.5	
3							9-12": No recovery.				
	S-4	3-4				NA	S-4: No recovery.				
									SILTY CLAY		
4											
	S-5	4-5				NA	S-5: No recovery.				
5										4.9	
	C-2	5-10	60	36		-	C-2:				
	S-6	5-6				NA	S-6: No recovery.				
6											
	S-7	6-7				NA	S-7: No recovery.		SAND		
7											
	S-8	7-8			7-8	1.2	S-8: 0-4":Tan, fine to medium SAND.			7.3	
							4-6": Brown, Silty CLAY.		SILTY CLAY	7.5	
							6-12": Tan, fine SAND.		SAND		
8										8	
	S-9	8-9				1.2	S-9: Brown, Silty CLAY.				
9											
	S-10	9-10				1.0	S-10: Brown, Silty CLAY.				
									SILTY CLAY		
10											
	C-3	10-15	60	39		-	C-3:				
	S-11	10-11				NA	S-11: No recovery.				
										10.8	
11											
	S-12	11-12				0.8	S-12: 0-9": No recovery.				
							9-12": Brown, fine to medium SAND, some Silt.		SAND		
12											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-31

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-31
SHEET: 2 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/23/2018
Finish Date: 10/23/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
13	S-13	12-13				0.8	S-13: 0-6": Brown, fine to medium SAND, some Silt. 6-8": Brown, Silty CLAY. 8-12": Brown, fine to medium SAND, some Silt.			SAND SILTY CLAY	12.5 12.7
14	S-14	13-14				0.9	S-14: Brown, fine to medium SAND, some Silt.				
15	S-15	14-15				0.9	S-15: Tan, fine to medium SAND, little Silt.				
	C-4	15-20	60	41		-	C-4:				
16	S-16	15-16				NA	S-16: No recovery.				
17	S-17	16-17				0.9	S-17: 0-7": No recovery. 7-12": Tan, fine to medium SAND, little Silt.			SAND	
18	S-18	17-18				0.5	S-18: Tan, fine to medium SAND, little Silt.				
19	S-19	18-19				0.8	S-19: Tan, fine to medium SAND, little Silt.				
20	S-20	19-20				0.8	S-20: Tan, fine to medium SAND, little Silt.				20
21							End of exploration at 20 feet.	2			
22											
23											
24											

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-31

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-32** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1		
	S-1	0-1				2.1	S-1: 0-8": TOPSOIL. 8-12": Tan, fine to medium SAND, trace Silt.		TOPSOIL 0.7	
1	S-2	1-2				0.9	S-2: Tan, fine to medium SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.2	S-3: Tan, fine to medium SAND, little Silt.			
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5				NA	S-5: No recovery.		SAND	
5	C-2	5-10	60	41		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7			6-7	0.7	S-7: 0-7": No recovery. 7-12": Tan, fine to medium SAND, little Silt.			
7	S-8	7-8				6.0	S-8: 0-3": TOPSOIL. 3-12": Tan, fine to medium SAND, little Silt.		7 TOPSOIL 7.3	
8	S-9	8-9				1.2	S-9: Tan, fine to medium SAND, little Silt.			
9	S-10	9-10				0.8	S-10: Tan, fine to medium SAND, little Silt.			
10	C-3	10-15	60	42		-	C-3:		SAND	
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				0.7	S-12: 0-6": No recovery. 6-12": Tan, fine to medium SAND, little Silt.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-32

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-32** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13			12-13	0.6	S-13: Tan, fine to medium SAND, little Silt.		SAND	
	S-14	13-14				0.5	S-14: Brown, CLAY.			13
14	S-15	14-15				-	S-15: Brown, CLAY.		CLAY	
15	C-4	15-20	60	36		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.			16
17	S-18	17-18				0.4	S-18: 0-7": Brown, fine to medium SAND, some Silt. 7-12": Brown, CLAY.		SAND	17.6
18	S-19	18-19				0.6	S-19: 0-5": Brown, CLAY. 5-12": Tan, fine to medium SAND, little Silt.		CLAY	18.4
19	S-20	19-20				0.6	S-20: Tan, fine to medium SAND, little Silt.		SAND	
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-32

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-33** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.1	
	S-1	0-1				1.1	S-1: 0-1": Dark brown, TOPSOIL.			
1							1-7": Brown, fine to medium SAND, some Silt.			
	S-2	1-2				1.0	7-12": Tan, fine to medium SAND, little Silt.			No Equipment Installed
							S-2: Tan, fine to medium SAND, little Silt.			
2										
	S-3	2-3				0.9	S-3: Tan, fine to medium SAND, little Silt.			
3										
	S-4	3-4				NA	S-4: No recovery.			
									SAND	
4										
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	44		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6										
	S-7	6-7			6-7	0.9	S-7: 0-4": No recovery.			
							4-12": Brown, fine to medium SAND, some Silt.			
7									7	
	S-8	7-8				1.1	S-8: 0-1": Dark brown, TOPSOIL.		7.1 TOPSOIL 7.2	
							1-2": Tan, fine to medium SAND, little Silt.		SAND 7.3	
							2-3": Brown, Silty CLAY.		SILTY CLAY	
8										
	S-9	8-9				1.0	3-12": Tan, fine to medium SAND, little Silt.			
							S-9: Tan, fine to medium SAND, little Silt.			
9										
	S-10	9-10				1.0	S-10: Tan, fine to medium SAND, little Silt.			
									SAND	
10										
	C-3	10-15	60	36		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11										
	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-33

