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A Division of GZA

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MANAGEMENT

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MEMORANDUM

To: Abby Hendershott, EGLE

From: Lori Powers, Rose & Westra, a Division of GZA GeoEnvironmental, Inc.

Date: July 31, 2019

File No.: 16.0062335.52 Task 002

Re: Wolverine World Wide, Inc. (Wolverine) – House Street Disposal Area
Monthly Progress Report

This EGLE Monthly Progress Report (MPR) is being submitted on behalf of Wolverine. This EGLE MPR is completed as agreed upon in Mr. John Byl's July 9, 2018 letter entitled *Response to May 29 Correspondence regarding Tannery Meeting Summary and Action Items*.

This progress report also includes information to supplement the July 11, 2019 U.S. EPA MPR (attached).

SITE INVESTIGATION ACTIONS

Continued effort for access to off-site drilling locations. Resumed drilling at location MW-23 for installation of two additional wells.

Continued delineation activities associated with the EPA's April 29, 2019 letter.

Conducted a site visit with EPA and EGLE at an adjoining parcel to meet with the property owner to discuss possible drilling in a depression.

Met with adjoining property owner to discuss drilling logistics and property access.

SITE ANALYTICAL DATA RECEIVED

Available, Quarter 2 groundwater monitoring results for on and off-Site wells are attached.

Monitoring well installation profiling data was previously provided to EGLE.

Soil data received to date from the on-Site investigation is also summarized in the attached tables.

SITE MAPPING

A revised map is attached. Note, these locations are estimated and not all wells have been surveyed.



SITE ANTICIPATED ACTIONS AND SCHEDULE FOR NEXT REPORTING PERIOD

It is likely drilling at off-site locations, including possibly PMW-24 and possibly PMW-12, will continue. R&W/GZA will continue to make efforts to gain access to drilling locations PMW-22, PMW-13, and PMW-16.

Continue to respond to the EPA's April 29, 2019 correspondence regarding CERCLA actions at the Wolverine Tannery and House Street sites.

OFF-SITE SUMMARY

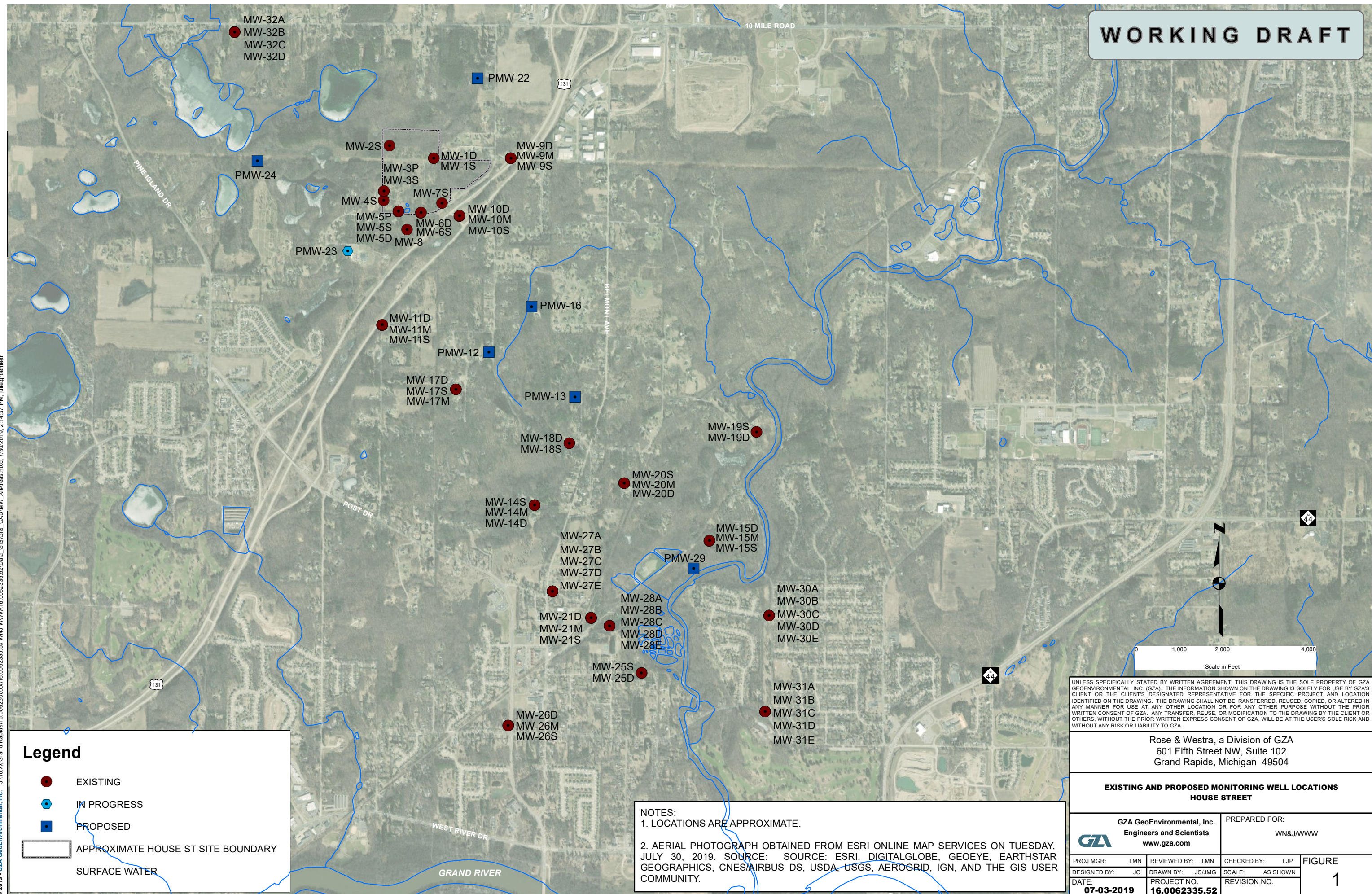
Draft scopes of work for parcels on the south side of House Street are being prepared for submittal to EGLE, EPA, MDOT, and the property owners and their counsel for review and approval prior to implementing any removal actions. An on-site meeting to review the scope of work with one resident, EGLE, and EPA was conducted July 10, 2019.

R&W/GZA is also working on approval for waste disposal, which may require additional waste characterization sampling. At this time, we have not received sufficient information to determine what further action is required.

R&W/GZA and Wolverine are evaluating possible actions for additional investigation/remediation at the Imperial Pine Parcel (7900 Imperial Pine Drive NE).

J:\62000\623xx\62335.52 - House St Pre-Inv\MDEQ Updates\July 2019 Update\WWW-House Street-MDEQMonthlyUpdate-07312019-F.docx

WORKING DRAFT



© 2019 - GZA GeoEnvironmental, Inc. J:\16.xx Grand Rapids\16.0062300.xx\16.0062335.5x WNJ WWW\16.0062335.52\Data_GIS\GIS_CAD\MW_AltAreas.mxd, 7/30/2019, 2:14:37 PM, julie.groenleer

TABLE 2A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Laboratory Sample ID(s)						UE30036-008	UE30036-007	UE30036-015	UE30036-016	UE30036-014	UE30036-004	UE30036-005	UE30036-010	UE30036-009	UE30036-017	UE30036-006	UE24001-012	UE24001-013
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	1.4 [J]	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorpropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	4.2	3.8	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 2A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D	HS-MW-14S	HS-MW-14M	HS-MW-14D	HS-MW-15S	HS-MW-15M
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D	HS-GW-MW14S	HS-GW-MW14M	HS-GW-MW14D	HS-GW-MW15S	HS-GW-MW15M
Laboratory Sample ID(s)						UE24001-014	UE24001-015	UE24001-001	UE24001-002	UE24001-003	UE24001-017	UE24001-018	UE24001-016	UE18016-010	UE18016-009	UE18016-008	UE18016-007	UE18016-006
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019	05/17/2019	05/17/2019	05/17/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	<20	<20	<20	<20	<20	<20	3.3 [J]	3.6 [J]	<20	2 [J]	2.1 [J]	<20	<20
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	<1	0.47 [J]	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorpropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 2A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-15D	HS-MW-17S	HS-MW-17M	HS-MW-17D	HS-MW-18S	HS-MW-18D	HS-MW-19S	HS-MW-19D	HS-MW-20S	HS-MW-20M	HS-MW-20D	HS-MW-21S	HS-MW-21M
Sample Name						HS-GW-MW15D	HS-GW-MW17S	HS-GW-MW17M	HS-GW-MW17D	HS-GW-MW18S	HS-GW-MW18D	HS-GW-MW19S	HS-GW-MW19D	HS-GW-MW20S	HS-GW-MW20M	HS-GW-MW20D	HS-GW-MW21S	HS-GW-MW21M
Laboratory Sample ID(s)						UE18016-005	UE25011-002	UE25011-003	UE25011-001	UE24001-005	UE24001-004	UE24001-006	UE24001-007	UE30036-001	UE30036-002	UE30036-003	UE18016-004	UE18016-003
Sample Date						05/16/2019	05/23/2019	05/23/2019	05/23/2019	05/21/2019	05/21/2019	05/21/2019	05/21/2019	05/28/2019	05/28/2019	05/28/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	2 [J]	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorpropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 2A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-21D	HS-MW-21D	HS-MW-25S	HS-MW-25D	HS-MW-26S	HS-MW-26M	HS-MW-26D	HS-MW-30A	HS-MW-30B	HS-MW-30C	HS-MW-30D	HS-MW-30E	HS-MW-31A
Sample Name						HS-GW-MW21D	HS-GW-MW21D DUP	HS-GW-MW25S	HS-GW-MW25D	HS-GW-MW26S	HS-GW-MW26M	HS-GW-MW26D	HS-GW-MW30A	HS-GW-MW30B	HS-GW-MW30C	HS-GW-MW30D	HS-GW-MW30E	HS-GW-MW31A
Laboratory Sample ID(s)						UE18016-001	UE18016-002	UE15023-007	UE15023-008	UE15023-010	UE15023-011	UE15023-009	UG03026-005	UG03026-007	UG06001-001	UG03026-008	UG03026-006	UG03026-003
Sample Date						05/16/2019	05/16/2019	05/14/2019	05/14/2019	05/15/2019	05/15/2019	05/15/2019	07/02/2019	07/02/2019	07/03/2019	07/02/2019	07/02/2019	07/01/2019
Parameter (µg/L)																		
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	<20	<20	<20	2.2 [J]	<20	<20	<20	4.2 [J]	3.7 [J]	3.5 [J]	3 [J]	9.1 [J]	4.3 [J]
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.54 [J]	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	0.41 [J]	<1
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorpropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.41	ND

TABLE 2A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-31B	HS-MW-31C	HS-MW-31D	HS-MW-31E	HS-MW-31E	HS-MW-32A	HS-MW-32B	HS-MW-32C	HS-MW-32D
Sample Name						HS-GW-MW31B	HS-GW-MW31C	HS-GW-MW31D	HS-GW-MW31E	HS-GW-MW31E DUP	HS-GW-MW32A	HS-GW-MW32B	HS-GW-MW32C	HS-GW-MW32D
Laboratory Sample ID(s)						UG03026-001	UG03026-004	UG03026-002	UG06001-002	UG06001-003	UE25011-005	UE25011-006	UE25011-007	UE25011-008
Sample Date						07/01/2019	07/01/2019	07/01/2019	07/03/2019	07/03/2019	05/24/2019	05/24/2019	05/24/2019	05/24/2019
Parameter (µg/L)														
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	4 [J]	6.3 [J]	5.2 [J]	3.9 [J]	3.8 [J]	<20	<20	<20	4.3 [J]
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	0.53 [J]	0.4 [J]	<1	<1	<1	0.41 [J]
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	0.46 [J]	<1	<1	0.62 [J]
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	0.59 [J]	<1	<1	0.85 [J]
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	0.46	ND	ND	0.62

TABLE 2B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Laboratory Sample ID(s)						UE30036-008	UE30036-007	UE30036-015	UE30036-016	UE30036-014	UE30036-004	UE30036-005	UE30036-010	UE30036-009	UE30036-017	UE30036-006	UE24001-012	UE24001-013
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	0.62	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	<1.6	<1.6	4.6 [B]	6.1 [B]	5 [B]	<1.6	3.7	<1.6	2.9	6.4 [B]	<1.6	1.4 [B]	<1.6
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-chloroethyl]ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	<0.8	<0.8	0.5 [J]	0.5 [J]	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-Ethylhexyl]phthalate	6.0 (A)	14	NLV	NCL	560	<4	<4	0.82 [J]	<4	0.57 [J]	<4	16	<4	<4	<4	<4	0.74 [B]	1.1 [B]
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	0.17 [J]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	0.32	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	0.37	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	0.11 [J]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 2B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D	HS-MW-14S	HS-MW-14M	HS-MW-14D	HS-MW-15S	HS-MW-15M
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D	HS-GW-MW14S	HS-GW-MW14M	HS-GW-MW14D	HS-GW-MW15S	HS-GW-MW15M
Laboratory Sample ID(s)						UE24001-014	UE24001-015	UE24001-001	UE24001-002	UE24001-003	UE24001-017	UE24001-018	UE24001-016	UE18016-010	UE18016-009	UE18016-008	UE18016-007	UE18016-006
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019	05/17/2019	05/17/2019	05/17/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	<1.6	1 [BJ]	1.1 [BHJ]	<1.6	1.4 [BHJ]	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-chloroethyl]ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	<0.8	<0.8	<0.8	0.54 [HJ]	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-Ethylhexyl]phthalate	6.0 (A)	14	NLV	NCL	560	0.92 [BJ]	0.69 [BJ]	0.62 [BHJ]	0.5 [BHJ]	0.52 [BHJ]	0.68 [BJ]	0.64 [BJ]	0.8 [BJ]	1.7 [J]	0.89 [J]	<4	<4	<4
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 2B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-15D	HS-MW-17S	HS-MW-17M	HS-MW-17D	HS-MW-18S	HS-MW-18D	HS-MW-19S	HS-MW-19D	HS-MW-20S	HS-MW-20M	HS-MW-20D	HS-MW-21S	HS-MW-21M
Sample Name						HS-GW-MW15D	HS-GW-MW17S	HS-GW-MW17M	HS-GW-MW17D	HS-GW-MW18S	HS-GW-MW18D	HS-GW-MW19S	HS-GW-MW19D	HS-GW-MW20S	HS-GW-MW20M	HS-GW-MW20D	HS-GW-MW21S	HS-GW-MW21M
Laboratory Sample ID(s)						UE18016-005	UE25011-002	UE25011-003	UE25011-001	UE24001-005	UE24001-004	UE24001-006	UE24001-007	UE30036-001	UE30036-002	UE30036-003	UE18016-004	UE18016-003
Sample Date						05/16/2019	05/23/2019	05/23/2019	05/23/2019	05/21/2019	05/21/2019	05/21/2019	05/21/2019	05/28/2019	05/28/2019	05/28/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	<1.6	<1.6	<1.6	<1.6	1.1 [BJ]	1.5 [BJ]	1.2 [BJ]	1.5 [BJ]	<1.6	<1.6	1.2 [J]	<1.6	<1.6
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-chloroethyl]ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-Ethylhexyl]phthalate	6.0 (A)	14	NLV	NCL	560	<4	0.98 [BJ]	1.1 [BJ]	1.2 [BJ]	0.59 [BJ]	0.54 [BJ]	<4	1.9 [BJ]	<4	0.55 [J]	<4	<4	<4
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 2B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-21D	HS-MW-21D	HS-MW-25S	HS-MW-25D	HS-MW-26S	HS-MW-26M	HS-MW-26D	HS-MW-30A	HS-MW-30B	HS-MW-30C	HS-MW-30D	HS-MW-30E	HS-MW-31A
Sample Name						HS-GW-MW21D	HS-GW-MW21D DUP	HS-GW-MW25S	HS-GW-MW25D	HS-GW-MW26S	HS-GW-MW26M	HS-GW-MW26D	HS-GW-MW30A	HS-GW-MW30B	HS-GW-MW30C	HS-GW-MW30D	HS-GW-MW30E	HS-GW-MW31A
Laboratory Sample ID(s)						UE18016-001	UE18016-002	UE15023-007	UE15023-008	UE15023-010	UE15023-011	UE15023-009	UG03026-005	UG03026-007	UG06001-001	UG03026-008	UG03026-006	UG03026-003
Sample Date						05/16/2019	05/16/2019	05/14/2019	05/14/2019	05/15/2019	05/15/2019	05/15/2019	07/02/2019	07/02/2019	07/03/2019	07/02/2019	07/02/2019	07/01/2019
Parameter (µg/L)																		
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	1 [J]	<1.6	<1.6	1 [J]	1 [J]	<1.6	1 [J]	2.5 [B]	5.6 [B]	<1.6	1.4 [BJ]	1.3 [BJ]	1.7 [B]
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-chloroethyl]ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	0.5 [J]	0.66 [J]	<0.8	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis[2-Ethylhexyl]phthalate	6.0 (A)	14	NLV	NCL	560	<4	<4	<4	<4	<4	<4	<4	2 [BJ]	1.3 [BJ]	0.66 [BJ]	0.94 [BJ]	0.81 [BJ]	1.7 [BJ]
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 2B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-31B	HS-MW-31C	HS-MW-31D	HS-MW-31E	HS-MW-31E	HS-MW-32A	HS-MW-32B	HS-MW-32C	HS-MW-32D
Sample Name						HS-GW-MW31B	HS-GW-MW31C	HS-GW-MW31D	HS-GW-MW31E	HS-GW-MW31E DUP	HS-GW-MW32A	HS-GW-MW32B	HS-GW-MW32C	HS-GW-MW32D
Laboratory Sample ID(s)						UG03026-001	UG03026-004	UG03026-002	UG06001-002	UG06001-003	UE25011-005	UE25011-006	UE25011-007	UE25011-008
Sample Date						07/01/2019	07/01/2019	07/01/2019	07/03/2019	07/03/2019	05/24/2019	05/24/2019	05/24/2019	05/24/2019
Parameter (µg/L)														
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	0.065 [J]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	1.1 [BJ]	8.1 [B]	1.9 [B]	<1.6	1 [J]	1.1 [BJ]	<1.6	<1.6	1.2 [J]
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis(2-chloroethyl)ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	0.62 [J]	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	0.58 [J]	<0.8	<0.8	<0.8	0.55 [J]	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis(2-Ethylhexyl)phthalate	6.0 (A)	14	NLV	NCL	560	1.8 [BJ]	1.7 [BJ]	1.1 [BJ]	<4	<4	1.2 [BJ]	<4	<4	<4
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 2C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Laboratory Sample ID(s)						UE30036-008 & 19051849-07B	UE30036-007 & 19051849-06B	UE30036-015 & 19051849-12B	UE30036-016 & 19051849-13B	UE30036-014 & 19051849-11B	UE30036-004 & 19051849-04B	UE30036-005 & 19051849-05B	UE30036-010 & 19051849-09B	UE30036-009 & 19051849-08B	UE30036-017 & 19051849-14B	UE30036-006 & 19051849-10B	UE24001-012 & 19051467-05B	UE24001-013 & 19051467-06B
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Aluminum	50 (V)	NA	NLV	NCL	60,000	<40	22 [J]	13 [J]	24 [J]	<40	16 [J]	81	<40	48	24 [J]	<40	<40	100
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	<2	<2	<2	<2	<2	<2	6.7	<2	3.2	<2	<2	<2	<2
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	39	84	45	74	59	81	26	68	25	59	12	33	81
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	21 [J]	34 [J]	31 [J]	31 [J]	20 [J]	320	42 [J]	19 [J]	45 [J]	17 [J]	24 [J]	17 [J]	17 [J]
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	1.8 [J]	1.8 [J]	1.5 [J]	1.7 [J]	2.1 [J]	2.9 [J]	1.3 [J]	1.5 [J]	<5	1.6 [J]	1.3 [J]	1.4 [J]	1.4 [J]
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	1.8	1.8	1.5	1.7	2.1	2.9	1.3	1.5	ND	1.6	1.3	1.4	1.4
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	<5	<5	<5	<5	<5	2 [J]	<5	<5	<5	<5	<5	<5	<5
Iron	300 (E)	NA	NLV	NCL	42,000	410	460	480	680	500	600	1,300	410	1,300	510	250	280	770
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	400,000	NA	NLV	NCL	NCL	30,000	31,000	32,000	40,000	30,000	40,000	23,000	28,000	21,000	35,000	15,000	24,000	27,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	1.3 [J]	1.6 [J]	1.5 [J]	2.1 [J]	1.8 [J]	2.4 [J]	1.7 [J]	1.4 [J]	1.9 [J]	1.7 [J]	<5	<5	1.3 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	7,300	100,000	7,500	5,100	3,700	140,000	14,000	19,000	29,000	12,000	7,100	73,000	7,800
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	<5	1.5 [J]	1.5 [J]	2.3 [J]	<5	1.8 [J]	3.7 [J]	<5	3.2 [J]	1.9 [J]	<5	<5	4.4 [J]
Vanadium	4.5	27	NLV	NCL	260	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	<10	4 [J]	<10	<10	<10	<10	2.5 [J]	<10	<10	23	<10	<10	<10