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-33** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.8	S-13: Tan, fine to medium SAND, little Silt.			
14	S-14	13-14				1.1	S-14: Tan, fine to medium SAND, little Silt.			
15	S-15	14-15				1.3	S-15: Tan, fine to medium SAND, little Silt.			
	C-4	15-20	60	36		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.		SAND	
17	S-18	17-18				0.8	S-18: Tan, fine to medium SAND, little Silt.			
18	S-19	18-19			18-19	1.0	S-19: Tan, fine to medium SAND, little Silt.			
19	S-20	19-20				0.8	S-20: Tan, fine to medium SAND, little Silt.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-33

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-34** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1		
	S-1	0-1				0.5	S-1: 0-8": Dark brown, TOPSOIL and gray, fine SAND, little Silt.		TOPSOIL AND SAND 0.7	
1	S-2	1-2				0.7	8-12": Brown-gray, fine SAND, some Silt. S-2: 0-7": Brown-gray, fine SAND, some Silt. 7-10": Tan-gray, fine SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.6	10-12": Tan-orange, fine SAND, little Silt. S-3: Tan-orange, fine SAND, little Silt.			
3	S-4	3-4				NA	S-4: No recovery.			
4	S-5	4-5			4-5	NA	S-5: No recovery.	2	SAND	
5	C-2	5-10	60	48		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				0.8	S-7: 0-6": Tan-gray, fine SAND, little Silt. 6-8": Dark brown, TOPSOIL.		6.5	
7	S-8	7-8				0.2	8-12": Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt). S-8: Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt).		TOPSOIL 6.7	
8	S-9	8-9				1.2	S-9: Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt).			
9	S-10	9-10				1.4	S-10: Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt).		SAND	
10	C-3	10-15	60	32		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected the second Geoprobe core run.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-34

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-34** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/24/2018
Finish Date: 10/24/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				1.0	S-13: 0-4": No recovery. 4-12" Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt).			
	S-14	13-14				1.1	S-14: Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt).			
14	S-15	14-15				1.2	S-15: Tan, fine SAND (0-1.5" lenses of fine SAND, little Silt).			
15	C-4	15-20	60	36	15-16	ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.		SAND	
17	S-18	17-18				1.7	S-18: 0-10": Tan-gray, fine SAND, little Silt. 10-12": Brown-gray, fine SAND, some Silt.			
18	S-19	18-19				1.4	S-19: 0-1": Brown-gray, fine SAND, some Silt. 1-12": Tan, fine SAND.			
19	S-20	19-20				1.3	S-20: Tan, fine SAND.			
20										20
							End of exploration at 20 feet.	3		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-34

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-35
SHEET: 1 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/22/2018
Finish Date: 10/22/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	40		ND	C-1:	1	TOPSOIL 0.5	
	S-1	0-1				0.3	S-1: 0-6": Dark brown, TOPSOIL, little fine Sand, little Silt.			
1							6-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				0.2	S-2: Tan, fine SAND.			No Equipment Installed
2										
	S-3	2-3				0.1	S-3: Tan, fine SAND.			
3									SAND	
	S-4	3-4				0.3	S-4: 0-4": Tan, fine SAND.			
							4-12": No recovery.			
4					4-5					
	S-5	4-5				NA	S-5: No recovery.	2		
5										
	C-2	5-10	60	60		ND	C-2:		5.3	
	S-6	5-6				0.4	S-6: 0-3": Tan-orange, fine SAND, little Silt.		TOPSOIL 5.5	
							3-6": Dark brown, TOPSOIL, little fine Sand.			
6	S-7	6-7				0.3	6-12": Brown, CLAY.			
							S-7: Brown, CLAY.			
7										
	S-8	7-8				0.2	S-8: Brown, CLAY.		CLAY	
8										
	S-9	8-9				0.3	S-9: 0-10": Brown, CLAY.			
							10-12": Tan, fine SAND.		8.8	
9	S-10	9-10				0.3	S-10: Tan, fine SAND.			
10										
	C-3	10-15	60	43		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.		SAND	
11										
	S-12	11-12				-	S-12: 0-5": No recovery.			
						0.2	5-12": Tan, fine SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil sample submitted for laboratory analyses were collected from the second Geoprobe core run.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-35

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-35** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/22/2018
Finish Date: 10/22/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
13	S-13	12-13				0.3	S-13: Tan, fine SAND.		
	S-14	13-14				0.3	S-14: Tan, fine SAND.		
14	S-15	14-15				0.2	S-15: Tan, fine SAND.		
15	C-4	15-20	60	46		-	C-4:		
	S-16	15-16				NA	S-16: No recovery.		
16	S-17	16-17				0.2	S-17: 0-2": No recovery. 2-12": Tan, fine SAND.		SAND
17	S-18	17-18				0.2	S-18: Tan, fine SAND.		
18	S-19	18-19			18-19	0.1	S-19: Tan, fine SAND.		
19	S-20	19-20				0.1	S-20: Tan, fine SAND.		
20							End of exploration at 20 feet.	3	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-35