TABLE 2C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D	HS-MW-14S	HS-MW-14M	HS-MW-14D	HS-MW-15S	HS-MW-15M
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D	HS-GW-MW14S	HS-GW-MW14M	HS-GW-MW14D	HS-GW-MW15S	HS-GW-MW15M
Laboratory Sample ID(s)						UE24001-014 & 19051467-07B	UE24001-015 & 19051467-08B	UE24001-001 & 19051357-01B	UE24001-002 & 19051357-02B	UE24001-003 & 19051357-03B	UE24001-017 & 19051467-10B	UE24001-018 & 19051467-11B	UE24001-016 & 19051467-09B	UE18016-010 & 19050975-15B	UE18016-009 & 19050975-14B	UE18016-008 & 19050975-13B	UE18016-007 & 19050975-12B	UE18016-006 & 19050975-11B
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019	05/17/2019	05/17/2019	05/17/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Aluminum	50 (V)	NA	NLV	NCL	60,000	92	67	<40	22 [J]	830	<40	<40	15 [J]	<40	12 [J]	<40	<40	<40
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	<2	<2	<2	<2	<2	<2	<2	1.3 [J]	<2	<2	<2	<2	1.4 [J]
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	97	95	65	68	31	39	35	62	78	140	18	29	32
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	28 [J]	27 [J]	23 [J]	21 [J]	79	20 [J]	16 [J]	13 [J]	19 [J]	21 [J]	25 [J]	21 [J]	58
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	1.5 [J]	1.3 [J]	<5	1.5 [J]	3 [J]	<5	1.8 [J]	<5	<5	<5	<5	<5	<5
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	1.5	1.3	ND	1.5	3	ND	1.8	ND	ND	ND	ND	ND	ND
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	<5	<5	<5	<5	1.6 [J]	<5	<5	<5	<5	<5	<5	<5	<5
Iron	300 (E)	NA	NLV	NCL	42,000	800	770	390	330	4,300	390	240	530	420	1,000	1,500	340	2,000
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	0.56 [J]	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	400,000	NA	NLV	NCL	NCL	26,000	25,000	23,000	20,000	25,000	28,000	24,000	24,000	24,000	28,000	29,000	23,000	25,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	1.4 [J]	1.5 [J]	1.4 [J]	1.3 [J]	3.1 [J]	2.6 [J]	<5	1.3 [J]	1.6 [J]	1.7 [J]	5.7	1.3 [J]	2.2 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	18,000	18,000	31,000	190,000	12,000	82,000	4,300	3,800	39,000	35,000	34,000	15,000	13,000
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	3.8 [J]	3.2 [J]	<5	1.7 [J]	35	<5	<5	1.4 [J]	<5	<5	<5	<5	1.3 [J]
Vanadium	4.5	27	NLV	NCL	260	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	<10	<10	27 [B]	<10	4.3 [B]	<10	<10	<10	<10	<10	<10	<10	<10

TABLE 2C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-15D	HS-MW-17S	HS-MW-17M	HS-MW-17D	HS-MW-18S	HS-MW-18D	HS-MW-19S	HS-MW-19D	HS-MW-20S	HS-MW-20M	HS-MW-20D	HS-MW-21S	HS-MW-21M
Sample Name						HS-GW-MW15D	HS-GW-MW17S	HS-GW-MW17M	HS-GW-MW17D	HS-GW-MW18S	HS-GW-MW18D	HS-GW-MW19S	HS-GW-MW19D	HS-GW-MW20S	HS-GW-MW20M	HS-GW-MW20D	HS-GW-MW21S	HS-GW-MW21M
Laboratory Sample ID(s)						UE18016-005 & 19050975-10B	UE25011-002 & 19051467-13B	UE25011-003 & 19051467-14B	UE25011-001 & 19051467-12B	UE24001-005 & 19051467-02B	UE24001-004 & 19051467-01B	UE24001-006 & 19051467-03B	UE24001-007 & 19051467-04B	UE30036-001 & 19051849-01B	UE30036-002 & 19051849-02B	UE30036-003 & 19051849-03B	UE18016-004 & 19050975-09B	UE18016-003 & 19050975-08B
Sample Date						05/16/2019	05/23/2019	05/23/2019	05/23/2019	05/21/2019	05/21/2019	05/21/2019	05/21/2019	05/28/2019	05/28/2019	05/28/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Aluminum	50 (V)	NA	NLV	NCL	60,000	27 [J]	<40	29 [J]	<40	<40	<40	85	<40	13 [J]	47	390	<40	<40
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	0.67 [J]	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	1.6 [J]	<2	<2	<2	<2	6.1	<2	<2	<2	<2	<2	<2	<2
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	14	54	60	140	16	9.7	430	22	56	57	61	61	13
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	370	20 [J]	15 [J]	20 [J]	13 [J]	260	84	69	20 [J]	22 [J]	43 [J]	19 [J]	23 [J]
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	1.4 [J]	<5	<5	1.3 [J]	2.7 [J]	1.3 [J]	<5
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.3	2.7	1.3	ND
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	1.6 [J]	<5	<5	<5	<5	<5	<5	<5	<5	1.4 [J]	<5	<5	<5
Iron	300 (E)	NA	NLV	NCL	42,000	4,100	540	440	1,200	89	3,800	1,300	4,100	300	440	1,800	400	2,600
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.31 [J]	<1	<1
Magnesium	400,000	NA	NLV	NCL	NCL	61,000	34,000	23,000	35,000	8,300	25,000	17,000	42,000	23,000	26,000	27,000	21,000	22,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	3.8 [J]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	6.1	2.3 [J]	<5	1.8 [J]	<5	3.3 [J]	<5	2.3 [J]	<5	<5	2.5 [J]	1.3 [J]	2.8 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	89,000	81,000	5,000	48,000	32,000	24,000	21,000	14,000	20,000	38,000	39,000	43,000	4,500
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	2.5 [J]	<5	1.9 [J]	<5	<5	1.4 [J]	5.4	1.9 [J]	<5	2.6 [J]	18	<5	1.7 [J]
Vanadium	4.5	27	NLV	NCL	260	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	<10	<10	<10	11	<10	<10	<10	<10	<10	<10	3.2 [J]	<10	<10

TABLE 2C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-21D	HS-MW-21D	HS-MW-25S	HS-MW-25D	HS-MW-26S	HS-MW-26M	HS-MW-26D	HS-MW-30A	HS-MW-30B	HS-MW-30C	HS-MW-30D	HS-MW-30E	HS-MW-31A
Sample Name						HS-GW-MW21D	HS-GW-MW21D DUP	HS-GW-MW25S	HS-GW-MW25D	HS-GW-MW26S	HS-GW-MW26M	HS-GW-MW26D	HS-GW-MW30A	HS-GW-MW30B	HS-GW-MW30C	HS-GW-MW30D	HS-GW-MW30E	HS-GW-MW31A
Laboratory Sample ID(s)						UE18016-001 & 19050975-06B	UE18016-002 & 19050975-07B	UE15023-007 & 19050975-01B	UE15023-008 & 19050975-02B	UE15023-010 & 19050975-04B	UE15023-011 & 19050975-05B	UE15023-009 & 19050975-03B	UG03026-005	UG03026-007	UG06001-001	UG03026-008	UG03026-006	UG03026-003
Sample Date						05/16/2019	05/16/2019	05/14/2019	05/14/2019	05/15/2019	05/15/2019	05/15/2019	07/02/2019	07/02/2019	07/03/2019	07/02/2019	07/02/2019	07/01/2019
Parameter (µg/L)																		
Aluminum	50 (V)	NA	NLV	NCL	60,000	12 [J]	11 [J]	54	20 [J]	27 [J]	930	21 [J]	18 [J]	24 [J]	59	58	3,500	11 [J]
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	<2	<2	2.5	<2	3.4	<2	2.2	<2	<2	<2	<2	1.6 [J]	<2
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	13	13	28	100	150	120	10	59	57	70	70	120	36
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.23 [J]	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	27 [J]	26 [J]	58 [B]	65 [B]	32 [BJ]	42 [BJ]	63 [B]	30 [J]	29 [J]	49 [BJ]	46 [J]	41 [J]	26 [J]
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	<5	<5	2.3 [J]	<5	<5	2.1 [J]	<5	<5	<5	<5	<5	25	<5
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	ND	ND	2.3	ND	ND	2.1	ND	NC	NC	NC	NC	NC	NC
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5	<5	<5	<5	<5	<5	<5	<5						
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	1.3 [J]	<5	<5	<5	<5	1.8 [J]	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	<5	<5	<5	1.4 [J]	<5	1.7 [J]	5.4	<5	<5	<5	<5	5.7	1.3 [J]
Iron	300 (E)	NA	NLV	NCL	42,000	4,200	4,200	610	980	630	2,000	7,800	350	390	440	490	8,800	610
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	<1	0.59 [J]	<1	<1	<1	<1	<1	2.8	<1
Magnesium	400,000	NA	NLV	NCL	NCL	24,000	25,000	19,000	27,000	17,000	24,000	25,000	23,000	23,000	25,000	21,000	29,000	23,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	<10	<10	2.5 [J]	<10	11	<10	<10	<10	<10	<10	5.4 [J]	36	29
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	3.3 [J]	3.4 [J]	1.5 [J]	2.4 [J]	<5	3.3 [J]	6.9	<5	1.4 [J]	<5	1.3 [J]	5.8	3.2 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	9,400	9,200	36,000	28,000	24,000	68,000	3,000	19,000	21,000	15,000	14,000	16,000	36,000
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	2.2 [J]	2 [J]	34	1.9 [J]	2 [J]	28	3.5 [J]	1.3 [J]	1.7 [J]	2.3 [J]	2.2 [J]	50	<5
Vanadium	4.5	27	NLV	NCL	260	<5	<5	4.2 [J]	<5	<5	<5	<5	<5	<5	<5	<5	4.7 [J]	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	<10	<10	<10	<10	<10	4.5 [J]	5.8 [J]	3.2 [BJ]	3.7 [BJ]	3.6 [BJ]	6.6 [BJ]	52 [B]	7.6 [BJ]

TABLE 2C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-31B	HS-MW-31C	HS-MW-31D	HS-MW-31E	HS-MW-31E	HS-MW-32A	HS-MW-32B	HS-MW-32C	HS-MW-32D
Sample Name						HS-GW-MW31B	HS-GW-MW31C	HS-GW-MW31D	HS-GW-MW31E	HS-GW-MW31E DUP	HS-GW-MW32A	HS-GW-MW32B	HS-GW-MW32C	HS-GW-MW32D
Laboratory Sample ID(s)						UG03026-001	UG03026-004	UG03026-002	UG06001-002	UG06001-003	UE25011-005 & 19051467-16B	UE25011-006 & 19051467-17B	UE25011-007 & 19051467-18B	UE25011-008 & 19051467-19B
Sample Date						07/01/2019	07/01/2019	07/01/2019	07/03/2019	07/03/2019	05/24/2019	05/24/2019	05/24/2019	05/24/2019
Parameter (µg/L)														
Aluminum	50 (V)	NA	NLV	NCL	60,000	15 [J]	23 [J]	14 [J]	180	56	<40	<40	<40	<40
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	<2	<2	<2	<2	<2	<2	3.6	2.4	1.3 [J]
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	34	49	84	54	52	51	28	28	31
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	43 [J]	34 [J]	44 [J]	70 [B]	74 [B]	85	83	79	190
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	<5	1.6 [J]	<5	<5	<5	<5	<5	<5	<5
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	NC	NC	NC	NC	NC	NC	ND	ND	NC
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5						11	<5	<5	33
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	<5	<5	<5	<5	<5	<5	<5	<5	<5
Iron	300 (E)	NA	NLV	NCL	42,000	430	1,000	380	1,900	1,600	6,900	1,500	4,000	4,200
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	400,000	NA	NLV	NCL	NCL	21,000	25,000	24,000	19,000	20,000	22,000	19,000	20,000	27,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	11	15	17	4.4 [J]	4.2 [J]	6.9 [J]	4.5 [J]	9.7 [J]	26
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	2.4 [J]	2.5 [J]	1.9 [J]	<5	<5	2.3 [J]	2.2 [J]	2.3 [J]	3 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	33,000	42,000	40,000	15,000	15,000	8,800	29,000	7,500	400,000
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	5.9	2.7 [J]	1.4 [J]	1.7 [J]	1.3 [J]	<5
Vanadium	4.5	27	NLV	NCL	260	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	3.7 [BJ]	4 [BJ]	3.7 [BJ]	5 [BJ]	3.8 [BJ]	2.8 [J]	5.9 [J]	<10	<10

TABLE 2D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Laboratory Sample ID(s)						UE30036-008 & 19051849-07A/C	UE30036-007 & 19051849-06A/C	UE30036-015 & 19051849-12A/C	UE30036-016 & 19051849-13A/C	UE30036-014 & 19051849-11A/C	UE30036-004 & 19051849-04A/C	UE30036-005 & 19051849-05A/C	UE30036-010 & 19051849-09A/C	UE30036-009 & 19051849-08A/C	UE30036-017 & 19051849-14A/C	UE30036-006 & 19051849-10A/C	UE24001-012 & 19051467-05A/C	UE24001-013 & 19051467-06A/C
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Formic acid	10,000	ID	7,700,000	NCL	1.9	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Hardness (total)	NCL	NCL	NCL	NCL	NCL	370,000	380,000	400,000	560,000	430,000	530,000	420,000	370,000	490,000	450,000	210,000	320,000	310,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	75 [J]	370	<100	<100	<100	3,300	180	<100	210	<100	<100	<100	150
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	18,000	20,000	2,300	4,400	2,200	18,000	44	1,300	18,000	3,900	15,000	870	12 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	18,000	20,000	2,300	4,400	2,200	21,000	220	1,300	18,000	3,900	15,000	870	160
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	2.9	14	ND	ND	ND	130	6.9	ND	8.0	ND	ND	ND	5.7
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	8,300	200,000	17,000	2,500	2,300	92,000	34,000	72,000	69,000	54,000	23,000	150,000	24,000
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	<50	<50	<50	<50	<50	<50	<50	<50	53	<50	<50	<50	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	10,000	22,000	16,000	23,000	20,000	69,000	170,000	19,000	200,000	20,000	9,100	9,600	21,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 2D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D	HS-MW-14S	HS-MW-14M	HS-MW-14D	HS-MW-15S	HS-MW-15M
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D	HS-GW-MW14S	HS-GW-MW14M	HS-GW-MW14D	HS-GW-MW15S	HS-GW-MW15M
Laboratory Sample ID(s)						UE24001-014 & 19051467-07A/C	UE24001-015 & 19051467-08A/C	UE24001-001 & 19051357-01A/C	UE24001-002 & 19051357-02A/C	UE24001-003 & 19051357-03A/C	UE24001-017 & 19051467-10A/C	UE24001-018 & 19051467-11A/C	UE24001-016 & 19051467-09A/C	UE18016-010 & 19050975-15A/C	UE18016-009 & 19050975-14A/C	UE18016-008 & 19050975-13A/C	UE18016-007 & 19050975-12A/C	UE18016-006 & 19050975-11A/C
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019	05/17/2019	05/17/2019	05/17/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Formic acid	10,000	ID	7,700,000	NCL	1.9	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Hardness (total)	NCL	NCL	NCL	NCL	NCL	340,000	340,000	330,000	280,000	490,000	380,000	280,000	280,000	320,000	390,000	960,000	290,000	560,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	470	470	<100	<100	280	72 [J]	<100	55 [J]	<100	<100	<100	<100	94 [J]
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	<20	2,100	1,900	1,600	12 [J]	1,900	3,300	<20	1,700	15,000	130	300	6 [B]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	470	2,600	1,900	1,600	290	2,000	3,300	55	1,700	15,000	130	300	100
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	18	18	ND	ND	11	2.8	ND	2.1	ND	ND	ND	ND	3.6
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	68,000	68,000	60,000	240,000	3,600	120,000	13,000	9,300	81,000	95,000	100,000	37,000	42,000
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	60	60	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	42,000	42,000	7,300	16,000	260,000	6,500	16,000	51,000	26,000	51,000	640,000	28,000	290,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 2D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-15D	HS-MW-17S	HS-MW-17M	HS-MW-17D	HS-MW-18S	HS-MW-18D	HS-MW-19S	HS-MW-19D	HS-MW-20S	HS-MW-20M	HS-MW-20D	HS-MW-21S	HS-MW-21M
Sample Name						HS-GW-MW15D	HS-GW-MW17S	HS-GW-MW17M	HS-GW-MW17D	HS-GW-MW18S	HS-GW-MW18D	HS-GW-MW19S	HS-GW-MW19D	HS-GW-MW20S	HS-GW-MW20M	HS-GW-MW20D	HS-GW-MW21S	HS-GW-MW21M
Laboratory Sample ID(s)						UE18016-005 & 19050975-10A/C	UE25011-002 & 19051467-13A/C	UE25011-003 & 19051467-14A/C	UE25011-001 & 19051467-12A/C	UE24001-005 & 19051467-02A/C	UE24001-004 & 19051467-01A/C	UE24001-006 & 19051467-03A/C	UE24001-007 & 19051467-04A/C	UE30036-001 & 19051849-01A/C	UE30036-002 & 19051849-02A/C	UE30036-003 & 19051849-03A/C	UE18016-004 & 19050975-09A/C	UE18016-003 & 19050975-08A/C
Sample Date						05/16/2019	05/23/2019	05/23/2019	05/23/2019	05/21/2019	05/21/2019	05/21/2019	05/21/2019	05/28/2019	05/28/2019	05/28/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Formic acid	10,000	ID	7,700,000	NCL	1.9	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Hardness (total)	NCL	NCL	NCL	NCL	NCL	1,800,000	460,000	280,000	460,000	96,000	1,000,000	240,000	940,000	290,000	340,000	450,000	320,000	750,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	1,500	<100	44 [J]	<100	<100	250	470	220	<100	<100	84 [J]	34 [J]	130
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	15 [BJ]	9,700	630	10 [J]	750	2,300	19 [J]	11 [J]	600	14,000	15 [J]	1,300 [B]	7.8 [BJ]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	1,500	9,700	670	10	750	2,600	490	230	600	14,000	99	1,300	140
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	57	ND	1.7	ND	ND	9.6	18	8.4	ND	ND	3.2	1.3	5.0
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	33,000	220,000	14,000	91,000	42,000	47,000	8,300	32,000	43,000	78,000	65,000	77,000	5,900
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	2,000,000	12,000	30,000	56,000	5,800	710,000	9,700	570,000	25,000	24,000	120,000	54,000	520,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 2D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-21D	HS-MW-21D	HS-MW-25S	HS-MW-25D	HS-MW-26S	HS-MW-26M	HS-MW-26D	HS-MW-30A	HS-MW-30B	HS-MW-30C	HS-MW-30D	HS-MW-30E	HS-MW-31A
Sample Name						HS-GW-MW21D	HS-GW-MW21D DUP	HS-GW-MW25S	HS-GW-MW25D	HS-GW-MW26S	HS-GW-MW26M	HS-GW-MW26D	HS-GW-MW30A	HS-GW-MW30B	HS-GW-MW30C	HS-GW-MW30D	HS-GW-MW30E	HS-GW-MW31A
Laboratory Sample ID(s)						UE18016-001 & 19050975-06A/C	UE18016-002 & 19050975-07A/C	UE15023-007 & 19050975-01A/C	UE15023-008 & 19050975-02A/C	UE15023-010 & 19050975-04A/C	UE15023-011 & 19050975-05A/C	UE15023-009 & 19050975-03A/C	UG03026-005	UG03026-007	UG06001-001	UG03026-008	UG03026-006	UG03026-003
Sample Date						05/16/2019	05/16/2019	05/14/2019	05/14/2019	05/15/2019	05/15/2019	05/15/2019	07/02/2019	07/02/2019	07/03/2019	07/02/2019	07/02/2019	07/01/2019
Parameter (µg/L)																		
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000						
Formic acid	10,000	ID	7,700,000	NCL	1.9	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000						
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL	<2	<2	4.1	<2	<2	<2	<2						
Hardness (total)	NCL	NCL	NCL	NCL	NCL	940,000	970,000	210,000	330,000	190,000	290,000	1,600,000	290,000	280,000	300,000	300,000	370,000	320,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	240	220	39 [BJ]	78 [BJ]	660 [B]	100 [B]	210 [B]	<100	<100	<100	<100	46 [J]	110
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	8.5 [BJ]	9.7 [BJ]	2,100 [B]	21,000 [B]	140 [B]	1,300 [B]	2.2 [BJ]	3,000	2,900	3,200	2,200	1,300	790
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	250	230	2,100	21,000	800	1,400	210	3,000	2,900	3,200	2,200	1,300	900
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	9.2	8.4	1.5	3.0	25	3.8	8.0	ND	ND	ND	ND	1.8	4.2
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	3,800	3,600	32,000	65,000	21,000	130,000	4,100 [J]	32,000	34,000	34,000	33,000	33,000	64,000
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	80	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	760,000	790,000	15,000	36,000	36,000	71,000	1,400,000	17,000	17,000	23,000	42,000	30,000	11,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 2D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-31B	HS-MW-31C	HS-MW-31D	HS-MW-31E	HS-MW-31E	HS-MW-32A	HS-MW-32B	HS-MW-32C	HS-MW-32D
Sample Name						HS-GW-MW31B	HS-GW-MW31C	HS-GW-MW31D	HS-GW-MW31E	HS-GW-MW31E DUP	HS-GW-MW32A	HS-GW-MW32B	HS-GW-MW32C	HS-GW-MW32D
Laboratory Sample ID(s)						UG03026-001	UG03026-004	UG03026-002	UG06001-002	UG06001-003	UE25011-005 & 19051467-16A/C	UE25011-006 & 19051467-17A/C	UE25011-007 & 19051467-18A/C	UE25011-008 & 19051467-19A/C
Sample Date						07/01/2019	07/01/2019	07/01/2019	07/03/2019	07/03/2019	05/24/2019	05/24/2019	05/24/2019	05/24/2019
Parameter (µg/L)														
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL						<25,000	<25,000	<25,000	<25,000
Formic acid	10,000	ID	7,700,000	NCL	1.9						<25,000	<25,000	<25,000	<25,000
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL						<2	<2	<2	<2
Hardness (total)	NCL	NCL	NCL	NCL	NCL	260,000	300,000	290,000	280,000	280,000	600,000	560,000	570,000	940,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	80 [J]	180	39 [J]	110	110	280	360	280	910
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	4,800	4,100	3,400	19 [J]	14 [J]	15 [J]	<20	15,000	<20
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	4,900	4,300	3,400	130	120	300	360	15,000	910
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	3.1	6.9	1.5	4.2	4.2	11	14	11	35
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	61,000	78,000	80,000	19,000	18,000	32,000	15,000	16,000	40,000
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	<50	<50	<50	<50	<50	<50	<50	<50	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	22,000	20,000	32,000	89,000	91,000	360,000	410,000	390,000	1,400,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 2E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Laboratory Sample ID(s)						UE30036-008	UE30036-007	UE30036-015	UE30036-016	UE30036-014	UE30036-004	UE30036-005	UE30036-010	UE30036-009	UE30036-017	UE30036-006	UE24001-012	UE24001-013
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0076	<0.0072	<0.0072	<0.0071	<0.0069	<0.14	<0.0069	<0.0069	<0.0071	<0.0069	<0.0071	<0.007	<0.0069
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	1,200	0.0059	0.0057	0.099	0.5	0.055	1.6	<0.0034	0.0052	<0.0036	0.006	0.028	<0.0035	<0.0035
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	0.065	0.46	3.5	<0.0034	<0.0035	<0.0036	<0.0035	0.033	<0.0035	<0.0035
Perfluoro-1-nonanesulfonate (PFNS)	NCL	NCL	NCL	NCL	NCL	<0.0076	<0.0072	<0.0072	<0.0071	<0.0069	<0.14	<0.0069	<0.0069	<0.0071	<0.0069	<0.0071	<0.007	<0.0069
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoro-1-pentanesulfonate (PFPeS)	NCL	NCL	NCL	NCL	NCL	0.0038	<0.0036	0.11	0.92	0.19	3.1	<0.0034	0.011	<0.0036	<0.0035	0.035	<0.0035	<0.0035
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	0.034	<0.0036	0.055	2.1	2.9	11	<0.0034	0.039	<0.0036	0.0089	0.085	<0.0035	<0.0035
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	0.011	0.13	0.071	0.52	<0.0034	<0.0035	<0.0036	<0.0035	0.0066	<0.0035	<0.0035
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	0.022	0.34	0.19	1.8	<0.0034	0.0043	<0.0036	<0.0035	0.044	<0.0035	<0.0035
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	0.0051	<0.0036	0.072	0.41	0.2	1.6	<0.0034	0.0053	<0.0036	<0.0035	0.024	<0.0035	<0.0035
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorooctanoic acid (PFOA)	0.07 (JJ)	12	NCL	NCL	NCL	0.013	0.0098	0.019	0.89	1.4	11	0.0028	0.028	<0.0018	0.0035	0.35	<0.0017	<0.0017
Perfluorooctane sulfonic acid (PFOS)	0.07 (JJ)	0.012	NCL	NCL	NCL	0.012	0.0044	<0.0036	0.057	3.2	100	0.011	0.0059	<0.0036	0.0037	0.051	0.0049	<0.0035
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	0.025	0.014	0.019	0.95	4.6	110	0.014	0.034	ND	0.0072	0.4	0.0049	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	0.015	0.14	0.075	0.61	<0.0034	<0.0035	<0.0036	<0.0035	0.0067	<0.0035	<0.0035
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	0.074	0.02	0.4	5.6	8.7	130	0.014	0.099	ND	0.022	0.66	0.0049	ND

TABLE 2E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D	HS-MW-14S	HS-MW-14M	HS-MW-14D	HS-MW-15S	HS-MW-15M
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D	HS-GW-MW14S	HS-GW-MW14M	HS-GW-MW14D	HS-GW-MW15S	HS-GW-MW15M
Laboratory Sample ID(s)						UE24001-014	UE24001-015	UE24001-001	UE24001-002	UE24001-003	UE24001-017	UE24001-018	UE24001-016	UE18016-010	UE18016-009	UE18016-008	UE18016-007	UE18016-006
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019	05/17/2019	05/17/2019	05/17/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0072	<0.0071	<0.0078	<0.007	<0.007	<0.0075	<0.0072	<0.0075	<0.0072	<0.0073	<0.0074	<0.0073	<0.0076
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	1,200	<0.0036	<0.0036	0.004	0.0063	<0.0035	<0.0038	0.013	<0.0037	<0.0036	<0.0036	<0.0037	0.0058	<0.0038
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0049	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluoro-1-nonanesulfonate (PFNS)	NCL	NCL	NCL	NCL	NCL	<0.0072	<0.0071	<0.0078	<0.007	<0.007	<0.0075	<0.0072	<0.0075	<0.0072	<0.0073	<0.0074	<0.0073	<0.0076
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluoro-1-pentanesulfonate (PFPeS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0084	0.0036	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	0.005	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	0.0065	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorooctanoic acid (PFOA)	0.07 (JJ)	12	NCL	NCL	NCL	<0.0018	<0.0018	0.015	0.0072	<0.0017	0.0028	<0.0018	<0.0019	0.0047	<0.0018	<0.0019	<0.0018	<0.0019
Perfluorooctane sulfonic acid (PFOS)	0.07 (JJ)	0.012	NCL	NCL	NCL	<0.0036	<0.0036	0.036	0.012	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	ND	ND	0.051	0.019	ND	0.0028	ND	ND	0.0047	ND	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	0.0054	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0036	<0.0038
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	ND	ND	0.068	0.029	ND	0.0028	0.013	ND	0.022	ND	ND	0.0058	ND

TABLE 2E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-15D	HS-MW-17S	HS-MW-17M	HS-MW-17D	HS-MW-18S	HS-MW-18D	HS-MW-19S	HS-MW-19D	HS-MW-20S	HS-MW-20M	HS-MW-20D	HS-MW-21S	HS-MW-21M
Sample Name						HS-GW-MW15D	HS-GW-MW17S	HS-GW-MW17M	HS-GW-MW17D	HS-GW-MW18S	HS-GW-MW18D	HS-GW-MW19S	HS-GW-MW19D	HS-GW-MW20S	HS-GW-MW20M	HS-GW-MW20D	HS-GW-MW21S	HS-GW-MW21M
Laboratory Sample ID(s)						UE18016-005	UE25011-002	UE25011-003	UE25011-001	UE24001-005	UE24001-004	UE24001-006	UE24001-007	UE30036-001	UE30036-002	UE30036-003	UE18016-004	UE18016-003
Sample Date						05/16/2019	05/23/2019	05/23/2019	05/23/2019	05/21/2019	05/21/2019	05/21/2019	05/21/2019	05/28/2019	05/28/2019	05/28/2019	05/16/2019	05/16/2019
Parameter (µg/L)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0073	<0.0069	<0.0071	<0.007	<0.0073	<0.0074	<0.0069	<0.007	<0.0074	<0.0069	<0.0073	<0.0074	<0.0073
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	1,200	<0.0037	0.02	0.0039	0.41	<0.0036	0.031	<0.0034	<0.0035	0.016	0.068	0.17	<0.0037	<0.0036
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	0.024	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	0.0088	<0.0036	<0.0037	<0.0036
Perfluoro-1-nonanesulfonate (PFNS)	NCL	NCL	NCL	NCL	NCL	<0.0073	<0.0069	<0.0071	<0.007	<0.0073	<0.0074	<0.0069	<0.007	<0.0074	<0.0069	<0.0073	<0.0074	<0.0073
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluoro-1-pentanesulfonate (PFPeS)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	0.5	<0.0036	0.014	<0.0034	<0.0035	0.013	0.079	0.098	<0.0037	<0.0036
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	1	<0.0036	0.0082	<0.0034	<0.0035	0.017	0.16	0.042	<0.0037	<0.0036
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	<0.0037	0.0058	<0.0036	0.11	<0.0036	0.02	<0.0034	<0.0035	0.0043	0.015	0.052	<0.0037	<0.0036
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	0.3	<0.0036	0.011	<0.0034	<0.0035	0.0082	0.042	0.078	<0.0037	<0.0036
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	0.31	<0.0036	0.024	<0.0034	<0.0035	0.0085	0.038	0.1	<0.0037	<0.0036
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluorooctanoic acid (PFOA)	0.07 (JJ)	12	NCL	NCL	NCL	<0.0018	<0.0017	<0.0018	1.2	<0.0018	0.015	<0.0017	<0.0018	0.022	0.17	0.12	0.0026	<0.0018
Perfluorooctane sulfonic acid (PFOS)	0.07 (JJ)	0.012	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	0.058	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	0.034	<0.0036	<0.0037	<0.0036
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	ND	ND	ND	1.3	ND	0.015	ND	ND	0.022	0.2	0.12	0.0026	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	<0.0037	0.0044	<0.0036	0.13	<0.0036	0.017	<0.0034	<0.0035	0.0039	0.017	0.054	<0.0037	<0.0036
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	<0.0037	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0034	<0.0035	<0.0037	<0.0035	<0.0036	<0.0037	<0.0036
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	ND	0.03	0.0039	4	ND	0.14	ND	ND	0.093	0.63	0.71	0.0026	ND

TABLE 2E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-21D	HS-MW-21D	HS-MW-25S	HS-MW-25D	HS-MW-26S	HS-MW-26M	HS-MW-26D	HS-MW-30A	HS-MW-30B	HS-MW-30C	HS-MW-30D	HS-MW-30E	HS-MW-31A
Sample Name						HS-GW-MW21D	HS-GW-MW21D DUP	HS-GW-MW25S	HS-GW-MW25D	HS-GW-MW26S	HS-GW-MW26M	HS-GW-MW26D	HS-GW-MW30A	HS-GW-MW30B	HS-GW-MW30C	HS-GW-MW30D	HS-GW-MW30E	HS-GW-MW31A
Laboratory Sample ID(s)						UE18016-001	UE18016-002	UE15023-007	UE15023-008	UE15023-010	UE15023-011	UE15023-009	UG03026-005	UG03026-007	UG06001-001	UG03026-008	UG03026-006	UG03026-003
Sample Date						05/16/2019	05/16/2019	05/14/2019	05/14/2019	05/15/2019	05/15/2019	05/15/2019	07/02/2019	07/02/2019	07/03/2019	07/02/2019	07/02/2019	07/01/2019
Parameter (µg/L)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0073	<0.0073	<0.0072	<0.0074	<0.0073	<0.0074	<0.0071	<0.0071	<0.0072	<0.0074	<0.0071	<0.0074	<0.007
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	1,200	<0.0036	<0.0036	0.01	0.012	<0.0036	0.0046	<0.0036	0.0061	0.0071	0.0057	0.0048	0.0055	0.011
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluoro-1-nonanesulfonate (PFNS)	NCL	NCL	NCL	NCL	NCL	<0.0073	<0.0073	<0.0072	<0.0074	<0.0073	<0.0074	<0.0071	<0.0071	<0.0072	<0.0074	<0.0071	<0.0074	<0.007
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluoro-1-pentanesulfonate (PFPeS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0045	0.0069	<0.0036	<0.0037	<0.0036	0.0038	0.0038	<0.0037	<0.0036	<0.0037	0.0071
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	0.0047	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	0.0045	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0056	0.01	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorooctanoic acid (PFOA)	0.07 (JJ)	12	NCL	NCL	NCL	<0.0018	<0.0018	0.0091	0.014	<0.0018	0.0055	<0.0018	0.0033	0.0064	<0.0018	<0.0018	<0.0018	0.0035
Perfluorooctane sulfonic acid (PFOS)	0.07 (JJ)	0.012	NCL	NCL	NCL	<0.0036	<0.0036	0.071	0.051	<0.0036	0.011	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	ND	ND	0.08	0.065	ND	0.017	ND	0.0033	0.0064	ND	ND	ND	0.0035
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0043	0.0086	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0035	<0.0036	<0.0037	<0.0036	<0.0037	<0.0035
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	ND	ND	0.1	0.11	ND	0.021	ND	0.013	0.017	0.0057	0.0048	0.0055	0.022

TABLE 2E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-31B	HS-MW-31C	HS-MW-31D	HS-MW-31E	HS-MW-31E	HS-MW-32A	HS-MW-32B	HS-MW-32C	HS-MW-32D
Sample Name						HS-GW-MW31B	HS-GW-MW31C	HS-GW-MW31D	HS-GW-MW31E	HS-GW-MW31E DUP	HS-GW-MW32A	HS-GW-MW32B	HS-GW-MW32C	HS-GW-MW32D
Laboratory Sample ID(s)						UG03026-001	UG03026-004	UG03026-002	UG06001-002	UG06001-003	UE25011-005	UE25011-006	UE25011-007	UE25011-008
Sample Date						07/01/2019	07/01/2019	07/01/2019	07/03/2019	07/03/2019	05/24/2019	05/24/2019	05/24/2019	05/24/2019
Parameter (µg/L)														
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038	<0.0037
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038	<0.0037
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038	<0.0037
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0073	<0.0075	<0.0072	<0.0075	<0.0072	<0.0073	<0.0074	<0.0076	<0.0074
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	1,200	0.014	0.018	0.012	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluoro-1-nonanesulfonate (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0073	<0.0075	<0.0072	<0.0075	<0.0072	<0.0073	<0.0074	<0.0076
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluoro-1-pentanesulfonate (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	0.0041	0.005	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	0.011	0.011	0.0082	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	0.006	0.0051	0.0042	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	0.0038	<0.0037	0.0037	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	0.0056	0.006	0.0074	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorooctanoic acid (PFOA)	0.07 (U)	12	NCL	NCL	NCL	NCL	0.022	0.01	0.0073	<0.0019	<0.0018	<0.0018	<0.0018	<0.0019
Perfluorooctane sulfonic acid (PFOS)	0.07 (U)	0.012	NCL	NCL	NCL	NCL	0.0059	0.0077	0.0044	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	NCL	0.028	0.018	0.012	ND	ND	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	0.0051	0.004	0.006	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluorotridecanoic acid (PFTTrDA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0037	<0.0036	<0.0037	<0.0036	<0.0036	<0.0037	<0.0038
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	0.078	0.067	0.053	ND	ND	ND	ND	ND

NOTES:

1. Concentration and criteria units are micrograms per Liter ($\mu\text{g/L}$) or parts per billion (ppb). Calculated criteria and concentrations are rounded to two significant digits. "ND" indicates the parameters used in the calculation were not detected.
"NC" indicates not calculated.
2. Michigan Part 201 Groundwater Cleanup Criteria are based on "Table 1, Groundwater: Residential and Nonresidential 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 299.44 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 EGLE Table 1.
"NLV" indicates the substance is not likely to volatilize under most conditions.
Footnotes Include:
(A) - The criterion is the State of Michigan drinking water standard.
(D) - The calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or $1.0\text{E}+9$ ppb.
(E) - Criterion is the aesthetic drinking water value.
(F) - Criterion is based on adverse impacts to plant life and phytotoxicity.
(G) - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
EGLE'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.
(L) - Criteria for lead are derived using a biologically based model. The generic residential drinking water criterion of $4\mu\text{g/L}$ is linked to the generic residential soil direct contact criterion of 400 mg/kg.
(M) - Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
(N) - The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 $\mu\text{g/L}$.
(P) - Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria.
(S) - Criterion defaults to the hazardous substance-specific water solubility limit.
(V) - Criterion is the aesthetic drinking water value.
(W) - Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of $80\mu\text{g/L}$.
(AA) - Use 10,000 $\mu\text{g/L}$ where groundwater enters a structure through the use of a water well, sump or other device. Use 28,000 $\mu\text{g/L}$ for all other uses.
(CC) - The generic GSI criteria are based on the toxicity of unionized ammonia (NH₃); the criteria are 29 $\mu\text{g/L}$ and 53 $\mu\text{g/L}$ for cold water and warm water surface water, respectively. As a result, the GSI criterion shall be compared to the percent of the total ammonia concentration in the groundwater that will become NH₃ in the surface water. This percent NH₃ is a function of the pH and temperature of the receiving surface water and was estimated using the table of this footnote titled "Percent NH₃ in Aqueous Ammonia Solutions for 0-30°C and pH 6-10." This approach uses a default temperature of 68°F and 85°F 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%.
(EE) - The applicable GSI criteria for phosphorus is 1,000 $\mu\text{g/L}$.
(FF) - The chloride GSI criteria shall not apply for surface waters of the state that are not designated as a public water supply source.
(JJ) - Compliance with the drinking water criteria shall require comparing the sum of the PFOA and PFOS groundwater concentrations to the drinking water criterion of 0.07 $\mu\text{g/L}$.
3. EGLE Residential Groundwater Recommended Volatilization to Indoor Air Interim Action Screening Levels (RIASLs) for were based on EGLE's Toxics Steering Group's "Media-Specific Interim Action Screening Levels," published in August 2017. The EGLE published the RIASLs in August 2017, and recently removed the RIASLs from the EGLE website. The EGLE is reportedly evaluating the RIASLs for appropriate use and applicability. These are included for reference.
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 Tap Water 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 Groundwater Cleanup Criteria. U.S. EPA RMLs and EGLE Media-Specific Interim Action Screening Levels are provided for reference only and results 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 laboratory interpretation of the chains of custody.