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-36
SHEET: 1 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/16/2018
Finish Date: 10/16/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
0	C-1	0-5	60	36	0-1	ND	C-1:	1		
	S-1	0-1				0.9	S-1: 0-6": Dark brown, TOPSOIL.		TOPSOIL 0.5	
							6-12": Tan-orange, fine SAND, little Silt.			
1	S-2	1-2				1.1	S-2: 0-9": Tan-orange, fine SAND, little Silt.			No Equipment Installed
							9-12": Tan, fine SAND.			
2	S-3	2-3				1.0	S-3: Tan, fine SAND.			
3	S-4	3-4				NA	S-4: No recovery.			
									SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	46		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				1.3	S-7: 0-2": No recovery.			
							2-8": Tan, fine SAND.			
							8-10": Tan-orange, fine SAND, little Silt.		6.8	
7	S-8	7-8				1.3	10-12": Dark brown, TOPSOIL.		TOPSOIL 7	
							S-8: Tan, fine SAND.			
8	S-9	8-9				0.8	S-9: Tan, fine SAND.			
9									SAND	
	S-10	9-10			9-10	1.0	S-10: 0-2": Tan, fine SAND.			
							2-4": Tan, fine to coarse SAND, little Gravel.			
							4-6": Brown, fine to medium SAND, some Silt.			
10	C-3	10-15	60	56		ND	6-12": Tan, fine SAND.			
	S-11	10-11				0.4	C-3:		10.6	
							S-11: 0-4": No recovery.			
11							4-7": Tan, fine SAND.			
	S-12	11-12				1.0	7-12": Brown, CLAY & SILT.		CLAY & SILT	
							S-12: Brown, CLAY & SILT.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-36

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-36** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/16/2018 **Finish Date:** 10/16/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.6	S-13: Brown, CLAY & SILT.			
	S-14	13-14				1.0	S-14: Brown, CLAY & SILT.		CLAY & SILT	
14	S-15	14-15				1.0	S-15: 0-10": Brown, CLAY & SILT. 10-12": Tan, fine SAND.			14.8
15	C-4	15-20	60	41		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				-	S-17: 0-7": No recovery. 7-12": Tan, fine to coarse SAND, some Gravel.			
17	S-18	17-18				-	S-18: Tan, fine to coarse SAND, some Gravel.		SAND	
18	S-19	18-19				-	S-19: Light tan, fine SAND.			
19	S-20	19-20				-	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-36

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-37** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				ND	S-1: 0-4": Dark brown, TOPSOIL.			
							4-12": Tan-orange, fine SAND.			
1	S-2	1-2				ND	S-2: Tan-orange, fine SAND.			No Equipment Installed
2	S-3	2-3				ND	S-3: Tan, fine SAND.			
3	S-4	3-4			3-4	NA	S-4: No recovery.	2	SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	58		ND	C-2:			
	S-6	5-6				ND	S-6: 0-2": No recovery.			
							2-10": Tan-orange, fine SAND, little Silt.		5.8	
6	S-7	6-7				ND	10-12": Dark brown, TOPSOIL.		TOPSOIL 6	
							S-7: Brown, Silty CLAY.			
7	S-8	7-8				ND	S-8: Brown, Silty CLAY.		SILTY CLAY	
8	S-9	8-9				ND	S-9: 0-5": Brown, Silty CLAY.		8.4	
							5-12": Light tan, fine SAND.			
9	S-10	9-10				ND	S-10: Light tan, fine SAND.			
10	C-3	10-15	60	40		ND	C-3:		SAND	
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12			11-12	ND	S-12: 0-8": No recovery.			
							8-12": Tan, fine to medium SAND.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected from the second Geoprobe core run.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-37

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-37** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-13	12-13				ND	S-13: 0-2": Tan, fine to medium SAND. 2-12": Tan-orange, fine SAND, little Silt.			
13	S-14	13-14				ND	S-14: Tan, fine to medium SAND.			
14	S-15	14-15				ND	S-15: Tan, fine to medium SAND.			
15	C-4	15-20	60	38		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				ND	S-17: 0-10": No recovery. 10-12": Tan, fine SAND.		SAND	
17	S-18	17-18				ND	S-18: Tan, fine SAND.			
18	S-19	18-19				ND	S-19: Alternating layers of tan, fine SAND and tan-orange, fine SAND, little Silt.			
19	S-20	19-20				ND	S-20: Alternating layers of tan, fine SAND and tan-orange, fine SAND, little Silt.			
20										20
							End of exploration at 20 feet.	3		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-37

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-38** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/22/2018 **Finish Date:** 10/22/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				0.4	S-1: 0-3": Dark brown, TOPSOIL. 3-12": Tan, fine to medium SAND, some Silt.			
1	S-2	1-2				0.3	S-2: 0-9": Tan, fine to medium SAND, some Silt. 9-12": Brown, CLAY.		SAND	No Equipment Installed
									1.8	
2	S-3	2-3			2-3	0.3	S-3: Brown, CLAY.			
3	S-4	3-4				NA	S-4: No recovery.		CLAY	
									4	
4	S-5	4-5				NA	S-5: No recovery.			
5									SAND	
	C-2	5-10	60	60		-	C-2:			
	S-6	5-6				0.8	S-6: 0-6": Tan, fine to medium SAND, little Silt.		5.5	
							6-8": TOPSOIL.		TOPSOIL 5.7	
6	S-7	6-7				0.3	8-12": Tan, fine SAND. S-7: Brown, CLAY.		SAND 6	
7	S-8	7-8				0.4	S-8: Brown, CLAY.		CLAY	
8									8	
	S-9	8-9				0.3	S-9: Tan, fine to medium SAND, little Silt.			
9	S-10	9-10				0.3	S-10: Tan, fine to medium SAND, little Silt.			
10	C-3	10-15	60	36		-	C-3:		SAND	
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-38