TABLE 1A
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCs
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2100	HS-SB-2100	HS-SB-2101	HS-SB-2101	HS-SB-2102	HS-SB-2102	HS-SB-2103	HS-SB-2103	HS-SB-2103
Sample Name									HS-SB-2100 (1-2)	HS-SB-2100 (3-4)	HS-SB-2101 (1-2)	HS-SB-2101 (3-4)	HS-SB-2102 (1-2)	HS-SB-2102 (3-4)	HS-SB-2103 (1-2)	HS-SB-2103 (1-2) DUP	HS-SB-2103 (3-4)
Depth Interval (Feet below ground surface)									1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	1 - 2	3 - 4
Boring Location									House St Site	House St Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)									UF21044-002	UF21044-003	UF21044-004	UF21044-005	UF21044-006	UF21044-007	UF21044-008	UF21044-009	UF21044-010
Sample Date									6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/19/2019	6/19/2019	6/19/2019
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	<340	<290	<350	<290	<390	<290	<370	<340	<360
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<340	<290	<350	<290	<390	<290	<370	<340	<360
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<68	<59	<69	<57	<77	<57	<75	<67	<73
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Chloroethane	8,600	22,000	2,900,000 (C)	30,000,000	670,000,000,000	2,600,000 (C)	330	41,000,000	<68	<59	<69	<57	<77	<57	<75	<67	<73
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<34	<29	<35	<29	<39	<29	<37	<34	<36
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,2-Dibromoethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<68	<59	<69	<57	<77	<57	<75	<67	<73
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<34	<29	<35	<29	<39	<29	<37	<34	<36
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<34	<29	<35	<29	<39	<29	<37	<34	<36
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
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<340	<290	<350	<290	<390	<290	<370	<340	<360
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	42	<29	34 [HJ]	15 [J]	22 [HJ]	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)	NCL	99,000,000	<340	<290	<350	<290	<390	<290	<370	<340	<360
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<170	<150	<170	<140	<190	<140	<190	<170	<180
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	24 [J]	<29	22 [HJ]	<29	74 [H]	<29	<37	<34	<36
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Toluene	16,000	5,400	330,000 (C)	2,800,000	27,000,000,000	50,000,000 (C)	3,700	15,000,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
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	<34	<29	<35	<29	<39	<29	<37	<34	<36
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<34	<29	<35	<29	<39	<29	<37	<34	<36
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Trichlorofluoromethane	52,000	NA	2,800,000 (C)	92,000,000	3,800,000,000,000	79,000,000 (C)	NCL	70,000,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<34	<29	<35	<29	<39	<29	<37	<34	<36
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<34	<29	<35	<29	<39	<29	<37	<34	<36
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<34	<29	<35	<29	<39	<29	<37	<34	<36
Xylenes (total)	5,600	980	6,300,000 (C)	46,000,000	290,000,000,000	410,000,000 (C)	280	1,700,000	<68	<59	<69	<57	<77	<57	<75	<67	<73
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1A
SUMMARY OF SOIL SAMPLE ANALYSIS - VOCs
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2126	HS-SB-2126	HS-SB-2127	HS-SB-2127	HS-SB-2128	HS-SB-2128	HS-SB-2223	HS-SB-2223
Sample Name									HS-SB-2126 (2-3)	HS-SB-2126 (8-9)	HS-SB-2127 (3-4)	HS-SB-2127 (8-9)	HS-SB-2128 (2-3)	HS-SB-2128 (8-9)	HS-SB-2223 (1-2)	HS-SB-2223 (8-9)
Depth Interval (Feet below ground surface)									2 - 3	8 - 9	3 - 4	8 - 9	2 - 3	8 - 9	1 - 2	8 - 9
Boring Location									Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)									UF27082-001	UF27082-002	UF27082-003	UF27082-004	UF27082-005	UF27082-006	UF27082-007	UF27082-008
Sample Date									6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019
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	<530	<520	<440	<670	<730	<800	<740	<790
Benzene	100	4,000	1,600	13,000	380,000,000	180,000	1.7 (M)	120,000	<53	<52	<44	<67	<73	<80	<74	<79
Bromodichloromethane	1,600 (W)	ID	1,200	9,100	84,000,000	110,000	NCL	29,000	<53	<52	<44	<67	<73	<80	<74	<79
Bromoform	1,600 (W)	ID	150,000	900,000	2,800,000,000	820,000	NCL	1,900,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<520	<440	<670	<730	<800	<740	<790
Bromomethane (Methyl bromide)	200	100	860	11,000	330,000,000	320,000	NCL	21,000	<110	<100	<89	<130	<150	<160	<150	<160
Carbon disulfide	16,000	ID	76,000	1,300,000	47,000,000,000	7,200,000 (C,DD)	NCL	2,300,000	<53	<52	<44	<67	<73	<80	<74	<79
Carbon tetrachloride	100	760	190	3,500	130,000,000	96,000	NCL	65,000	<53	<52	<44	<67	<73	<80	<74	<79
Chlorobenzene	2,000	500	120,000	770,000	4,700,000,000	4,300,000 (C)	82	830,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<100	<89	<130	<150	<160	<150	<160
Chloroform	1,600 (W)	7,000	7,200	45,000	1,300,000,000	1,200,000	0.26 (M)	32,000	<53	<52	<44	<67	<73	<80	<74	<79
Chloromethane (Methyl chloride)	5,200	ID	2,300	40,000	4,900,000,000	1,600,000 (C)	6.9 (M)	330,000	<53	<52	<44	<67	<73	<80	<74	<79
Cyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	20,000,000	<53	<52	<44	<67	<73	<80	<74	<79
1,2-Dibromo-3-chloropropane (DBCP)	10 (M)	ID	220	260	560,000	4,400 (C)	NCL	530	<53	<52	<44	<67	<73	<80	<74	<79
Dibromochloromethane	1,600 (W)	ID	3,900	24,000	130,000,000	110,000	NCL	830,000	<53	<52	<44	<67	<73	<80	<74	<79
1,2-Dibromomethane (EDB)	20 (M)	110	670	1,700	14,000,000	92	NCL	3,600	<53	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
1,3-Dichlorobenzene	170	680	26,000	79,000	200,000,000	200,000 (C)	10 (M)	NCL	<53	<52	<44	<67	<73	<80	<74	<79
1,4-Dichlorobenzene	1,700	360	19,000	77,000	450,000,000	400,000	23 (M)	260,000	<53	<52	<44	<67	<73	<80	<74	<79
Dichlorodifluoromethane	95,000	ID	900,000	53,000,000	3,300,000,000,000	52,000,000 (C)	NCL	260,000	<110	<100	<89	<130	<150	<160	<150	<160
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	<52	<44	<67	<73	<80	<74	<79
1,2-Dichloroethane	100	7,200	2,100	6,200	120,000,000	91,000	NCL	46,000	<53	<52	<44	<67	<73	<80	<74	<79
1,1-Dichloroethene	140	2,600	62	1,100	62,000,000	200,000	12 (M)	680,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
1,2-Dichloropropane	100	4,600	4,000	25,000	270,000,000	140,000	NCL	47,000	<53	<52	<44	<67	<73	<80	<74	<79
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<53	<52	<44	<67	<73	<80	<74	<79
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<53	<52	<44	<67	<73	<80	<74	<79
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
Ethylbenzene	1,500	360	87,000	720,000	10,000,000,000	22,000,000 (C)	12 (M)	580,000	<53	<52	<44	<67	<73	<80	<74	<79
2-Hexanone	20,000	ID	990,000	1,100,000	2,700,000,000	32,000,000 (C)	NCL	600,000	<530	<520	<440	<670	<730	<800	<740	<790
Isopropylbenzene	91,000	3,200	400,000 (C)	1,700,000	5,800,000,000	25,000,000 (C)	NCL	5,800,000	<53	<52	<44	<67	<73	<80	<74	<79
Methyl acetate	NCL	NCL	NCL	NCL	NCL	NCL	NCL	230,000,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
4-Methyl-2-pentanone	36,000	ID	37,000,000 (C)	45,000,000	140,000,000,000	56,000,000 (C)	NCL	99,000,000	<530	<520	<440	<670	<730	<800	<740	<790
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<270	<260	<220	<340	<370	<400	<370	<390
Methylene chloride	100	30,000	45,000	210,000	6,600,000,000	1,300,000	130	1,000,000	24 [J]	<52	44	<67	<73	<80	<74	<79
Styrene	2,700	2,100	250,000	970,000	5,500,000,000	400,000	NCL	18,000,000	<53	<52	<44	<67	<73	<80	<74	<79
1,1,2,2-Tetrachloroethane	170	1,600	4,300	10,000	54,000,000	53,000	NCL	60,000	<53	<52	<44	<67	<73	<80	<74	<79
Tetrachloroethene	100	1,200	11,000	170,000	2,700,000,000	200,000 (C)	6.2 (M)	240,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
1,1,2-Trichloroethane	100	6,600	4,600	17,000	190,000,000	180,000	NCL	4,500	<53	<52	<44	<67	<73	<80	<74	<79
Trichloroethene	100	4,000	1,000	11,000	130,000,000	110,000 (DD)	0.33 (M)	12,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<52	<44	<67	<73	<80	<74	<79
Vinyl chloride	40	260	270	4,200	350,000,000	3,800	0.082 (M)	5,900	<53	<52	<44	<67	<73	<80	<74	<79
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<53	<52	<44	<67	<73	<80	<74	<79
o - Xylenes	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,900,000	<53	<52	<44	<67	<73	<80	<74	<79
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	<100	<89	<130	<150	<160	<150	<160
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	1,600 (W)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1B
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2100	HS-SB-2100	HS-SB-2101	HS-SB-2101	HS-SB-2102	HS-SB-2102	HS-SB-2103	HS-SB-2103	HS-SB-2103
Sample Name									HS-SB-2100 (1-2)	HS-SB-2100 (3-4)	HS-SB-2101 (1-2)	HS-SB-2101 (3-4)	HS-SB-2102 (1-2)	HS-SB-2102 (3-4)	HS-SB-2103 (1-2)	HS-SB-2103 (1-2) DUP	HS-SB-2103 (3-4)
Depth Interval (Feet below ground surface)									1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	1 - 2	3 - 4
Boring Location									House St Site	House St Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)									UF21044-002	UF21044-003	UF21044-004	UF21044-005	UF21044-006	UF21044-007	UF21044-008	UF21044-009	UF21044-010
Sample Date									6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/19/2019	6/19/2019	6/19/2019
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	<14	<13	<15	<14	<14	<14	<14
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<14	<14	<13	<15	<14	<14	<14	<14
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<72	<68	<71	<68	<73	<70	<72	<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	<14	<14	<13	<15	<14	<14	<14	<14
Atrazine	60	150	NLV	NLV	ID	71,000 (DD)	NCL	240,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Benzdine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<360	<340	<350	<330	<360	<350	<350	<340	<340
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<14	<14	<13	<15	<14	<14	<14	<14
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<72	<68	<71	<68	<73	<70	<72	<70	<69
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	11,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	ID	NCL	220,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<72	<68	<71	<68	<73	<70	<72	<70	<69
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<72	<68	<71	<68	<73	<70	<72	<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	<72	<68	<71	<68	<73	<70	<72	<70	<69
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<360	<340	<350	<330	<360	<350	<350	<340	<340
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<140	<130	<140	<130	<140	<140	<140	<140	<130
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<72	<68	<71	<68	<73	<70	<72	<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	<14	<14	<13	<15	<14	<14	<14	<14
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<360	<340	<350	<330	<360	<350	<350	<340	<340
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<140	<130	<140	<130	<140	<140	<140	<140	<130
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<14	<14	<13	<15	<14	<14	<14	<14
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<140	<130	<140	<130	<140	<140	<140	<140	<130
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<72	<68	<71	<68	<73	<70	<72	<70	<69
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<360	<340	<350	<330	<360	<350	<350	<340	<340
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<14	<14	<13	<15	<14	<14	<14	<14
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<72	<68	<71	<68	<73	<70	<72	<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	<14	<14	<13	<15	<14	<14	<14	<14
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<72	<68	<71	<68	<73	<70	<72	<70	<69
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<72	<68	<71	<68	<73	<70	<72	<70	<69

TABLE 1B
SUMMARY OF SOIL SAMPLE ANALYSIS - SVOCS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2126	HS-SB-2126	HS-SB-2127	HS-SB-2127	HS-SB-2128	HS-SB-2128	HS-SB-2223	HS-SB-2223
Sample Name									HS-SB-2126 (2-3)	HS-SB-2126 (8-9)	HS-SB-2127 (3-4)	HS-SB-2127 (8-9)	HS-SB-2128 (2-3)	HS-SB-2128 (8-9)	HS-SB-2223 (1-2)	HS-SB-2223 (8-9)
Depth Interval (Feet below ground surface)									2 - 3	8 - 9	3 - 4	8 - 9	2 - 3	8 - 9	1 - 2	8 - 9
Boring Location									Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)									UF27082-001	UF27082-002	UF27082-003	UF27082-004	UF27082-005	UF27082-006	UF27082-007	UF27082-008
Sample Date									6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019
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	<14	<16	<15	<14	<15	<16
Acenaphthylene	5,900	ID	1,600,000	2,200,000	2,300,000,000	1,600,000	NCL	NCL	<14	<14	<14	<16	<15	<14	<15	<16
Acetophenone	30,000	ID	120,000,000 (C)	44,000,000	33,000,000,000	47,000,000 (C)	NCL	23,000,000	<68	<72	<70	<80	<76	<71	<76	<80
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	<14	<16	<15	<14	<15	<16
Atrazine	60	150	NLV	NLV	ID	71,000 (DD)	NCL	240,000	<68	<72	<70	<80	<76	<71	<76	<80
Benzidine	1,000 (M)	1,000 (M)	NLV	NLV	46,000	1,000 (M)	NCL	53	<340	<350	<350	<390	<370	<350	<380	<400
Benzo(a)anthracene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<14	<14	<16	<15	<14	<15	<16
Benzo(a)pyrene	NLL	NLL	NLV	NLV	1,500,000	2,000	NCL	11,000	<14	<14	<14	<16	<15	<14	<15	<16
Benzo(b)fluoranthene	NLL	NLL	ID	ID	ID	20,000	NCL	110,000	<14	<14	<14	<16	<15	<14	<15	<16
Benzo(g,h,i)perylene	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NCL	NCL	<14	<14	<14	<16	<15	<14	<15	<16
Benzo(k)fluoranthene	NLL	NLL	NLV	NLV	ID	200,000	NCL	1,100,000	<14	<14	<14	<16	<15	<14	<15	<16
Butyl benzyl phthalate	2,200,000 (C)	120,000	NLV	NLV	47,000,000,000	36,000,000 (C)	NCL	29,000,000	<68	<72	<70	<80	<76	<71	<76	<80
Caprolactam	120,000	NA	NLV	NLV	670,000,000	53,000,000 (DD)	NCL	94,000,000	<68	<72	<70	<80	<76	<71	<76	<80
Carbazole	9,400	1,100	NLV	NLV	62,000,000	530,000	NCL	NCL	<68	<72	<70	<80	<76	<71	<76	<80
4-Chloro-3-methyl phenol	5,800	280	NLV	NLV	ID	4,500,000	NCL	19,000,000	<68	<72	<70	<80	<76	<71	<76	<80
bis(2-Chloroethyl)ether	100	100 (M)	8,300	3,800	9,400,000	13,000	NCL	23,000	<68	<72	<70	<80	<76	<71	<76	<80
2-Chloronaphthalene	620,000	NA	ID	ID	ID	56,000,000	NCL	14,000,000	<68	<72	<70	<80	<76	<71	<76	<80
2-Chlorophenol	900	360	430,000	960,000	1,200,000,000	1,400,000	NCL	1,200,000	<68	<72	<70	<80	<76	<71	<76	<80
Chrysene	NLL	NLL	ID	ID	ID	2,000,000	NCL	11,000,000	<14	<14	<14	<16	<15	<14	<15	<16
Dibenzo(a,h)anthracene	NLL	NLL	NLV	NLV	ID	2,000	NCL	NCL	<14	<14	<14	<16	<15	<14	<15	<16
Dibenzofuran	ID	1,700	2,000,000	130,000	6,700,000	ID	NCL	220,000	<68	<72	<70	<80	<76	<71	<76	<80
3,3'-Dichlorobenzidine	2,000 (M)	2,000 (M)	NLV	NLV	6,500,000	6,600	NCL	120,000	<68	<72	<70	<80	<76	<71	<76	<80
2,4-Dichlorophenol	1,500	330 (M)	NLV	NLV	5,100,000,000	660,000 (DD)	NCL	570,000	<68	<72	<70	<80	<76	<71	<76	<80
Diethylphthalate	110,000	2,200	NLV	NLV	3,300,000,000	170,000,000 (C)	NCL	150,000,000	<68	<72	<70	<80	<76	<71	<76	<80
Dimethyl phthalate	1,500,000 (C)	NA	NLV	NLV	3,300,000,000	1,000,000,000 (C,D)	NCL	NCL	<68	<72	<70	<80	<76	<71	<76	<80
2,4-Dimethylphenol	7,400	7,600	NLV	NLV	4,700,000,000	11,000,000	NCL	3,800,000	<68	<72	<70	<80	<76	<71	<76	<80
Di-n-butyl phthalate	960,000 (C)	11,000	NLV	NLV	3,300,000,000	27,000,000 (C)	NCL	19,000,000	<68	<72	<70	<80	<76	<71	<76	<80
4,6-Dinitro-2-methylphenol	830 (M)	NA	NLV	NLV	130,000,000	79,000	NCL	15,000	<340	<350	<350	<390	<370	<350	<380	<400
2,4-Dinitrotoluene	430	NA	NLV	NLV	16,000,000	48,000	NCL	170,000	<130	<140	<140	<160	<150	<140	<150	<160
Di-n-octylphthalate	100,000,000	ID	NLV	NLV	31,000,000,000	6,900,000	NCL	1,900,000	<68	<72	<70	<80	<76	<71	<76	<80
1,2-Diphenylhydrazine(as azobenzene)	4,200	ID	6,100,000	630,000	100,000,000	140,000	NCL	560,000	<68	<72	<70	<80	<76	<71	<76	<80
bis(2-Ethylhexyl)phthalate	NLL	NLL	NLV	NLV	700,000,000	2,800,000	NCL	3,800,000	<68	<72	<70	<80	<76	<71	<76	<80
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	<14	<16	<15	<14	<15	<16
Fluorene	390,000	5,300	580,000,000	130,000,000	9,300,000,000	27,000,000	NCL	7,200,000	<14	<14	<14	<16	<15	<14	<15	<16
Hexachlorobenzene	1,800	350	41,000	17,000	6,800,000	8,900	NCL	21,000	<68	<72	<70	<80	<76	<71	<76	<80
Hexachlorobutadiene	26,000	91	130,000	130,000	140,000,000	100,000	NCL	120,000	<68	<72	<70	<80	<76	<71	<76	<80
Hexachlorocyclopentadiene	320,000	ID	30,000	50,000	13,000,000	2,300,000 (C)	NCL	5,300	<340	<350	<350	<390	<370	<350	<380	<400
Hexachloroethane	430	1,800	40,000	550,000	230,000,000	230,000	NCL	130,000	<68	<72	<70	<80	<76	<71	<76	<80
Indeno(1,2,3-c,d)pyrene	NLL	NLL	NLV	NLV	ID	20,000	NCL	110,000	<14	<14	<14	<16	<15	<14	<15	<16
Isophorone	15,000	26,000	NLV	NLV	12,000,000,000	4,800,000 (C)	NCL	38,000,000	<68	<72	<70	<80	<76	<71	<76	<80
2-Methylnaphthalene	57,000	4,200	2,700,000	1,500,000	670,000,000	8,100,000	NCL	720,000	<14	<14	<14	<16	<15	<14	<15	<16
2-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	9,500,000	<68	<72	<70	<80	<76	<71	<76	<80
3+4-Methylphenol	NCL	NCL	NCL	NCL	NCL	NCL	NCL	19,000,000	<130	<140	<140	<160	<150	<140	<150	<160
Naphthalene	35,000	730	250,000	300,000	200,000,000	16,000,000	NCL	380,000	<14	<14	<14	<16	<15	<14	<15	<16
Nitrobenzene	330 (M)	3,600	91,000	54,000	47,000,000	100,000	NCL	380,000	<68	<72	<70	<80	<76	<71	<76	<80
2-Nitrophenol	400	ID	NLV	NLV	ID	630,000	NCL	NCL	<130	<140	<140	<160	<150	<140	<150	<160
N-Nitrosodi-n-propylamine	330 (M)	NA	NLV	NLV	1,600,000	1,200	NCL	7,800	<68	<72	<70	<80	<76	<71	<76	<80
N-Nitrosodiphenylamine (Diphenylamine)	5,400	NA	NLV	NLV	2,200,000,000	1,700,000	NCL	11,000,000	<68	<72	<70	<80	<76	<71	<76	<80
Pentachlorophenol	22	17,000 (G)	NLV	NLV	100,000,000	90,000	NCL	100,000	<340	<350	<350	<390	<370	<350	<380	<400
Phenanthrene	56,000	2,100	2,800,000	160,000	6,700,000	1,600,000	NCL	NCL	<14	<14	<14	<16	<15	<14	<15	<16
Phenol	88,000	9,000	NLV	NLV	40,000,000,000	40,000,000 (C,DD)	NCL	57,000,000	<68	<72	<70	<80	<76	<71	<76	<80
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	<14	<16	<15	<14	<15	<16
2,4,5-Trichlorophenol	39,000	NA	NLV	NLV	23,000,000,000	23,000,000	NCL	19,000,000	<68	<72	<70	<80	<76	<71	<76	<80
2,4,6-Trichlorophenol	2,400	330 (M)	NLV	NLV	1,000,000,000	710,000	NCL	190,000	<68	<72	<70	<80	<76	<71	<76	<80