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-38** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/22/2018
Finish Date: 10/22/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13			12-13	0.3	S-13: Tan, fine to medium SAND, little Silt.			
14	S-14	13-14				0.3	S-14: Tan, fine to medium SAND, little Silt.			
15	S-15	14-15				0.4	S-15: Tan, fine to medium SAND, little Silt.			
	C-4	15-20	60	36		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.		SAND	
17	S-18	17-18				0.3	S-18: Tan, fine to medium SAND, little Silt.			
18	S-19	18-19				0.3	S-19: Tan, fine to medium SAND, little Silt.			
19	S-20	19-20				0.2	S-20: Tan, fine to medium SAND, little Silt.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-38

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-39** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	45		-	C-1:	1		
	S-1	0-1				1.0	S-1: 0-7": Dark brown, TOPSOIL.		TOPSOIL 0.6	
1							7-9": Brown, fine to medium SAND, some Silt.			
	S-2	1-2				1.4	9-12": Brown, fine to medium SAND, little Silt.			No Equipment Installed
							S-2: Brown, fine to medium SAND, little Silt.			
2	S-3	2-3				1.0	S-3: Brown, fine to medium SAND, little Silt.			
3	S-4	3-4				1.1	S-4: 0-9": Brown, fine to medium SAND, little Silt.			
							9-12": No recovery.			
4									SAND	
	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	36		-	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				NA	S-7: No recovery.			
7	S-8	7-8			7-8	0.9	S-8: 0-1": Brown, fine to medium SAND, little Silt.		7.1	
							1-2": Brown, Silty CLAY.		SILTY CLAY 7.2	
							2-9": Brown, fine to medium SAND, some Silt.		SAND 7.7	
8	S-9	8-9				1.0	9-10": Brown, Silty CLAY.		SILTY CLAY 7.8	
							10-12": Brown, fine to medium SAND, some Silt.		SAND	
							S-9: 0-9": Brown, fine to medium SAND, some Silt.		8.8	
9							9-12": Brown, Silty CLAY.		SILTY CLAY 9	
	S-10	9-10				1.0	S-10: 0-3": Brown, CLAY.		CLAY 9.3	
							3-12": Tan, fine to medium SAND, some Silt.			
10	C-3	10-15	60	36		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11									SAND	
	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-39

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-39** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-13	12-13			12-13	0.8	S-13: Tan, fine to medium SAND, trace Silt.			
13									SAND	
	S-14	13-14				0.9	S-14: 0-7": Tan, fine to medium SAND, trace Silt.			
							7-12": Brown, fine to medium SAND and SILT.			13.6
14									SAND AND SILT	14
	S-15	14-15				0.9	S-15: 0-1": Tan, fine SAND.		SAND	14.1
							1-5": Brown, fine to medium SAND and SILT.		SAND AND SILT	14.4
							5-7": Tan, fine SAND.		SAND	14.6
15										14.8
	C-4	15-20	60	43		-	7-9": Brown, Silty CLAY.		SILTY CLAY	
	S-16	15-16				NA	9-12": Tan, fine to medium SAND, little Silt.			
16							C-4:			
	S-17	16-17				1.1	S-16: No recovery.			
							S-17: 0-5": No recovery.			
							5-9": Brown, fine to medium SAND, some Silt.			
17							9-12": Tan, fine to medium SAND, little Silt.			
	S-18	17-18				0.6	S-18: Tan, fine to medium SAND, little Silt.			
18									SAND	
	S-19	18-19				1.0	S-19: Tan, fine to medium SAND, little Silt.			
19										
	S-20	19-20				0.9	S-20: Tan, fine to medium SAND, little Silt.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-39

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-40** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	31		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				0.7	S-1: 0-3": Dark brown, TOPSOIL.		SAND 0.7	
1							3-8": Tan-gray, fine SAND, some Silt.		SILT 1	
	S-2	1-2			1-2	0.5	8-12": Brown-orange, SILT, little Sand.			No Equipment Installed
							S-2: Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).		SAND	
2										
	S-3	2-3				0.6	S-3: 0-5": Tan, fine SAND (0-1" lenses of tan-orange, fine SAND, little Silt).		2.4	
							5-7": Tan-orange, SILT and SAND.			
3							7-12": No recovery.			
	S-4	3-4				NA	S-4: No recovery.		SILT AND SAND	
4										
	S-5	4-5				NA	S-5: No recovery.		4.5	
5										
	C-2	5-10	60	43		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6									SAND	
	S-7	6-7				0.9	S-7: 0-5": No recovery.			
							5-12": Tan, fine SAND, little Silt.			
7									7	
	S-8	7-8				0.7	S-8: 0-2": Dark brown, TOPSOIL.		TOPSOIL 7.2	
							2-12": Tan, fine SAND, trace Silt.			
8										
	S-9	8-9				0.6	S-9: Tan, fine SAND.			
9										
	S-10	9-10				0.7	S-10: Tan, fine SAND.			
									SAND	
10										
	C-3	10-15	60	40		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11										
	S-12	11-12				0.3	S-12: 0-8": No recovery.			
							8-12": Tan-gray, fine to medium SAND, little Silt.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-40