TABLE 1C
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background ²	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2100	HS-SB-2100	HS-SB-2101	HS-SB-2101	HS-SB-2102	HS-SB-2102	HS-SB-2103	HS-SB-2103	HS-SB-2103
Sample Name										HS-SB-2100 (1-2)	HS-SB-2100 (3-4)	HS-SB-2101 (1-2)	HS-SB-2101 (3-4)	HS-SB-2102 (1-2)	HS-SB-2102 (3-4)	HS-SB-2103 (1-2)	HS-SB-2103 (1-2) DUP	HS-SB-2103 (3-4)
Depth Interval (Feet below ground surface)										1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	1 - 2	3 - 4
Boring Location										House St Site	House St Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										UF21044-002	UF21044-003	UF21044-004	UF21044-005	UF21044-006	UF21044-007	UF21044-008	UF21044-009	UF21044-010
Sample Date										6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/19/2019	6/19/2019	6/19/2019
Parameter (µg/kg)																		
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	6,500,000	2,300,000	4,500,000	4,000,000	3,500,000	1,500,000	5,100,000	4,900,000	2,000,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<460	<370	<530	<520	<500	<490	<460	<500	<400
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	890	510	700	850	610	720	910	960	720
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	70,000	9,000	39,000	18,000	17,000	8,500	30,000	28,000	7,300
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	75 [J]	41 [J]	71 [J]	64 [J]	59 [J]	48 [J]	71 [J]	69 [J]	55 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<12,000	<9,700	<14,000	<13,000	<13,000	<13,000	<12,000	<13,000	<10,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	46 [J]	<97	31 [J]	26 [J]	<130	25 [J]	42 [J]	37 [J]	24 [J]
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	8,600	3,100	4,600	5,300	3,700	2,600	5,600	5,300	3,200
Trivalent Chromium (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	8,300	2,900	4,400	5,000	3,500	2,400	5,600	5,300	3,200
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	280 [J]	230 [J]	220 [J]	270 [J]	240 [J]	210 [J]	<1,100	<1,100	<1,000
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	1,600	850 [J]	1,200 [J]	1,500	850 [J]	970 [J]	1,200	1,100 [J]	980 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	2,200	1,200	1,700	2,000	1,700	1,400	2,000	2,000	1,300
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	5,000,000	2,300,000	3,800,000	3,900,000	2,900,000	2,100,000	4,000,000	4,200,000	2,800,000
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	3,300	1,200	2,400	2,200	1,800	1,100	2,500	2,300	1,300
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	510,000	300,000	400,000	520,000	310,000	260,000	420,000	430,000	310,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	23 [J]	<84	23 [J]	20 [J]	<92	<84	24 [J]	23 [J]	<78
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,300	<1,900	<2,700	<2,600	<2,500	<2,500	<2,300	<2,500	<2,000
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	4,000	2,100	2,800	3,400	2,600	1,800	3,400	3,500	2,200
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,200	<970	<1,400	<1,300	<1,300	<1,300	<1,200	<1,300	<1,000
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<230	<190	<270	<260	<250	<250	<230	<250	<200
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<92,000	<75,000	<110,000	<100,000	<100,000	<98,000	<92,000	<100,000	<80,000
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	67 [J]	<97	46 [J]	33 [J]	<130	<130	41 [J]	42 [J]	<100
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	160,000	84,000	110,000	140,000	91,000	77,000	130,000	130,000	98,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	9,200	4,900	6,700	8,000	5,400	4,300	7,400	7,700	5,700
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	23,000	5,200	17,000	9,400	9,800	3,100	17,000	17,000	4,100

TABLE 1C
SUMMARY OF SOIL SAMPLE ANALYSIS - METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background ²	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2126	HS-SB-2126	HS-SB-2127	HS-SB-2127	HS-SB-2128	HS-SB-2128	HS-SB-2223	HS-SB-2223
Sample Name										HS-SB-2126 (2-3)	HS-SB-2126 (8-9)	HS-SB-2127 (3-4)	HS-SB-2127 (8-9)	HS-SB-2128 (2-3)	HS-SB-2128 (8-9)	HS-SB-2223 (1-2)	HS-SB-2223 (8-9)
Depth Interval (Feet below ground surface)										2 - 3	8 - 9	3 - 4	8 - 9	2 - 3	8 - 9	1 - 2	8 - 9
Boring Location										Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										UF27082-001	UF27082-002	UF27082-003	UF27082-004	UF27082-005	UF27082-006	UF27082-007	UF27082-008
Sample Date										6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019
Parameter (µg/kg)																	
Aluminum	6,900,000	1,000	NA	NLV	NLV	ID	50,000,000 (DD)	NCL	230,000,000	1,400,000	1,400,000	1,600,000	820,000	3,700,000	810,000	4,700,000	1,400,000
Antimony	NA	4,300	94,000	NLV	NLV	13,000,000	180,000	NCL	94,000	<500	<520	<520	<530	<530	<540	<520	<570
Arsenic	5,800	4,600	4,600	NLV	NLV	720,000	7,600	NCL	68,000	880	740	4,800	470 [J]	1,000	480 [J]	1,900	660
Barium	75,000	1,300,000	660,000 (G)	NLV	NLV	330,000,000	37,000,000	NCL	46,000,000	8,000	6,100	6,600	3,600	20,000	3,300	25,000	7,400
Beryllium	NA	51,000	320,000 (G)	NLV	NLV	1,300,000	410,000	NCL	470,000	46 [J]	43 [J]	42 [J]	38 [J]	52 [J]	37 [J]	48 [J]	41 [J]
Boron	NA	10,000	140,000	NLV	NLV	ID	48,000,000 (DD)	NCL	47,000,000	<13,000	<14,000	<14,000	<14,000	<14,000	<14,000	3,700 [J]	<15,000
Cadmium	1,200	6,000	3,000 (G)	NLV	NLV	1,700,000	550,000	NCL	NCL	<130	<140	<140	<140	27 [J]	<140	48 [J]	<150
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,000	2,800	4,400	2,000	5,200	2,100	7,200	2,800
Trivalent Chromium (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	3,000	2,800	4,400	2,000	5,200	2,100	7,200	2,800
Hexavalent Chromium	NA	30,000	3,300	NLV	NLV	260,000	2,500,000	NCL	30,000	<1,100	<1,100	<1,100	<1,200	<1,100	<1,100	<1,200	<1,200
Cobalt	6,800	800	2,000	NLV	NLV	13,000,000	2,600,000	NCL	70,000	970 [J]	830 [J]	1,900	560 [J]	1,500	580 [J]	2,900	880 [J]
Copper	32,000	5,800,000	100,000 (G)	NLV	NLV	130,000,000	20,000,000	NCL	9,400,000	1,400	1,800	5,700	1,100 [J]	2,000	1,100 [J]	5,100	1,600
Iron	12,000,000	6,000	NA	NLV	NLV	ID	160,000,000	NCL	160,000,000	2,600,000 [B]	2,500,000 [B]	5,800,000 [B]	1,800,000 [B]	4,000,000 [B]	1,700,000 [B]	7,800,000 [B]	2,400,000 [B]
Lead	21,000	700,000	2,500,000 (G)	NLV	NLV	100,000,000	400,000	NCL	400,000	1,700	1,200	5,800	780	3,200	720	3,700	1,200
Magnesium	NA	8,000,000	NA	NLV	NLV	6,700,000,000	1,000,000,000 (D)	NCL	NCL	310,000	320,000	420,000	220,000	590,000	830,000	4,800,000	370,000
Mercury	130	1,700	50 (M)	48,000	52,000	20,000,000	160,000	0.027	33,000	<88	<82	<84	<91	<86	<90	<84	<90
Molybdenum	NA	1,500	64,000	NLV	NLV	ID	2,600,000	NCL	1,200,000	<2,500	<2,600	<2,600	<2,600	<2,700	<2,700	<2,600	<2,900
Nickel	20,000	100,000	100,000 (G)	NLV	NLV	13,000,000	40,000,000	NCL	4,600,000	2,100	2,200	3,900	1,400	3,700	1,400	5,700	2,000
Selenium	410	4,000	400	NLV	NLV	130,000,000	2,600,000	NCL	1,200,000	<1,300	<1,400	<1,400	<1,400	<1,400	<1,400	<1,300	<1,500
Silver	1,000	4,500	100 (M)	NLV	NLV	6,700,000	2,500,000	NCL	1,200,000	<250	<260	<260	<260	<270	<270	<260	<290
Sodium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	76,000 [J]	<100,000	<100,000	<110,000	<110,000	<110,000	<100,000	51,000 [J]
Thallium	NA	2,300	4,200	NLV	NLV	13,000,000	35,000	NCL	2,300	<130	<140	37 [J]	<140	35 [J]	<140	69 [J]	<150
Titanium	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	85,000	97,000	170,000	66,000	140,000	66,000	220,000	88,000
Vanadium	NA	72,000	430,000	NLV	NLV	ID	750,000 (DD)	NCL	1,200,000	4,500	5,000	11,000	3,200	6,700	2,800	11,000	4,400
Zinc	47,000	2,400,000	230,000 (G)	NLV	NLV	ID	170,000,000	NCL	70,000,000	4,900	5,400	16,000	3,200	12,000	3,800	19,000	4,500

TABLE 1D
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background ²	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2100	HS-SB-2100	HS-SB-2101	HS-SB-2101	HS-SB-2102	HS-SB-2102	HS-SB-2103	HS-SB-2103	HS-SB-2103
Sample Name										HS-SB-2100 (1-2)	HS-SB-2100 (3-4)	HS-SB-2101 (1-2)	HS-SB-2101 (3-4)	HS-SB-2102 (1-2)	HS-SB-2102 (3-4)	HS-SB-2103 (1-2)	HS-SB-2103 (1-2) DUP	HS-SB-2103 (3-4)
Depth Interval (Feet below ground surface)										1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	1 - 2	3 - 4
Boring Location										House St Site	House St Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										UF21044-002 & 19061232-01A	UF21044-003 & 19061232-02A	UF21044-004 & 19061232-03A	UF21044-005 & 19061232-04A	UF21044-006	UF21044-007	UF21044-008	UF21044-009	UF21044-010
Sample Date										06/18/2019	06/18/2019	06/18/2019	06/18/2019	6/18/2019	6/18/2019	6/19/2019	6/19/2019	6/19/2019
Parameter (µg/kg)																		
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<19,000	<19,000	<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	<19,000	<19,000	<20,000	<20,000					
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	200	80 [J]	140	87 [J]	92 [J]	67 [J]	120 [J]	84 [J]	59 [J]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	81	<40	<40	<40					
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,100	<1,100	<1,100	<1,100	<1,000	<1,100	<1,100	<1,000
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	460	380	430	380	430	390	480	730	630
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	460	380	430	380	430	390	480	730	630
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NA	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL	<11,000	<11,000	<11,000	<11,000	<11,000	<10,000	<11,000	<11,000	<10,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	430,000	83,000	350,000	110,000	350,000	63,000	340,000	340,000	87,000
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<11,000	<11,000	<11,000	<11,000	<10,000	<11,000	<11,000	<10,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<100,000	<100,000	<100,000					

TABLE 1D
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background ²	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2118	HS-SB-2118	HS-SB-2119	HS-SB-2119	HS-SB-2120	HS-SB-2120	HS-SB-2120	HS-SB-2126	HS-SB-2126
Sample Name										HS-SB-2118 (0-1)	HS-SB-2118 (3-4)	HS-SB-2119 (0-1)	HS-SB-2119 (3-4)	HS-SB-2120 (1-2)	HS-SB-2120 (1-2) DUP	HS-SB-2120 (4-5)	HS-SB-2126 (2-3)	HS-SB-2126 (8-9)
Depth Interval (Feet below ground surface)										0 - 1	3 - 4	0 - 1	3 - 4	1 - 2	1 - 2	4 - 5	2 - 3	8 - 9
Boring Location										House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	Off-Site	Off-Site
Laboratory Sample ID(s)										19070640-01A	19070640-02A	19070640-03A	19070640-04A	19070640-05A	19070640-06A	19070640-07A	UF27082-001	UF27082-002
Sample Date										7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	6/25/2019	6/25/2019
Parameter (µg/kg)																		
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<19,000	<19,000	<19,000	<18,000	<19,000	<19,000	<19,000		
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<19,000	<19,000	<19,000	<18,000	<19,000	<19,000	<19,000		
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000								68 [J]	71 [J]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	42	<40	<39	<40	<40	<40	<39		
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL								<1,100	<1,100
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL								440	810
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	NC	NC	NC	NC	NC	NC	NC	440	810
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NA	NCL	NC	NC	NC	NC	NC	NC	NC	ND	ND
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL								990 [J]	14,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL								47,000	54,000
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL								<11,000	<11,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<100,000	<100,000	<100,000	<100,000	<100,000	<100,000		

TABLE 1D
SUMMARY OF SOIL SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Statewide Default Background ²	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2127	HS-SB-2127	HS-SB-2128	HS-SB-2128	HS-SB-2223	HS-SB-2223
Sample Name										HS-SB-2127 (3-4)	HS-SB-2127 (8-9)	HS-SB-2128 (2-3)	HS-SB-2128 (8-9)	HS-SB-2223 (1-2)	HS-SB-2223 (8-9)
Depth Interval (Feet below ground surface)										3 - 4	8 - 9	2 - 3	8 - 9	1 - 2	8 - 9
Boring Location										Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										UF27082-003	UF27082-004	UF27082-005	UF27082-006	UF27082-007	UF27082-008
Sample Date										6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019
Parameter (µg/kg)															
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL						
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000						
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000	140	68 [J]	92 [J]	78 [J]	85 [J]	57 [J]
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL						
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1,100	<1,200	<1,100	<1,100	<1,200	<1,200
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	1,200	420	1,300	540	670	640
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	1200	420	1,300	540	670	640
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NA	NCL	ND	ND	ND	ND	ND	ND
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL	9,300 [J]	19,000	<11,000	15,000	3,800 [J]	80,000
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL	76,000	57,000	170,000	57,000	140,000	140,000
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL	<11,000	<12,000	<11,000	<11,000	<12,000	<12,000
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL						

TABLE 1E
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2100	HS-SB-2100	HS-SB-2101	HS-SB-2101	HS-SB-2102	HS-SB-2102	HS-SB-2103	HS-SB-2103	HS-SB-2103
Sample Name									HS-SB-2100 (1-2)	HS-SB-2100 (3-4)	HS-SB-2101 (1-2)	HS-SB-2101 (3-4)	HS-SB-2102 (1-2)	HS-SB-2102 (3-4)	HS-SB-2103 (1-2)	HS-SB-2103 (1-2) DUP	HS-SB-2103 (3-4)
Depth Interval (Feet below ground surface)									1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	3 - 4	1 - 2	1 - 2	3 - 4
Boring Location									House St Site	House St Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)									UF21044-002	UF21044-003	UF21044-004	UF21044-005	UF21044-006	UF21044-007	UF21044-008	UF21044-009	UF21044-010
Sample Date									6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	6/19/2019	6/19/2019	6/19/2019
Parameter (µg/kg)																	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<12	<9.6	<12	<9.4	<10	<10	<11	<9.8	<11
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<12	<9.6	<12	<9.4	<10	<10	<11	<9.8	<11
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.4	<1.9	<2.3	<1.9	<2.1	<2	<2.2	<2	<2.2
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<2.4	<1.9	<2.3	<1.9	<2.1	<2	<2.2	<2	<2.2
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	16	22	<5.8	<4.7	6.9	5.7	<5.4	<4.9	<5.4
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	16	22	ND	ND	6.9	5.7	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluorotridecanoic acid (PFTriDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<6	<4.8	<5.8	<4.7	<5.2	<5	<5.4	<4.9	<5.4
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	16	22	ND	ND	6.9	5.7	ND	ND	ND

TABLE 1E
SUMMARY OF SOIL SAMPLE ANALYSIS - PFAS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Soil Cleanup Criteria – Drinking Water Protection ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Soil Cleanup Criteria – Soil Volatilization to Indoor Air Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Infinite Source Volatile Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Particulate Soil Inhalation ²	Part 201 Generic Residential Soil Cleanup Criteria – Direct Contact ²	EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Level ³	U.S. EPA Residential Soil Regional Removal Management Levels ⁴	HS-SB-2126	HS-SB-2126	HS-SB-2127	HS-SB-2127	HS-SB-2128	HS-SB-2128	HS-SB-2223	HS-SB-2223
Sample Name									HS-SB-2126 (2-3)	HS-SB-2126 (8-9)	HS-SB-2127 (3-4)	HS-SB-2127 (8-9)	HS-SB-2128 (2-3)	HS-SB-2128 (8-9)	HS-SB-2223 (1-2)	HS-SB-2223 (8-9)
Depth Interval (Feet below ground surface)									2 - 3	8 - 9	3 - 4	8 - 9	2 - 3	8 - 9	1 - 2	8 - 9
Boring Location									Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)									UF27082-001	UF27082-002	UF27082-003	UF27082-004	UF27082-005	UF27082-006	UF27082-007	UF27082-008
Sample Date									6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019
Parameter (µg/kg)																
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.5	<11	<9.4	<12	<9.9	<10	<10	<12
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<9.5	<11	<9.4	<12	<9.9	<10	<10	<12
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2.3	<1.9	<2.4	<2	<2.1	<2.1	<2.3
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<1.9	<2.3	<1.9	<2.4	<2	<2.1	<2.1	<2.3
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	3,800,000	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	12
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	NCL	NCL	NCL	NCL	NCL	15	37	57	6.6	67	5.2	6	80
PFOA + PFOS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	15	37	57	6.6	67	5.2	6	92
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluorotridecanoic acid (PFTriDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<4.7	<5.6	<4.7	<5.9	<5	<5.2	<5.2	<5.8
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	15	37	57	6.6	67	5.2	6	92