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-40** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.5	S-13: 0-4": Tan-gray, fine to medium SAND, little Silt. 4-12": Tan-gray, fine SAND.			
14	S-14	13-14				0.6	S-14: Tan-gray, fine SAND.			
15	S-15	14-15				0.7	S-15: Tan-gray, fine SAND.			
	C-4	15-20	60	45		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.6	S-17: 0-3": No recovery. 3-12": Tan, fine SAND.		SAND	
17	S-18	17-18				0.6	S-18: Tan, fine SAND.			
18	S-19	18-19				0.6	S-19: Tan, fine SAND.			
19	S-20	19-20			19-20	0.5	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-40

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-41** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 11/24/2018 **Finish Date:** 11/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL AND SAND 0.5	
	S-1	0-1				1.0	S-1: 0-6": Dark brown, TOPSOIL and fine to medium SAND, little Silt.			
1	S-2	1-2				0.9	6-12": Brown-gray, fine to medium SAND, little Silt. S-2: Brown-gray, fine to medium SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.8	S-3: 0-10": Brown-gray, fine to medium SAND, little Silt. 10-12": Tan, fine SAND.			
3	S-4	3-4			3-4	NA	S-4: No recovery.	2		
									SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	44		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				1.0	S-7: 0-4": No recovery. 4-10": Tan-gray, fine SAND, little Silt. 10-12": Dark brown, TOPSOIL.		6.8	
7	S-8	7-8				1.2	S-8: Tan, fine SAND, little Silt.		TOPSOIL 7	
8	S-9	8-9				0.9	S-9: Tan, fine SAND, little Silt.			
9	S-10	9-10				1.0	S-10: Tan, fine SAND.			
									SAND	
10	C-3	10-15	60	39		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				0.7	S-12: 0-9": No recovery. 9-10": Gray-tan, fine SAND, some Silt. 10-12": Tan, fine SAND, little Silt.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.
2. Soil samples submitted for laboratory analyses were collected from the second Geoprobe core run.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-41

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-41** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 11/24/2018 **Finish Date:** 11/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				ND	S-13: 0-10": Tan, fine SAND, little Silt. 10-12": Tan, fine SAND (0-0.5" lenses of fine SAND, little Silt).			
14	S-14	13-14				0.9	S-14: Tan, fine SAND (0-0.5" lenses of fine SAND, little Silt).			
15	S-15	14-15				1.0	S-15: Tan, fine SAND (0-0.5" lenses of fine SAND, little Silt).		SAND	
	C-4	15-20	60	42		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				1.0	S-17: 0-6": No recovery. 6-10": Dark brown, TOPSOIL, some fine Sand.			16.5
17	S-18	17-18				0.8	10-12": Tan, fine SAND. S-18: Tan, fine SAND.		TOPSOIL	16.8
18	S-19	18-19				0.7	S-19: Tan, fine SAND.		SAND	
19	S-20	19-20			19-20	1.0	S-20: Tan, fine SAND.			
20										20
							End of exploration at 20 feet.	3		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-41

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
MDOT
Rockford, MI

EXPLORATION NO.: MDOT-SB-42
SHEET: 1 of 2
PROJECT NO: 16.0062335.53
REVIEWED BY: SJB/NJC

Logged By: Matt McGavick
Drilling Co.: Mateco Drilling
Foreman: CJ Stoufjesdyk

Start Date: 10/17/2018
Finish Date: 10/17/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	40		ND	C-1:	1	TOPSOIL 0.5	
	S-1	0-1				ND	S-1: 0-6": Dark brown, TOPSOIL.			
1					1-2		6-12": Brown-orange, SILT and fine SAND.		SILT AND SAND 1	
	S-2	1-2				ND	S-2: Tan-orange, fine SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.1	S-3: Tan, fine SAND.			
3	S-4	3-4				ND	S-4: 0-4" Tan, fine SAND.			
							4-12": No recovery.			
4									SAND	
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	47		ND	C-2:			
	S-6	5-6				NA	S-6: No recovery.			
6	S-7	6-7				ND	S-7: 0-1": No recovery.			
							1-6": Tan-orange, fine SAND, little Silt.		6.5	
							6-7": Dark brown, TOPSOIL.		TOPSOIL 6.6	
7	S-8	7-8				ND	7-12": Tan-orange, fine SAND, little Silt.			
							S-8: Tan, fine SAND.			
8	S-9	8-9				ND	S-9: Tan, fine SAND.			
9									SAND	
	S-10	9-10				ND	S-10: Tan, fine SAND.			
10	C-3	10-15	60	44		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.		10.7	
11					11-12					
	S-12	11-12				-	S-12: 0-4": No recovery.			
							4-12": Brown, Silty CLAY.		SILTY CLAY	
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-42

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-42** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** CJ Stoufjesdyk	**Start Date:** 10/17/2018 **Finish Date:** 10/17/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.1	S-13: Brown, Silty CLAY.		SILTY CLAY	
	S-14	13-14				-	S-14: Tan, fine SAND.			13
14	S-15	14-15				-	S-15: Tan, fine SAND.			
15	C-4	15-20	60	31		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.		SAND	
17	S-18	17-18				-	S-18: 0-5": No recovery. 5-12": Fine to coarse SAND, some Gravel.			
18	S-19	18-19				-	S-19: Fine to coarse SAND, some Gravel.			
19	S-20	19-20				-	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2 3		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.
3. PID was malfuntioning. No measurements were obtained after 13 feet.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-42

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-43** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.2	
	S-1	0-1				0.3	S-1: 0-2": Dark brown, TOPSOIL.			
1							2-12": Tan, fine to medium SAND, little Silt.			
	S-2	1-2				0.4	S-2: Tan, fine to medium SAND, little Silt.			No Equipment Installed
2	S-3	2-3				0.6	S-3: Tan, fine to medium SAND, little Silt.			
3	S-4	3-4				NA	S-4: No recovery.		SAND	
4	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	50		-	C-2:			
	S-6	5-6				0.5	S-6: 0-10": No recovery.			
6							10-12": Tan, fine to medium SAND, little Silt.			
	S-7	6-7			6-7	0.5	S-7: 0-5": Tan, fine to medium SAND, little Silt.		6.4	
							5-6": Dark brown, TOPSOIL.		6.5 TOPSOIL	
7							6-12": Tan, fine to medium SAND, little Silt.			
	S-8	7-8				0.5	S-8: Tan, fine to medium SAND, little Silt.		SAND	
8									8	
	S-9	8-9				0.6	S-9: Brown, Silty CLAY.			
9	S-10	9-10				0.6	S-10: Brown, Silty CLAY.			
10	C-3	10-15	60	36		-	C-3:		SILTY CLAY	
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-43

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-43** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
	S-13	12-13				0.7	S-13: 0-2": Brown, Silty CLAY.		12.2
							2-12": Tan, fine to medium SAND, little Silt.		
13	S-14	13-14				0.5	S-14: Tan, fine to medium SAND, little Silt.		
14	S-15	14-15				0.5	S-15: Tan, fine to medium SAND, little Silt.		
15	C-4	15-20	60	36		-	C-4:		
	S-16	15-16				NA	S-16: No recovery.		
16	S-17	16-17			16-17	NA	S-17: No recovery.	2	SAND
17	S-18	17-18				0.5	S-18: Tan, fine to medium SAND, little Silt.		
18	S-19	18-19				0.4	S-19: Tan, fine to medium SAND, little Silt.		
19	S-20	19-20				0.4	S-20: Tan, fine to medium SAND, little Silt.		
20							End of exploration at 20 feet.	3	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

2. Soil samples submitted for laboratory analyses were collected from the second Geoprobe core run.
3. Groundwater was not encountered during drilling or upon completion.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-43

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-44** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1		
	S-1	0-1				0.3	S-1: 0-7": Dark brown, TOPSOIL.		TOPSOIL 0.6	
1							7-12": Tan, fine to medium SAND, trace Silt.			
	S-2	1-2				0.4	S-2: Tan, fine to medium SAND, trace Silt.			No Equipment Installed
2					2-3				SAND	
	S-3	2-3				0.3	S-3: 0-9": Tan, fine to medium SAND, trace Silt.			
							9-12": Brown, Silty CLAY.		2.8	
3	S-4	3-4				NA	S-4: No recovery.		SILTY CLAY	
4									4	
	S-5	4-5				NA	S-5: No recovery.			
5									SAND	
	C-2	5-10	60	60		-	C-2:			
	S-6	5-6				0.6	S-6: 0-7": Tan, fine to medium SAND, trace Silt.		5.6	
							7-9": Dark brown, TOPSOIL.		TOPSOIL 5.8	
6	S-7	6-7				0.3	9-12": Tan, fine to medium SAND, little Silt.		SAND 6	
							S-7: Brown, Silty CLAY.			
7	S-8	7-8				0.4	S-8: Brown, Silty CLAY.		SILTY CLAY	
8	S-9	8-9				0.3	S-9: 0-7": Brown, Silty CLAY.			
							7-12": Tan, fine to medium SAND, little Silt.		8.6	
9	S-10	9-10				0.2	S-10: Tan, fine to medium SAND, litle Silt.			
10	C-3	10-15	60	36		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.		SAND	
11	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-44

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-44** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.5	S-13: Tan, fine to coarse SAND, little Gravel.			
	S-14	13-14				0.6	S-14: Tan, fine to medium SAND.			
14	S-15	14-15			14-15	0.6	S-15: Tan, fine to medium SAND.			
15	C-4	15-20	60	40		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.5	S-17: 0-8": No recovery. 8-12": Tan, fine to medium SAND, trace Silt.		SAND	
17	S-18	17-18				0.5	S-18: Tan, fine to medium SAND, trace Silt.			
18	S-19	18-19				0.4	S-19: Tan, fine to medium SAND, trace Silt.			
19	S-20	19-20				0.7	S-20: Tan, fine to medium SAND, trace Silt.			
20										20
							End of exploration at 20 feet.	2		
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-44

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-45** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/23/2018 **Finish Date:** 10/23/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		-	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				2.6	S-1: 0-3": Dark brown, TOPSOIL.			
1							3-12": Tan-orange, fine to medium SAND, some Silt.			
	S-2	1-2				1.8	S-2: 0-5": Tan-orange, fine to medium SAND, some Silt.			No Equipment Installed
							5-12": Tan, fine to medium SAND.			
2										
	S-3	2-3				0.7	S-3: Tan, fine to medium SAND.			
3										
	S-4	3-4				NA	S-4: No recovery.		SAND	
4										
	S-5	4-5				NA	S-5: No recovery.			
5										
	C-2	5-10	60	52		-	C-2:			
	S-6	5-6				1.1	S-6: 0-8": No recovery.			
							8-12": Tan, fine to medium SAND.			
6										
	S-7	6-7				1.2	S-7: 0-5": Tan, fine to medium SAND.		6.4	
							5-6": Dark brown, TOPSOIL.		6.5	
							6-12": Tan, fine to medium SAND, little Silt.		TOPSOIL	
7										
	S-8	7-8				0.9	S-8: Tan, fine to medium SAND, ltle Silt.		SAND	
8					8-9					
	S-9	8-9				0.8	S-9: 0-7": Tan, fine to medium SAND, little Silt.			
							7-12-": Brown, Silty CLAY.		8.6	
9										
	S-10	9-10				0.8	S-10: Brown, Silty CLAY.			
10										
	C-3	10-15	60	36		-	C-3:			
	S-11	10-11				NA	S-11: No recovery.		SILTY CLAY	
11										
	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-45