NOTES:

- Concentration and criteria units are micrograms per kilogram ($\mu\text{g/kg}$) or parts per billion (ppb). Calculated criteria and concentrations are rounded to two significant digits. "ND" indicates the parameters used in the calculation were not detected. "NC" indicates not calculated.
- Michigan Part 201 Soil 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 EGLE Table 2.
"NULL" 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 $1.0\text{E}+9$ 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.
EGLE'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 ($220 \text{ mg CaCO}_3/\text{L}$) 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 $2.0\text{E}+5 \text{ }\mu\text{g/kg}$.
(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 $1,600 \text{ }\mu\text{g/kg}$.
(CC) - The generic soil GSI protection criteria for unionized ammonia are $580 \text{ }\mu\text{g/kg}$ and $1,100 \text{ }\mu\text{g/kg}$ 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 $1,000 \text{ }\mu\text{g/L}$. 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 ($20,000 \text{ }\mu\text{g/kg}$) was used.
- EGLE Residential Soil Recommended Volatilization to Indoor Air Interim Action Screening Levels (RIASLs) for were based on EGLE's Toxics Steering Group's "Media-Specific Interim Action Screening Levels," published in August 2017. The EGLE published the RIASLs in August 2017, and recently removed the RIASLs from the EGLE website. The EGLE is reportedly evaluating the RIASLs for appropriate use and applicability. These are included for reference.
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).
- U.S. EPA Residential Soil Regional Removal Management Levels (RMLs) were based on "Generic RML Tables," updated November 2018.
- To the extent that samples listed in these tables contain or consist of waste material, in whole or in part, the comparison to the EGLE Part 201 generic cleanup criteria does not imply applicability of the criteria because the physical and chemical properties of the waste material are expected to be different from the default values or assumptions used to derive the Generic Soil Cleanup Criteria in the Cleanup Criteria Requirements for Response Activity Rules (R299.1-299.50).
- Bold, italic number with thick line border or italic parameter name indicates that parameter was detected above the Michigan Part 201 Soil Cleanup Criteria. Per MCL 324.20101(e)(i), if state-wide default background levels are available and greater than a risk-based generic cleanup criterion, then the state-wide default background levels are used as a substitute for that generic cleanup criterion.
- 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.
"H" indicates the sample was analyzed out of holding time.
- 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 laboratory interpretation of the chains of custody.



Rose & Westra
A Division of GZA



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MEMORANDUM

To: Jeffrey Kimble, U.S. EPA, Region 5

From: Loretta Powers, Rose & Westra, a Division of GZA GeoEnvironmental, Inc.

Date: July 11, 2019

File No.: 16.0062335.52 Task 006

Re: Wolverine World Wide, Inc. (Wolverine) – House Street – Monthly Progress Report

This Monthly Progress Report (MPR) is being provided at the request of the U.S. EPA to support the June 3, 2019 Draft *Work Plan, House Street Disposal Area, Plainfield Township, Kent County, Michigan* (2019 WP). The 2019 WP was prepared in response to the U.S. EPA Region 5 Unilateral Administrative Order for Removal Actions¹ (UAO) effective February 1, 2018, associated with the Former Wolverine Tannery and House Street Disposal Area. This MPR is submitted pursuant to Paragraph 25 of the UAO.

Per Paragraph 25 of the UAO, this MPR summarizes the following items for the period of June 11 to July 2, 2018: “... *significant development during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.*” Subsequent to issuance of the UAO and completion of the 2019 WP, R&W/GZA and U.S. EPA agreed that approved modifications to the 2019 WP will also be summarized in the MPRs.

ACTIONS PERFORMED

- 1) June 10-June 14, 2019: R&W/GZA mobilized to the Site. Mobilization included tasks such as clearing vegetation, staking some drilling locations, sign placement, repair gravel pads for work trailers, place work trailers, and setting equipment and supplies for use at the Site.
- 2) June 17, 2019: R&W/GZA began drilling efforts for delineation task in the southwestern portion of the Site (2019 WP, Section 3.4).
- 3) June 20, 2019: Western Michigan University students were invited to the Site to observe the 2019 WP implementation
- 4) June 27, 2019: Wolverine received U.S. EPA's Approval with Significant Modifications to the draft 2019 WP.
- 5) July 2, 2019: The borings and associated sampling in the Southwest investigation area were completed. This totaled 33 boring locations.

¹. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. V-W-18-C-004.



Table 1 summarizes the borings completed and associated samples collected during this reporting period. The completed locations in the southwestern investigation area are also shown on attached working draft, Figure 3.

Boring logs for soil borings identified as HS-SB-2100 to HS-SB-2115 are attached.

ANALYTICAL DATA RECIEVED

No analytical data from the southwest investigation was received during this reporting period.

Analytical data from the Quarter 2 groundwater sampling of the on-Site and near-Site groundwater wells (series MW-1 through MW-11) are included on the attached tables.

ANTICIPATED ACTIONS AND SCHEDULE FOR NEXT REPORTING PERIOD

During the next reporting period, July 3 to August 2, 2019, R&W/GZA anticipates submittal of the final 2019 WP to the EPA (due July 12, 2019). Additionally, the following tasks are anticipated to begin or be completed:

- 1) Complete Section 3.6 of the 2019 WP, Chromium TCLP soil delineation
- 2) Obtain access to the two adjoining privately owned parcels for the west adjacent suspected wetland areas investigation (2019 WP, Section 3.5); this task will begin once the chromium TCLP soil delineation is completed
- 3) Receipt of analytical data for southwest investigation
- 4) Begin clearing and installation of fencing
- 5) Complete of additional boring logs from this reporting period and a portion of those completed during the next reporting period

IDENTIFIED PROBLEMS AND RESOLUTIONS

It was determined that the accuracy of the GIS locations of some of the 2018 borings in the southwest portion of the Site were not accurate for the purpose of measuring out a 25-foot tier. Resolved by physically measuring 25 ft from stakes of original boring locations.

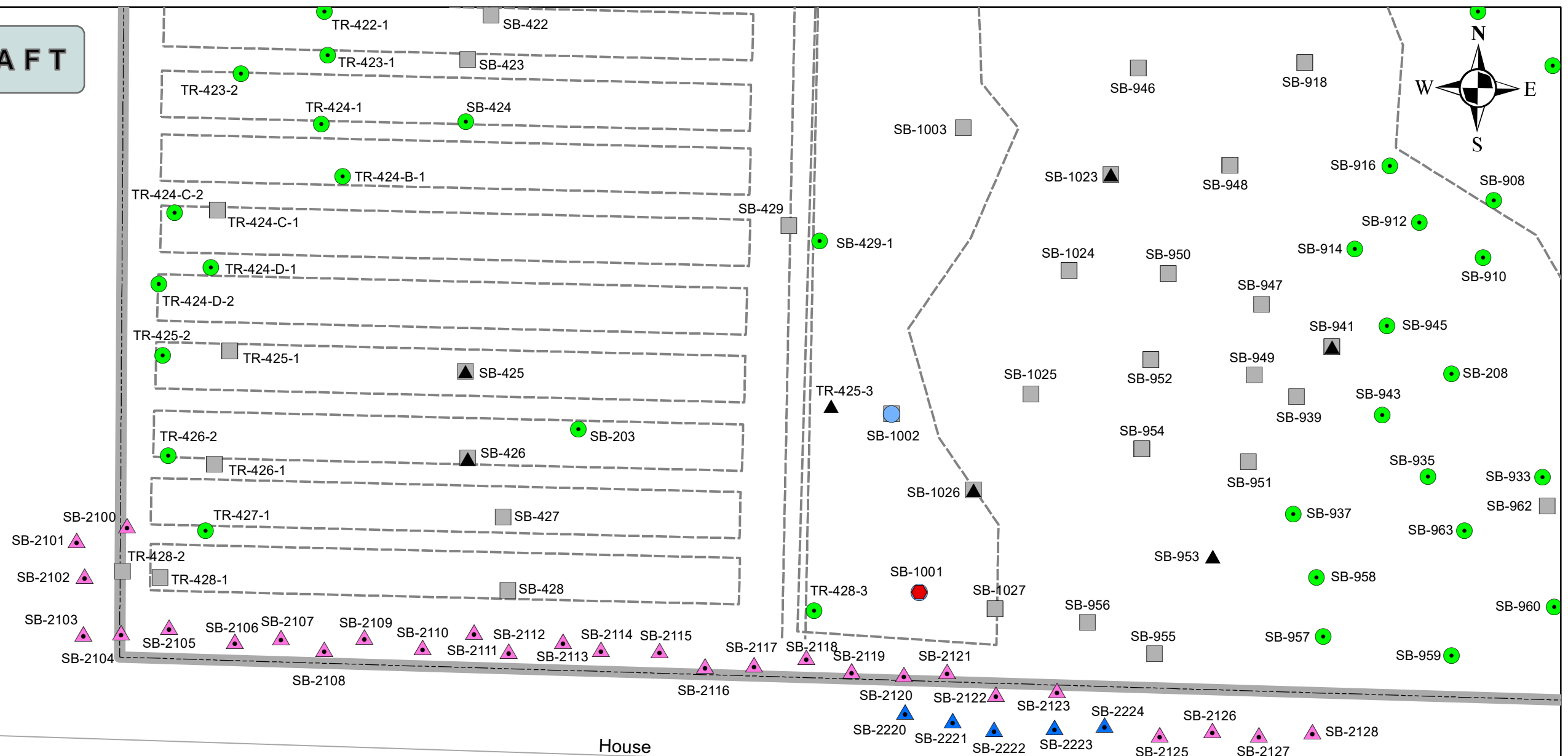
APPROVED 2019 WP MODIFICATIONS

No modifications were approved during this reporting period as the final 2019 WP had not yet been completed.

Approved 2019 WP modifications will be tracked and summarized in the MPRs.

J:\62000\623xx\62335.52 - House St Pre-Inv\0 - Task 006 - 2019 WorkPlan\EPA MPRs\July 2019\House Street-EPA-MonthlyUpdate-07112019-f.docx

WORKING DRAFT



LEGEND

- | | |
|---|-------------------------------|
|  | RED WASTE MATERIAL |
|  | BROWN WASTE MATERIAL |
|  | BLACK WASTE MATERIAL |
|  | WHITE WASTE MATERIAL |
|  | GRAY WASTE MATERIAL |
|  | NO WASTE MATERIAL
OBSERVED |

2019 SOUTHWEST AREA TIERED BORING LOCATION

-  TIER 1
 TIER 2
 ----- 1966 PROPOSED SITE PLAN



APPROXIMATE HOUSE SITE BOUNDARY

NOTES

- NOTES
1. SOIL BORING STATUS UPDATED THROUGH 7/8/2019.
 2. LOCATIONS OF BORINGS NOT COMPLETED ARE SUBJECT TO CHANGE.
 3. LOCATIONS ARE PROCEEDED BY THE SITE CODE "HS-" ON BORING LOGS AND SAMPLE NAMES.
 4. 2018 BORING LOCATIONS FOR TR-428-1 AND TR-428-2 WERE UPDATED BASED ON FIELD GPS MEASUREMENTS.



NO.	ISSUE/DESCRIPTION			BY	DATE
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Rose & Westra, a Division of GZA 601 Fifth Street NW, Suite 102 Grand Rapids, Michigan 49504					
ADDITIONAL SOIL BORINGS SOUTHWEST AREA					
GZA GeoEnvironmental, Inc. Engineers and Scientists  www.gza.com			PREPARED FOR: WN&J/WWW		
PROJ MGR: LIP	REVIEWED BY: LIP	CHECKED BY: LIP	FIGURE		
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1"=60'	3		
DATE: 07-09-2019	PROJECT NO. 16.0062355.52	REVISION NO.			

House Street Soil Boring Locations
2019 Delineation

DRAFT

Sampling Program	Sample Location	Start Date	End Date	Start Depth (ft)	End Depth (ft)	Samples Analyzed			Date Samples Sent to Lab	PID Readings for Samples Analyzed			XRF Results for Samples Analyzed												
Southwest Investigation	HS-SB-2100	17-Jun-19	18-Jun-19	0	20	1-2	3-4	NA	18-Jun-19	0.2	0.1	NA	7.4	<LOD	NA	31	28	NA	<LOD	<LOD	NA	11.9	5.5	NA	
Southwest Investigation	HS-SB-2101	18-Jun-19	18-Jun-19	0	20	1-2	3-4	NA	18-Jun-19	0.9	2.0	NA	<LOD	<LOD	NA	44	32	NA	<LOD	<LOD	NA	5.6	8	NA	
Southwest Investigation	HS-SB-2102	18-Jun-19	20-Jun-19	0	20	1-2	3-4	NA	20-Jun-19	0.9	0.8	NA	<LOD	<LOD	NA	53	24	NA	<LOD	<LOD	NA	11.4	5.3	NA	
Southwest Investigation	HS-SB-2103	19-Jun-19	20-Jun-19	0	20	1-2	3-4	NA	20-Jun-19	3.8	11.6	NA	<LOD	<LOD	NA	19	23	NA	<LOD	<LOD	NA	6.7	5.3	NA	
Southwest Investigation	HS-SB-2104	19-Jun-19	28-Jun-19	0	20	1-2	3-4	NA	28-Jun-19	1.3	7.8	NA	<LOD	3.1	NA	29	48	NA	<LOD	<LOD	NA	5.7	10.6	NA	
Southwest Investigation	HS-SB-2105	19-Jun-19	28-Jun-19	0	20	2-3	3-4	NA	28-Jun-19	0.9	0.9	NA	3.2	<LOD	NA	53	23	NA	<LOD	<LOD	NA	12.8	5.2	NA	
Southwest Investigation	HS-SB-2106	19-Jun-19	1-Jul-19	0	20	2-3	5-6	NA	1-Jul-19	0.1	1.0	NA	3.4	<LOD	NA	56	27	NA	<LOD	<LOD	NA	15.1	6.2	NA	
Southwest Investigation	HS-SB-2107	20-Jun-19	1-Jul-19	0	20	2-3	6-7	NA	1-Jul-19	1.1	0.8	NA	2.5	<LOD	NA	46	28	NA	<LOD	<LOD	NA	8.4	6.1	NA	
Southwest Investigation	HS-SB-2108	20-Jun-19	1-Jul-19	0	20	1-2	3-4	NA	1-Jul-19	0.3	0.6	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	8	8	NA	
Southwest Investigation	HS-SB-2109	20-Jun-19	1-Jul-19	0	20	0-1	2-3	NA	1-Jul-19	0.8	0.6	NA	3	<LOD	NA	35	<LOD	NA	<LOD	<LOD	NA	16	8	NA	
Southwest Investigation	HS-SB-2110	20-Jun-19	1-Jul-19	0	20	1-2	3-4	NA	1-Jul-19	0.4	0.9	NA	<LOD	<LOD	NA	142	<LOD	NA	<LOD	<LOD	NA	8	7	NA	
Southwest Investigation	HS-SB-2111	21-Jun-19	1-Jul-19	0	20	0-1	2-3	NA	1-Jul-19	0.3	0.2	NA	<LOD	2.0	NA	76	37	NA	<LOD	<LOD	NA	11	11	NA	
Southwest Investigation	HS-SB-2112	21-Jun-19	2-Jul-19	0	20	2-3	4-5	NA	2-Jul-19	0.3	0.4	NA	6	4.0	NA	42	27	NA	<LOD	<LOD	NA	9	7	NA	
Southwest Investigation	HS-SB-2113	21-Jun-19	2-Jul-19	0	20	1-2	3-4	NA	2-Jul-19	0.1	0.4	NA	<LOD	4.0	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	4	11	NA	
Southwest Investigation	HS-SB-2114	21-Jun-19	2-Jul-19	0	20	0-1	3-4	NA	2-Jul-19	0.8	0.0	NA	<LOD	4.0	NA	439	<LOD	NA	<LOD	<LOD	NA	7	9	NA	
Southwest Investigation	HS-SB-2115	21-Jun-19	2-Jul-19	0	20	0-1	3-4	NA	2-Jul-19	0.7	1.0	NA	2	5.0	NA	419	<LOD	NA	<LOD	<LOD	NA	8	8	NA	
Southwest Investigation	HS-SB-2116	24-Jun-19	2-Jul-19	0	20	0-1	3-4	NA	2-Jul-19	0.8	0.6	NA	<LOD	4.0	NA	25	<LOD	NA	<LOD	<LOD	NA	5	8	NA	
Southwest Investigation	HS-SB-2117	24-Jun-19	2-Jul-19	0	20	0-1	2-3	NA	2-Jul-19	0.5	0.0	NA	2	3.0	NA	196	<LOD	NA	<LOD	<LOD	NA	10	11	NA	
Southwest Investigation	HS-SB-2118	24-Jun-19	2-Jul-19	0	20	0-1	3-4	NA	2-Jul-19	0.0	0.1	NA	<LOD	<LOD	NA	285	<LOD	NA	<LOD	<LOD	NA	11	8	NA	
Southwest Investigation	HS-SB-2119	24-Jun-19	2-Jul-19	0	20	0-1	3-4	NA	2-Jul-19	0.1	0.0	NA	<LOD	6.0	NA	957	34	NA	<LOD	<LOD	NA	11	13	NA	
Southwest Investigation	HS-SB-2120	25-Jun-19	2-Jul-19	0	20	1-2	4-5	NA	2-Jul-19	1.8	0.4	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	10	7	NA	
Southwest Investigation	HS-SB-2121	25-Jun-19	25-Jun-19	0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Southwest Investigation	HS-SB-2122	25-Jun-19	25-Jun-19	0	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Southwest Investigation	HS-SB-2123	25-Jun-19	25-Jun-19	0	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Southwest Investigation	HS-SB-2125	25-Jun-19	28-Jun-19	0	20	1-2	7-8	NA	28-Jun-19	0.6	0.7	NA	4	2.0	NA	24	<LOD	NA	<LOD	<LOD	NA	8	4	NA	
Southwest Investigation	HS-SB-2125	25-Jun-19	28-Jun-19	20	40	25-27	30-32	35-37	28-Jun-19	1.8/1.5	2.7/1.6	2.0/1.2	<LOD <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	58 <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	5 / 6	4 / 6	6 / 6		
Southwest Investigation	HS-SB-2126	24-Jun-19	26-Jun-19	0	20	2-3	8-9	NA	26-Jun-19	0.7	0.6	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	6	5	NA	
Southwest Investigation	HS-SB-2126	24-Jun-19	26-Jun-19	20	40	25-27	31-33	37-39	26-Jun-19	0.8	0.5	0.2	NR	<LOD <LOD	<LOD <LOD	NR	<LOD <LOD	<LOD 66	NR	<LOD <LOD	<LOD <LOD	NR	5 / 4	9 / 8	
Southwest Investigation	HS-SB-2127	24-Jun-19	25-Jun-19	0	20	3-4	8-9	NA	26-Jun-19	0.1	0.6	NA	5	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	5	4	NA	
Southwest Investigation	HS-SB-2128	24-Jun-19	26-Jun-19	0	20	2-3	8-9	NA	26-Jun-19	0.3	0.8	NA	7	<LOD	NA	39	<LOD	NA	<LOD	<LOD	NA	13	5	NA	
Southwest Investigation	HS-SB-2220	27-Jun-19	27-Jun-19	0	20	3-4	8-9	NA	28-Jun-19	4.4	1.4	NA	4	<LOD	NA	43	<LOD	NA	<LOD	<LOD	NA	9	4	NA	
Southwest Investigation	HS-SB-2221	26-Jun-19	27-Jun-19	0	20	0-1	8-9	NA	27-Jun-19	0.2	0.1	NA	<LOD	<LOD	NA	236	24	NA	<LOD	<LOD	NA	17	5	NA	
Southwest Investigation	HS-SB-2222	26-Jun-19	26-Jun-19	0	20	NS	NS	NS	Not Sampled	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Southwest Investigation	HS-SB-2223	26-Jun-19	26-Jun-19	0	20	1-2	8-9	NA	26-Jun-19	0.5	0.9	NA	2	4.0	NA	30	36	NA	<LOD	<LOD	NA	4	8	NA	
Southwest Investigation	HS-SB-2224	27-Jun-19	28-Jun-19	0	20	1-2	6-7	NA	28-Jun-19	0.8	0.9	NA	2	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	6	10	NA	
Southwest Investigation	HS-SB-2224	27-Jun-19	28-Jun-19	20	40	20-22	31-33	37-39	28-Jun-19	1.1/0.6	1.8/1.8	0.5/0.4	<LOD <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	<LOD <LOD	7 5	4 3	4 2		

TABLE 1A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Well Screen Interval (Feet below ground surface)						68.4 - 73.1	170.1 - 174.7	78.5 - 83.1	69.7 - 74.6	71.1 - 75.7	61.9 - 66.6	188 - 198	57.1 - 61.8	155 - 160	70.1 - 74.7	27.7 - 32.7	26 - 31	126 - 131
Laboratory Sample ID(s)						UE30036-008	UE30036-007	UE30036-015	UE30036-016	UE30036-014	UE30036-004	UE30036-005	UE30036-010	UE30036-009	UE30036-017	UE30036-006	UE24001-012	UE24001-013
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	1.4 [J]	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	4.2	3.8	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1A
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - VOCS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D
Well Screen Interval (Feet below ground surface)						203 - 208	203 - 208	49 - 59	125 - 130	185 - 190	21 - 31	95 - 100	150 - 155
Laboratory Sample ID(s)						UE24001-014	UE24001-015	UE24001-001	UE24001-002	UE24001-003	UE24001-017	UE24001-018	UE24001-016
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019
Parameter (µg/L)													
Acetone	730	1,700	1,000,000,000 (D,S)	12,000,000	42,000	<20	<20	<20	<20	<20	<20	3.3 [J]	3.6 [J]
Benzene	5.0 (A)	200	5,600	14	46	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	80 (A,W)	ID	4,800	NCL	13	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80 (A,W)	ID	470,000	NCL	330	<1	<1	<1	<1	<1	<1	<1	<1
Methyl ethyl ketone (2-Butanone)	13,000	2,200	240,000,000 (S)	NCL	17,000	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane (Methyl bromide)	10	5.0 (M)	4,000	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2
Carbon disulfide	800	ID	250,000	NCL	2,400	<1	<1	<1	<1	0.47 [J]	<1	<1	<1
Carbon tetrachloride	5.0 (A)	38	370	NCL	46	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	100 (A)	25	210,000	540	230	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	430	1,100	5,700,000 (S)	6,700	63,000	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	80 (A,W)	350	28,000	7.6	22	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane (Methyl chloride)	260	ID	8,600	160	560	<1	<1	<1	<1	<1	<1	<1	<1
Cyclohexane	NCL	NCL	NCL	NCL	38,000	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane (DBCP)	0.20 (A)	ID	220	NCL	0.033	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	80 (A,W)	ID	14,000	NCL	87	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane (Ethylene dibromide)	0.05 (A)	5.7	2,400	NCL	0.75	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	600 (A)	13	160,000 (S)	NCL	910	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	6.6	28	18,000	52	NCL	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	75 (A)	17	16,000	120	48	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1,700	ID	220,000	NCL	590	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	880	740	1,000,000	67	280	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	5.0 (A)	360	9,600	NCL	17	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	7.0 (A)	130	200	170	850	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	70 (A)	620	93,000	48	110	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	100 (A)	1,500	85,000	650	1,100	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5.0 (A)	230	16,000	NCL	25	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropene (Calculated: cis + trans)	8.5	9.0	3,900	NCL	47	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74 (E)	18	110,000	45	150	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	1,000	ID	4,200,000	NCL	110	<10	<10	<10	<10	<10	<10	<10	<10
Isopropyl benzene	800	28	56,000 (S)	NCL	1,400	<1	<1	<1	<1	<1	<1	<1	<1
Methyl acetate	NCL	NCL	NCL	NCL	60,000	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tertiary butyl ether (MTBE)	40 (E)	7,100	47,000,000 (S)	4,000	1,400	<1	<1	<1	<1	<1	<1	<1	<1
Methyl isobutyl ketone	1,800	ID	20,000,000 (S)	NCL	19,000	<10	<10	<10	<10	<10	<10	<10	<10
Methylcyclohexane	NCL	NCL	NCL	NCL	NCL	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	5.0 (A)	1,500	220,000	3,900	320	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	100 (A)	80	170,000	NCL	3,600	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	8.5	78	12,000	NCL	7.6	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	5.0 (A)	60	25,000	96	120	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	790 (E)	270	530,000 (S)	23,000	3,300	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	170,000 (S)	32	170,000 (S)	NCL	31,000	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	70 (A)	99	300,000 (S)	95	12	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200 (A)	89	660,000	8,600	24,000	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5.0 (A)	330	17,000	NCL	1.2	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethylene	5.0 (A)	200	2,200	6.1	8.5	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	2,600	NA	1,100,000 (S)	NCL	15,000	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	2.0 (A)	13	1,100	0.96 (M)	1.9	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (Total)	280 (E)	49	190,000 (S)	1,200	580	<1	<1	<1	<1	<1	<1	<1	<1
m+p - Xylenes	NCL	NCL	NCL	NCL	NCL	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	NCL	NCL	NCL	NCL	580	<1	<1	<1	<1	<1	<1	<1	<1
Trihalomethanes (Calculation: Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane)	80 (W)	NCL	NCL	NCL	NCL	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Well Screen Interval (Feet below ground surface)						68.4 - 73.1	170.1 - 174.7	78.5 - 83.1	69.7 - 74.6	71.1 - 75.7	61.9 - 66.6	188 - 198	57.1 - 61.8	155 - 160	70.1 - 74.7	27.7 - 32.7	26 - 31	126 - 131
Laboratory Sample ID(s)						UE30036-008	UE30036-007	UE30036-015	UE30036-016	UE30036-014	UE30036-004	UE30036-005	UE30036-010	UE30036-009	UE30036-017	UE30036-006	UE24001-012	UE24001-013
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	0.62	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	<1.6	<1.6	4.6 [B]	6.1 [B]	5 [B]	<1.6	3.7	<1.6	2.9	6.4 [B]	<1.6	1.4 [B]	<1.6
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis(2-chloroethyl)ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	<0.8	<0.8	<0.8	0.5 [J]	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis(2-Ethylhexyl)phthalate	6.0 (A)	14	NLV	NCL	560	<4	<4	0.82 [J]	<4	0.57 [J]	<4	16	<4	<4	<4	<4	0.74 [B]	1.1 [B]
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	0.17 [J]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000.00	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	0.32	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	0.37	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	0.11 [J]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 1B
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - SVOCs
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D
Well Screen Interval (Feet below ground surface)						203 - 208	203 - 208	49 - 59	125 - 130	185 - 190	21 - 31	95 - 100	150 - 155
Laboratory Sample ID(s)						UE24001-014	UE24001-015	UE24001-001	UE24001-002	UE24001-003	UE24001-017	UE24001-018	UE24001-016
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019
Parameter (µg/L)													
Acenaphthene	1,300	38	4,200 (S)	NCL	1,600	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	52	ID	3,900 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetophenone	1,500	ID	6,100,000 (S)	NCL	5,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Anthracene	43 (S)	ID	43 (S)	NCL	5,300	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Atrazine	3.0 (A)	7.3	NLV	NCL	30	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Benzidine	0.30 (M)	0.30 (M)	NLV	NCL	0.011	<20	<20	<20	<20	<20	<20	<20	<20
Benzo[a]anthracene	2.1	ID	NLV	NCL	3.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	5.0 (A)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene (3,4-Benzofluoranthene)	1.5 (S,AA)	ID	ID	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	1.0 (M)	ID	NLV	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[k]fluoranthene	1.0 (M)	NA	NLV	NCL	250	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butyl benzyl phthalate	1,200	67	NLV	NCL	1,600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Caprolactam	5,800	NA	NLV	NCL	30,000	<1.6	1 [BJ]	1.1 [BHJ]	<1.6	1.4 [BHJ]	<1.6	<1.6	<1.6
Carbazole	85	10 (M)	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
p-Chloro-m-cresol	150	7.4	NLV	NCL	4,300	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis(2-chloroethyl)ether	2.0	1.0 (M)	38,000	NCL	1.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chloronaphthalene	1,800	NA	ID	NCL	2,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Chlorophenol	45	18	490,000	NCL	270	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Chrysene	1.6 (S)	ID	ID	NCL	2,500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzo[a,h]anthracene	2.0 (M)	ID	NLV	NCL	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dibenzofuran	ID	4.0	10,000 (S)	NCL	24	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
3,3'-Dichlorobenzidine	1.1	0.30 (M)	NLV	NCL	13	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dichlorophenol	73	11	NLV	NCL	140	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Diethyl phthalate	5,500	110	NLV	NCL	45,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Dimethyl phthalate	73,000	NA	NLV	NCL	NCL	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4-Dimethylphenol	370	380	NLV	NCL	1,100	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Di-n-butyl phthalate	880	9.7	NLV	NCL	2,700	<0.8	<0.8	<0.8	<0.8	0.54 [HJ]	<0.8	<0.8	<0.8
4,6-Dinitro-o-cresol	20 (M)	NA	NLV	NCL	4.5	<4	<4	<4	<4	<4	<4	<4	<4
2,4-Dinitrotoluene	7.7	NA	NLV	NCL	24	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Di-n-octyl phthalate	130	ID	NLV	NCL	600	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Azobenzene	23	ID	6,400 (S)	NCL	12	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
bis(2-Ethylhexyl)phthalate	6.0 (A)	14	NLV	NCL	560	0.92 [BJ]	0.69 [BJ]	0.62 [BHJ]	0.5 [BHJ]	0.52 [BHJ]	0.68 [BJ]	0.64 [BJ]	0.8 [BJ]
Fluoranthene	210 (S)	1.6	210 (S)	NCL	2,400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	880	12	2,000 (S)	NCL	880	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	1.0 (A)	0.2 (M)	440	NCL	0.98	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorobutadiene	15	0.053	1,600	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Hexachlorocyclopentadiene	50 (A)	ID	130	NCL	1.2	<4	<4	<4	<4	<4	<4	<4	<4
Hexachloroethane	7.3	6.7	27,000.00	NCL	19	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Indeno[1,2,3-cd]pyrene	2.0 (M)	ID	NLV	NCL	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isophorone	770	1,300	NLV	NCL	7,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Methylnaphthalene	260	19	25,000 (S)	NCL	110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-Methylphenol	NCL	NCL	NCL	NCL	2,800	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4-Methylphenol	NCL	NCL	NCL	NCL	5,600	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Naphthalene	520	11	31,000 (S)	NCL	17	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrobenzene	3.4	180	280,000	NCL	14	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2-Nitrophenol	20	ID	NLV	NCL	NCL	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
n-Nitroso-di-n-propylamine	5.0 (M)	NA	NLV	NCL	1.1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
n-Nitrosodiphenylamine	270	NA	NLV	NCL	1,200	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pentachlorophenol	1.0 (A)	1.8 (G)	NLV	NCL	4.1	<4	<4	<4	<4	<4	<4	<4	<4
Phenanthrene	52	2.0 (M)	1,000 (S)	NCL	NCL	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	4,400	450	NLV	NCL	17,000	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Pyrene	140 (S)	ID	140 (S)	NCL	360	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,4,5-Trichlorophenol	730	NA	NLV	NCL	3,500	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
2,4,6-Trichlorophenol	120	5.0	NLV	NCL	36	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

TABLE 1C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ³	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Well Screen Interval (Feet below ground surface)						68.4 - 73.1	170.1 - 174.7	78.5 - 83.1	69.7 - 74.6	71.1 - 75.7	61.9 - 66.6	188 - 198	57.1 - 61.8	155 - 160	70.1 - 74.7	27.7 - 32.7	26 - 31	126 - 131
Laboratory Sample ID(s)						UE30036-008 & 19051849-07B	UE30036-007 & 19051849-06B	UE30036-015 & 19051849-12B	UE30036-016 & 19051849-13B	UE30036-014 & 19051849-11B	UE30036-004 & 19051849-04B	UE30036-005 & 19051849-05B	UE30036-010 & 19051849-09B	UE30036-009 & 19051849-08B	UE30036-017 & 19051849-14B	UE30036-006 & 19051849-10B	UE24001-012 & 19051467-05B	UE24001-013 & 19051467-06B
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Aluminum	50 (V)	NA	NLV	NCL	60,000	<40	22 [J]	13 [J]	24 [J]	<40	16 [J]	81	<40	48	24 [J]	<40	<40	100
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	<2	<2	<2	<2	<2	<2	6.7	<2	3.2	<2	<2	<2	<2
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	39	84	45	74	59	81	26	68	25	59	12	33	81
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	21 [J]	34 [J]	31 [J]	31 [J]	20 [J]	320	42 [J]	19 [J]	45 [J]	17 [J]	24 [J]	17 [J]	17 [J]
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	1.8 [J]	1.8 [J]	1.5 [J]	1.7 [J]	2.1 [J]	2.9 [J]	1.3 [J]	1.5 [J]	<5	1.6 [J]	1.3 [J]	1.4 [J]	1.4 [J]
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	1.8	1.8	1.5	1.7	2.1	2.9	1.3	1.5	ND	1.6	1.3	1.4	1.4
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	<5	<5	<5	<5	<5	2 [J]	<5	<5	<5	<5	<5	<5	<5
Iron	300 (E)	NA	NLV	NCL	42,000	410	460	480	680	500	600	1,300	410	1,300	510	250	280	770
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	400,000	NA	NLV	NCL	NCL	30,000	31,000	32,000	40,000	30,000	40,000	23,000	28,000	21,000	35,000	15,000	24,000	27,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	1.3 [J]	1.6 [J]	1.5 [J]	2.1 [J]	1.8 [J]	2.4 [J]	1.7 [J]	1.4 [J]	1.9 [J]	1.7 [J]	<5	<5	1.3 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	7,300	100,000	7,500	5,100	3,700	140,000	14,000	19,000	29,000	12,000	7,100	73,000	7,800
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	<5	1.5 [J]	1.5 [J]	2.3 [J]	<5	1.8 [J]	3.7 [J]	<5	3.2 [J]	1.9 [J]	<5	<5	4.4 [J]
Vanadium	4.5	27	NLV	NCL	260	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	<10	4 [J]	<10	<10	<10	<10	2.5 [J]	<10	<10	23	<10	<10	<10

TABLE 1C
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - METALS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D
Well Screen Interval (Feet below ground surface)						203 - 208	203 - 208	49 - 59	125 - 130	185 - 190	21 - 31	95 - 100	150 - 155
Laboratory Sample ID(s)						UE24001-014 & 19051467-07B	UE24001-015 & 19051467-08B	UE24001-001 & 19051357-01B	UE24001-002 & 19051357-02B	UE24001-003 & 19051357-03B	UE24001-017 & 19051467-10B	UE24001-018 & 19051467-11B	UE24001-016 & 19051467-09B
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019
Parameter (µg/L)													
Aluminum	50 (V)	NA	NLV	NCL	60,000	92	67	<40	22 [J]	830	<40	<40	15 [J]
Antimony	6.0 (A)	130	NLV	NCL	23	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	10 (A)	10	NLV	NCL	5.2	<2	<2	<2	<2	<2	<2	<2	1.3 [J]
Barium	2,000 (A)	1,000 (G)	NLV	NCL	11,000	97	95	65	68	31	39	35	62
Beryllium	4.0 (A)	25 (G)	NLV	NCL	74	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (Boron and Borates only)	500 (F)	7,200	NLV	NCL	12,000	28 [J]	27 [J]	23 [J]	21 [J]	79	20 [J]	16 [J]	13 [J]
Cadmium	5.0 (A)	2.5 (G)	NLV	NCL	NCL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Total)	NCL	NCL	NCL	NCL	NCL	1.5 [J]	1.3 [J]	<5	1.5 [J]	3 [J]	<5	1.8 [J]	<5
Trivalent Chromium (Calculated: Total - Hexavalent)	100 (A)	120 (G)	NLV	NCL	67,000	1.5	1.3	ND	1.5	3	ND	1.8	ND
Hexavalent Chromium	100 (A)	11	NLV	NCL	3.5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	40	100	NLV	NCL	18	<5	<5	<5	<5	<5	<5	<5	<5
Copper	1,000 (E)	18 (G)	NLV	NCL	2,400	<5	<5	<5	<5	1.6 [J]	<5	<5	<5
Iron	300 (E)	NA	NLV	NCL	42,000	800	770	390	330	4,300	390	240	530
Lead	4.0 (L)	14 (G)	NLV	NCL	15	<1	<1	<1	<1	0.56 [J]	<1	<1	<1
Magnesium	400,000	NA	NLV	NCL	NCL	26,000	25,000	23,000	20,000	25,000	28,000	24,000	24,000
Mercury	2.0 (A)	0.0013	56 (S)	1.4	1.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	73	3,200	NLV	NCL	300	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	100 (A)	100 (G)	NLV	NCL	1,200	1.4 [J]	1.5 [J]	1.4 [J]	1.3 [J]	3.1 [J]	2.6 [J]	<5	1.3 [J]
Selenium	50 (A)	5.0	NLV	NCL	300	<5	<5	<5	<5	<5	<5	<5	<5
Silver	34	0.2 (M)	NLV	NCL	280	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NCL	NCL	NCL	NCL	NCL	18,000	18,000	31,000	190,000	12,000	82,000	4,300	3,800
Thallium	2.0 (A)	3.7	NLV	NCL	0.60	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Titanium	NCL	NCL	NCL	NCL	NCL	3.8 [J]	3.2 [J]	<5	1.7 [J]	35	<5	<5	1.4 [J]
Vanadium	4.5	27	NLV	NCL	260	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	2,400	230 (G)	NLV	NCL	18,000	<10	<10	27 [B]	<10	4.3 [B]	<10	<10	<10