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-45** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/23/2018
Finish Date: 10/23/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				1.1	S-13: 0-7": Brown, Silty CLAY. 7-12": Tan, fine to medium SAND.		SILTY CLAY	12.6
	S-14	13-14				0.8	S-14: Tan, fine to medium SAND.			
14	S-15	14-15				ND	S-15: Tan, fine to medium SAND.			
15	C-4	15-20	60	36		-	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				NA	S-17: No recovery.		SAND	
17	S-18	17-18				1.0	S-18: Tan, fine to medium SAND.			
18	S-19	18-19			18-19	0.6	S-19: Tan, fine to medium SAND.			
19	S-20	19-20				0.6	S-20: Tan, fine to medium SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-45

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-46** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				0.3	S-1: 0-5": Dark brown, TOPSOIL.			
1							5-12": Tan-orange, fine SAND, little Silt.			
	S-2	1-2				0.1	S-2: 0-3": Tan-orange, fine SAND, little Silt.			No Equipment Installed
							3-12": Tan, fine SAND.		SAND	
2					2-3					
	S-3	2-3				ND	S-3: 0-7": Tan, fine SAND.			
							7-9": Brown, SILT and SAND.		2.6	
							9-12": Brown, Silty CLAY.		SILT AND SAND 2.8	
3										
	S-4	3-4				NA	S-4: No recovery.		SILTY CLAY	
4									4	
	S-5	4-5				NA	S-5: No recovery.		SILT AND SAND	
5										
	C-2	5-10	60	60		ND	C-2:		5.2	
	S-6	5-6				0.4	S-6: 0-2": Brown-tan, SILT and SAND.		TOPSOIL 5.3	
							2-3": Dark brown, TOPSOIL.		SAND 5.8	
6										
	S-7	6-7				0.5	3-9": Tan, fine SAND.			
							9-12": Brown, CLAY.			
							S-7: Brown, CLAY.			
7										
	S-8	7-8				0.2	S-8: Brown, CLAY.		CLAY	
8										
	S-9	8-9				0.2	S-9: Brown, CLAY.			
9									9	
	S-10	9-10				0.2	S-10: 0-2": Brown-orange, SILT and SAND.		SILT AND SAND 9.2	
							2-10": Tan, fine SAND.			
							10-12": Tan, fine to coarse SAND.			
10										
	C-3	10-15	60	36		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.		SAND	
11										
	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Matt McGavick

Boring No.:

MDOT-SB-46

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-46** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Matt McGavick **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.1	S-13: 0-3": Brown, fine to coarse SAND, little Gravel. 3-12": Tan, fine SAND.			
14	S-14	13-14				0.2	S-14: Tan, fine SAND.			
15	S-15	14-15				0.2	S-15: Tan, fine SAND.			
	C-4	15-20	60	41		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				ND	S-17: 0-7": No recovery. 7-12": Tan, fine SAND.		SAND	
17	S-18	17-18				0.2	S-18: Tan, fine SAND.			
18	S-19	18-19			18-19	0.1	S-19: Tan, fine SAND.			
19	S-20	19-20				0.2	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Matt McGavick

Boring No.:
MDOT-SB-46

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-47** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	36	0-1	-	C-1:	1		TOPSOIL	0.3	
	S-1	0-1				0.7	S-1: 0-4": Dark brown, TOPSOIL.					
1							4-12": Tan, fine SAND.			SAND		No Equipment Installed
	S-2	1-2				0.1	S-2: 0-7": Tan, fine SAND.					
							7-12": Brown, Silty CLAY.				1.6	
2	S-3	2-3				0.1	S-3: Brown, Silty CLAY.					
3										SILTY CLAY		
	S-4	3-4				NA	S-4: No recovery.					
4											4	
	S-5	4-5				NA	S-5: No recovery.					
5										SAND		
	C-2	5-10	60	60		-	C-2:					
	S-6	5-6				0.4	S-6: 0-6": Tan, fine SAND.				5.5	
							6-8": Dark brown, TOPSOIL.			TOPSOIL	5.7	
6							8-12": Tan, fine SAND.			SAND	6	
	S-7	6-7				0.3	S-7: Brown, Silty CLAY.					
7										SILTY CLAY		
	S-8	7-8				0.3	S-8: 0-4": Brown, Silty CLAY.				7.3	
							4-12": Tan, fine to medium SAND, trace Silt.					
8	S-9	8-9				0.3	S-9: Tan, fine to medium SAND, trace Silt.					
9	S-10	9-10				0.2	S-10: Tan, fine to medium SAND, trace Silt.					
10										SAND		
	C-3	10-15	60	24		-	C-3:					
	S-11	10-11				NA	S-11: No recovery.					
11	S-12	11-12				NA	S-12: No recovery.					
12												

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:

A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:

Conor Madison

Boring No.:

MDOT-SB-47

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-47** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/24/2018
Finish Date: 10/24/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)
13	S-13	12-13				NA	S-13: No recovery.		
	S-14	13-14				0.3	S-14: 0-5": Tan, fine to medium SAND, little Gravel. 5-12": Tan, fine to medium SAND.		
14	S-15	14-15			14-15	0.2	S-15: Tan, fine to medium SAND.		
15	C-4	15-20	60	27		-	C-4:		
	S-16	15-16				NA	S-16: No recovery.		
16	S-17	16-17				NA	S-17: No recovery.		SAND
17	S-18	17-18				0.1	S-18: 0-9": No recovery. 9-12": Tan, fine SAND.		
18	S-19	18-19				0.2	S-19: Tan, fine SAND.		
19	S-20	19-20				0.2	S-20: Tan, fine SAND.		
20							End of exploration at 20 feet.	2	20
21									
22									
23									
24									

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-47

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide MDOT Rockford, MI**	**EXPLORATION NO.: MDOT-SB-48** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison
Drilling Co.: Mateco Drilling
Foreman: Zack Norton

Start Date: 10/24/2018
Finish Date: 10/24/2018
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum:

Type of Rig: Geoprobe
Rig Model: 7822DT
Drilling Method: Direct Push

Sampler Type: Macrocore
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 60"

Offset of Boring From Original Location:

Ground Elevation: **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	36		ND	C-1:	1	TOPSOIL 0.3	
	S-1	0-1				0.7	S-1: 0-3": Dark brown, TOPSOIL.			
1							3-12": Tan-orange, fine to medium SAND, little Silt.			
	S-2	1-2			1-2	0.3	S-2: 0-7": Tan-orange, fine to medium SAND, little Silt.		SAND	No Equipment Installed
							7-12": Brown, Silty CLAY.		1.6	
2	S-3	2-3				0.2	S-3: Brown, Silty CLAY.			
3									SILTY CLAY	
	S-4	3-4				NA	S-4: No recovery.			
4									4	
	S-5	4-5				NA	S-5: No recovery.			
5	C-2	5-10	60	60		ND	C-2:		SAND	
	S-6	5-6				0.4	S-6: Tan, fine to medium SAND, little Silt.			
6	S-7	6-7				0.3	S-7: 0-6": Tan, fine to medium SAND, little Silt.			
							6-12": Brown, Silty CLAY.		6.5	
7	S-8	7-8				0.3	S-8: 0-5": Brown, Silty CLAY.		SILTY CLAY	
							5-10": Brown, fine to medium SAND, some Silt.		7.4	
							10-12": Tan, fine to medium SAND, little Silt.			
8	S-9	8-9				0.1	S-9: Tan, fine to medium SAND, little Silt.			
9	S-10	9-10				0.4	S-10: 0-4": Tan, fine to medium SAND, little Silt.			
							4-12": Tan, fine SAND, little Gravel.		SAND	
10	C-3	10-15	60	36		ND	C-3:			
	S-11	10-11				NA	S-11: No recovery.			
11	S-12	11-12				NA	S-12: No recovery.			
12										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionzation detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was ND.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-48

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019

GEOPROBE LOG

GZA **GeoEnvironmental, Inc.** *Engineers and Scientists*	**Wolverine World Wide** **MDOT** **Rockford, MI**	**EXPLORATION NO.: MDOT-SB-48** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.53** **REVIEWED BY: SJB/NJC**

Logged By: Conor Madison **Drilling Co.:** Mateco Drilling **Foreman:** Zack Norton	**Start Date:** 10/24/2018 **Finish Date:** 10/24/2018 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:**
Type of Rig: Geoprobe **Rig Model:** 7822DT **Drilling Method:** Direct Push	**Sampler Type:** Macrocore **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 60"	**Offset of Boring From Original Location:** **Ground Elevation:** **V. Datum:** MI State Plane S Zone NAD83

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
13	S-13	12-13				0.2	S-13: Tan, fine SAND.			
	S-14	13-14				0.4	S-14: Tan, fine SAND.			
14	S-15	14-15				0.3	S-15: Tan, fine SAND.			
15	C-4	15-20	60	41		ND	C-4:			
	S-16	15-16				NA	S-16: No recovery.			
16	S-17	16-17				0.3	S-17: 0-7": No recovery. 7-12": Tan, fine SAND.		SAND	
17	S-18	17-18				ND	S-18: Tan, fine SAND.			
18	S-19	18-19				0.1	S-19: Tan, fine SAND.			
19	S-20	19-20			19-20	0.1	S-20: Tan, fine SAND.			
20							End of exploration at 20 feet.	2		20
21										
22										
23										
24										

Granular Soils Blows/FT Density	Cohesive Soils Blows/FT Consistency	Plasticity SM Thread Diameter Rolled	
0-4 -- Very Loose	<2 -- Very Soft	None	SILT
4-10 -- Loose	2-4 -- Soft	1/4"	Clayey SILT
10-30 -- Medium Dense	4-8 -- M. Stiff	1/8"	SILT & CLAY
30-50 -- Dense	8-15 -- Stiff	1/16"	CLAY & SILT
>50 -- Very Dense	15-30 -- V. Stiff	1/32"	Silty CLAY
	>30 -- Hard	1/64"	CLAY

MISSDIG Ticket Number:
A82831551

REMARKS

2. Groundwater was not encountered during drilling or upon completion.

Logger Initials:
Conor Madison

Boring No.:
MDOT-SB-48

62335.53 WWW MDOT.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 1/21/2019