TABLE 1D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Well Screen Interval (Feet below ground surface)						68.4 - 73.1	170.1 - 174.7	78.5 - 83.1	69.7 - 74.6	71.1 - 75.7	61.9 - 66.6	188 - 198	57.1 - 61.8	155 - 160	70.1 - 74.7	27.7 - 32.7	26 - 31	126 - 131
Laboratory Sample ID(s)						UE30036-008 & 19051849-07A/C	UE30036-007 & 19051849-06A/C	UE30036-015 & 19051849-12A/C	UE30036-016 & 19051849-13A/C	UE30036-014 & 19051849-11A/C	UE30036-004 & 19051849-04A/C	UE30036-005 & 19051849-05A/C	UE30036-010 & 19051849-09A/C	UE30036-009 & 19051849-08A/C	UE30036-017 & 19051849-14A/C	UE30036-006 & 19051849-10A/C	UE24001-012 & 19051467-05A/C	UE24001-013 & 19051467-06A/C
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Formic acid	10,000	ID	7,700,000	NCL	1.9	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Hardness (total)	NCL	NCL	NCL	NCL	NCL	370,000	380,000	400,000	560,000	430,000	530,000	420,000	370,000	490,000	450,000	210,000	320,000	310,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	75 [J]	370	<100	<100	<100	3,300	180	<100	210	<100	<100	<100	150
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	18,000	20,000	2,300	4,400	2,200	18,000	44	1,300	18,000	3,900	15,000	870	12 [J]
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	18,000	20,000	2,300	4,400	2,200	21,000	220	1,300	18,000	3,900	15,000	870	160
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	2.9	14	ND	ND	ND	130	6.9	ND	8.0	ND	ND	ND	5.7
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	8,300	200,000	17,000	2,500	2,300	92,000	34,000	72,000	69,000	54,000	23,000	150,000	24,000
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	<50	<50	<50	<50	<50	<50	<50	<50	53	<50	<50	<50	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	10,000	22,000	16,000	23,000	20,000	69,000	170,000	19,000	200,000	20,000	9,100	9,600	21,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 1D
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - INORGANICS/GENERAL CHEMISTRY
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	EGLE Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D
Well Screen Interval (Feet below ground surface)						203 - 208	203 - 208	49 - 59	125 - 130	185 - 190	21 - 31	95 - 100	150 - 155
Laboratory Sample ID(s)						UE24001-014 & 19051467-07A/C	UE24001-015 & 19051467-08A/C	UE24001-001 & 19051357-01A/C	UE24001-002 & 19051357-02A/C	UE24001-003 & 19051357-03A/C	UE24001-017 & 19051467-10A/C	UE24001-018 & 19051467-11A/C	UE24001-016 & 19051467-09A/C
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019
Parameter (µg/L)													
Acetic Acid	4,200	8,800 (G)	NLV	NCL	NCL	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Formic acid	10,000	ID	7,700,000	NCL	1.9	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000	<25,000
Cyanide - Total	200	5.2	NLV	NCL	4.4	<10	<10	<10	<10	<10	<10	<10	<10
Cyanide, Available	200 (A)	5.2	NLV	NCL	NCL	<2	<2	<2	<2	<2	<2	<2	<2
Hardness (total)	NCL	NCL	NCL	NCL	NCL	340,000	340,000	330,000	280,000	490,000	380,000	280,000	280,000
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	470	470	<100	<100	280	72 [J]	<100	55 [J]
Nitrate-Nitrite - N	NCL	NCL	NCL	NCL	NCL	<20	2,100	1,900	1,600	12 [J]	1,900	3,300	<20
Nitrate-Nitrite - N + Ammonia - N (Calculated)	10,000 (N)	NCL	NCL	NCL	NCL	470	2,600	1,900	1,600	290	2,000	3,300	55
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NCL	29 (CC)	NCL	250,000	NCL	18	18	ND	ND	11	2.8	ND	2.1
Chloride	250,000 (E)	NCL (FF)	NLV	NCL	NCL	68,000	68,000	60,000	240,000	3,600	120,000	13,000	9,300
Phosphorus (Total)	63,000	1,000 (EE)	NLV	NCL	NCL	60	60	<50	<50	<50	<50	<50	<50
Sulfate	250,000 (E)	NA	NLV	NCL	NCL	42,000	42,000	7,300	16,000	260,000	6,500	16,000	51,000
Sulfide	NCL	NCL	NCL	NCL	NCL	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

TABLE 1E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	MDEQ Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-1S	HS-MW-1D	HS-MW-2S	HS-MW-3S	HS-MW-4S	HS-MW-5S	HS-MW-5D	HS-MW-6S	HS-MW-6D	HS-MW-7S	HS-MW-8	HS-MW-9S	HS-MW-9M
Sample Name						HS-GW-MW1S	HS-GW-MW1D	HS-GW-MW2	HS-GW-MW3S	HS-GW-MW4	HS-GW-MW5S	HS-GW-MW5D	HS-GW-MW6S	HS-GW-MW6D	HS-GW-MW7S	HS-GW-MW8	HS-GW-MW9S	HS-GW-MW9M
Well Screen Interval (Feet below ground surface)						68.4 - 73.1	170.1 - 174.7	78.5 - 83.1	69.7 - 74.6	71.1 - 75.7	61.9 - 66.6	188 - 198	57.1 - 61.8	155 - 160	70.1 - 74.7	27.7 - 32.7	26 - 31	126 - 131
Laboratory Sample ID(s)						UE30036-008	UE30036-007	UE30036-015	UE30036-016	UE30036-014	UE30036-004	UE30036-005	UE30036-010	UE30036-009	UE30036-017	UE30036-006	UE24001-012	UE24001-013
Sample Date						05/29/2019	05/29/2019	05/30/2019	05/30/2019	05/30/2019	05/28/2019	05/28/2019	05/29/2019	05/29/2019	05/30/2019	05/29/2019	05/22/2019	05/22/2019
Parameter (µg/L)																		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0076	<0.0072	<0.0072	<0.0071	<0.0069	<0.14	<0.0069	<0.0069	<0.0071	<0.0069	<0.0071	<0.007	<0.0069
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	1,200.00	0.0059	0.0057	0.099	0.5	0.055	1.6	<0.0034	0.0052	<0.0036	0.006	0.028	<0.0035	<0.0035
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	0.065	0.46	3.5	<0.0034	<0.0035	<0.0036	<0.0035	0.033	<0.0035	<0.0035
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	<0.0076	<0.0072	<0.0072	<0.0071	<0.0069	<0.14	<0.0069	<0.0069	<0.0071	<0.0069	<0.0071	<0.007	<0.0069
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	0.0038	<0.0036	0.11	0.92	0.19	3.1	<0.0034	0.011	<0.0036	<0.0035	0.035	<0.0035	<0.0035
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	0.034	<0.0036	0.055	2.1	2.9	11	<0.0034	0.039	<0.0036	0.0089	0.085	<0.0035	<0.0035
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	0.011	0.13	0.071	0.52	<0.0034	<0.0035	<0.0036	<0.0035	0.0066	<0.0035	<0.0035
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	0.022	0.34	0.19	1.8	<0.0034	0.0043	<0.0036	<0.0035	0.044	<0.0035	<0.0035
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	0.0051	<0.0036	0.072	0.41	0.2	1.6	<0.0034	0.0053	<0.0036	<0.0035	0.024	<0.0035	<0.0035
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorooctanoic acid (PFOA)	0.07 (JJ)	12	ID	NCL	NCL	0.013	0.0098	0.019	0.89	1.4	11	0.0028	0.028	<0.0018	0.0035	0.35	<0.0017	<0.0017
Perfluorooctane sulfonic acid (PFOS)	0.07 (JJ)	0.012	NLV	NCL	NCL	0.012	0.0044	<0.0036	0.057	3.2	100	0.011	0.0059	<0.0036	0.0037	0.051	0.0049	<0.0035
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	0.025	0.014	0.019	0.95	4.6	110	0.014	0.034	ND	0.0072	0.4	0.0049	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	0.015	0.14	0.075	0.61	<0.0034	<0.0035	<0.0036	<0.0035	0.0067	<0.0035	<0.0035
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	<0.0038	<0.0036	<0.0036	<0.0035	<0.0035	<0.07	<0.0034	<0.0035	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	0.074	0.02	0.4	5.6	8.7	130	0.014	0.099	ND	0.022	0.66	0.0049	ND

TABLE 1E
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS - PFAS
1855 House St NE
Plainfield Township, Kent County, MI

Sample Location	Part 201 Generic Residential Groundwater Cleanup Criteria – Drinking Water ²	Part 201 Generic Groundwater Cleanup Criteria – Groundwater Surface Water Interface ²	Part 201 Generic Residential Groundwater Cleanup Criteria – Groundwater Volatilization to Indoor Air Inhalation ²	MDEQ Residential Recommended Volatilization to Indoor Air Interim Action Screening Level - Groundwater ³	U.S. EPA Residential Tap Water Regional Removal Management Levels ⁴	HS-MW-9D	HS-MW-9D	HS-MW-10S	HS-MW-10M	HS-MW-10D	HS-MW-11S	HS-MW-11M	HS-MW-11D
Sample Name						HS-GW-MW9D	HS-GW-MW9D DUP	HS-GW-MW10S	HS-GW-MW10M	HS-GW-MW10D	HS-GW-MW11S	HS-GW-MW11M	HS-GW-MW11D
Well Screen Interval (Feet below ground surface)						203 - 208	203 - 208	49 - 59	125 - 130	185 - 190	21 - 31	95 - 100	150 - 155
Laboratory Sample ID(s)						UE24001-014	UE24001-015	UE24001-001	UE24001-002	UE24001-003	UE24001-017	UE24001-018	UE24001-016
Sample Date						05/22/2019	05/22/2019	05/20/2019	05/20/2019	05/20/2019	05/22/2019	05/22/2019	05/22/2019
Parameter (µg/L)													
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	NCL	NCL	<0.0072	<0.0071	<0.0078	<0.007	<0.007	<0.0075	<0.0072	<0.0075
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	NCL	NCL	1,200.00	<0.0036	<0.0036	0.004	0.0063	<0.0035	<0.0038	0.013	<0.0037
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0049	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	NCL	NCL	<0.0072	<0.0071	<0.0078	<0.007	<0.007	<0.0075	<0.0072	<0.0075
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	0.0084	0.0036	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorooctanoic acid (PFOA)	0.07 (JJ)	12	ID	NCL	NCL	<0.0018	<0.0018	0.015	0.0072	<0.0017	0.0028	<0.0018	<0.0019
Perfluorooctane sulfonic acid (PFOS)	0.07 (JJ)	0.012	NLV	NCL	NCL	<0.0036	<0.0036	0.036	0.012	<0.0035	<0.0038	<0.0036	<0.0037
PFOA + PFOS (Calculated)	0.07	NCL	NCL	NCL	NCL	ND	ND	0.051	0.019	ND	0.0028	ND	ND
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	NCL	NCL	<0.0036	<0.0036	<0.0039	<0.0035	<0.0035	<0.0038	<0.0036	<0.0037
Total PFAS (Calculated)	NCL	NCL	NCL	NCL	NCL	ND	ND	0.068	0.029	ND	0.0028	0.013	ND

NOTES:

1. Concentration and criteria units are micrograms per Liter ($\mu\text{g/L}$) or parts per billion (ppb). Calculated criteria and concentrations are rounded to two significant digits. "ND" indicates the parameters used in the calculation were not detected.

2. Michigan Part 201 Groundwater Cleanup Criteria are based on "Table 1, Groundwater: Residential and Nonresidential 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 299.44 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 EGLE Table 1.

"NLV" indicates the substance is not likely to volatilize under most conditions.

Footnotes Include:

(A) - The criterion is the State of Michigan drinking water standard.

(D) - The calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or $1.0\text{E}+9$ ppb.

(E) - Criterion is the aesthetic drinking water value.

(F) - Criterion is based on adverse impacts to plant life and phytotoxicity.

(G) - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

EGLE'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.

(L) - Criteria for lead are derived using a biologically based model. The generic residential drinking water criterion of $4\mu\text{g/L}$ is linked to the generic residential soil direct contact criterion of 400 mg/kg.

(M) - Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(N) - The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 $\mu\text{g/L}$.

(P) - Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria.

(S) - Criterion defaults to the hazardous substance-specific water solubility limit.

(V) - Criterion is the aesthetic drinking water value.

(W) - Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of $80\mu\text{g/L}$.

(AA) - Use 10,000 $\mu\text{g/L}$ where groundwater enters a structure through the use of a water well, sump or other device. Use 28,000 $\mu\text{g/L}$ for all other uses.

(CC) - The generic GSI criteria are based on the toxicity of unionized ammonia (NH₃); the criteria are 29 $\mu\text{g/L}$ and 53 $\mu\text{g/L}$ for cold water and warm water surface water, respectively. As a result, the GSI criterion shall be compared to the percent of the total ammonia concentration in the groundwater that will become NH₃ in the surface water. This percent NH₃ is a function of the pH and temperature of the receiving surface water and was estimated using the table of this footnote titled "Percent NH₃ in Aqueous Ammonia Solutions for 0-30°C and pH 6-10." This approach uses a default temperature of 68°F and 85°F 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%.

(EE) - The applicable GSI criteria for phosphorus is 1,000 $\mu\text{g/L}$.

(FF) - The chloride GSI criteria shall not apply for surface waters of the state that are not designated as a public water supply source.

(JJ) - Compliance with the drinking water criteria shall require comparing the sum of the PFOA and PFOS groundwater concentrations to the drinking water criterion of 0.07 $\mu\text{g/L}$.

3. EGLE Residential Groundwater Recommended Volatilization to Indoor Air Interim Action Screening Levels (RIASLs) for were based on EGLE's Toxics Steering Group's "Media-Specific Interim Action Screening Levels," published in August 2017. The EGLE published the RIASLs in August 2017, and recently removed the RIASLs from the EGLE website. The EGLE is reportedly evaluating the RIASLs for appropriate use and applicability. These are included for reference.

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 Tap Water 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 Groundwater Cleanup Criteria or Media-Specific Interim Action Screening Levels. 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.

"H" indicates analyzed out of hold time.

"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 laboratory interpretation of the chains of custody.

8. Well screen interval presented is the top of the well screen to the bottom of the well screen in feet below ground surface.

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2100
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/17/2019
Finish Date: 6/17/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
1	S-1	0-5	60	48		0.0	S-1: 0'-1': Brown, TOPSOIL, moist.			TOPSOIL	No Equipment Installed
		1-2			1-2	0.2	1'-4': Light brown, fine to medium SAND, moist.				
2						0.1					
3		3-4			3-4	0.1					
4						N/A	4'-5': No recovery.				
5	S-2	5-10	60	60		0.1	S-2: 5'-9': Light brown, fine to medium SAND, moist.				
6						0.0					
7						0.0					
8						0.0				SAND	
9						N/A	9'-10': Light brown, fine to medium SAND, moist, roots present.				
10	S-3	10-15	60	43		0.0	S-3: 10'-11': Dark brown to light brown, fine to medium SAND, moist.				
11						0.0	11'-12': Light brown, fine to medium SAND, moist.				
12						0.0	12'-13': Light brown, fine to medium SAND, moist, roots present.				
13						0.0	13'-14': Light brown, fine to medium SAND, moist.				
14							14'-15': No recovery.				

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2100

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
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Engineers and Scientists

Wolverine World Wide
House Street
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EXPLORATION NO.: HS-SB-2100
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
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N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	60		0.1	S-4: 15'-20': Light brown, fine to medium SAND, moist.				
16						0.0					
17						0.0				SAND	
18						0.0					
19						N/A					
20											20
21							End of exploration at 20 feet.				
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

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REMARKS

GEOPROBE LOG



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Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2101
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/18/2019
Finish Date: 6/18/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
1	S-1	0-5	60	47		1.1	S-1: 0'-1': Dark brown, TOPSOIL, moist. 6" Dark brown, fine to medium SAND.			TOPSOIL	No Equipment Installed
		1-2			1-2	0.9	1'-2': Dark brown to brown, fine to medium SAND, moist				
2						1.8	2'-3': Brown, fine to medium SAND, moist.				
3		3-4			3-4	2.0	3'-4': Light brown, fine to medium SAND, moist.				
4						N/A	4'-5': No recovery.				
5	S-2	5-10	60	44		1.2	S-2: 5'-9': Light brown, fine to medium SAND, moist.				
6						1.5					
7						1.3					
8						1.0					
9						N/A	9'-10': No recovery.				
10	S-3	10-15	60	45		1.8	S-3: 10'-14': Light brown, fine to medium SAND, moist.				No Equipment Installed
11						0.8					
12						0.8					
13						0.6	14'-15': No recovery.				
14											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
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Logger Initials:

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Boring No.:

HS-SB-2101

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



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EXPLORATION NO.: HS-SB-2101
SHEET: 2 of 2
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BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	48		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						0.7					
17						0.8					
18						0.9					
19						1.2.					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2101

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2102
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/18/2019
Finish Date: 6/18/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	60		0.6	S-1: 0'-5': Dark brown, TOPSOIL, moist. 0.5'-1.5': Dark brown, fine to medium SAND, moist.			TOPSOIL	0.5	No Equipment Installed
		1-2			1-2	0.9	1.5'-2': Brown, fine to medium SAND, moist. 2'-5': Light brown, fine to medium SAND, moist.					
2						0.8						
3		3-4			3-4	0.8						
4						1.0						
5	S-2	5-10	60	39		0.8	S-2: 5'-6': Light brown, fine to medium SAND, moist, roots present. 6'-9': Light brown, fine to medium SAND, moist.					
6						0.9						
7						0.1						
8						0.1				SAND		
9						N/A	9'-10': No recovery.					
10	S-3	10-15	60	42		0.7	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
11						0.9						
12						0.9						
13						0.5	14'-15': No recovery.					
14												

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2102

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2102
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/18/2019
Finish Date: 6/18/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	39		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						0.9					
17						0.4					
18						0.7					
19						0.3					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2102

REMARKS

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2103
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2019
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	54		2.7	S-1: 0'-5': Dark brown, TOPSOIL, moist. 0.5'-1': Dark brown, fine to medium SAND, moist.			TOPSOIL	0.5	No Equipment Installed
2		1-2			1-2	3.8	1'-2': Brown, fine to medium SAND, moist.					
3						0.5	2'-5': Light brown, fine to medium SAND, moist.					
4		3-4			3-4	11.6						
5						0.8						
6	S-2	5-10	60	41		0.8	S-2: 5'-6': Light brown, fine to medium SAND, moist.					
7						0.6	6'-9': Light brown, fine to medium SAND, moist. 2" dark brown Clay seam from 6.8'-7'.					
8						0.7				SAND		
9						4.1						
10						N/A	9'-10': No recovery.					
11	S-3	10-15	60	48		1.4	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
12						0.6						
13						0.6						
14						0.5	14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2103

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2103
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2019
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	42		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						0.5					
17						0.2					
18						0.5					
19						0.4					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2103

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
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Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2104
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2029
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	48		0.5	S-1: 0'-5': Dark brown, TOPSOIL, moist, roots present. 0.5'-1': Brown, fine to medium SAND, moist.			TOPSOIL	0.5	No Equipment Installed
2		1-2			1-2	1.3	1'-2': Brown to light brown, fine to medium SAND, moist.					
3						0.8	2'-3.1': Light brown, fine to medium SAND, moist.					
4		3-4			3-4	7.8	3.1'-4': Hard, brown, CLAY, moist.					
5						N/A	4'-5': No recovery.					
6	S-2	5-10	60	49		1.0	S-2: 5'-10': Light brown, fine to medium SAND, moist.					
7						0.6						
8						0.5				SAND		
9						0.6						
10						0.6						
11	S-3	10-15	60	44		1.0	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
12						1.0						
13						0.9						
14						0.9	14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2104

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2104
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2029
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	44		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						1.7					
17						1.1					
18						1.6					
19						1.5					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2104

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2105
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2019
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	48		0.4	S-1: 0'-4': Dark brown, fine to medium SAND, moist. 0.4'-1': Brown, fine to medium SAND, moist. 1'-2': Brown to light brown, fine to medium SAND, moist.			SAND	1.7	No Equipment Installed
2						0.8					2.0	
3		2-3			2-3	0.9	2'-2.3': Light brown, fine to medium SAND, moist. 2.3'-2.7': Brown, CLAY, moist.			CLAY	2.3	
4										SAND	2.7	
5		3-4			3-4	0.9	2.7'-3': Light brown, fine to medium SAND, moist.			CLAY	3.0	
6										SAND	3.4	
7							3'-3.4': Brown, CLAY, moist. 3.4'-4': Light brown, fine to medium SAND, moist. 4'-5': No recovery.					No Equipment Installed
8	S-2	5-10	60	49		1.1	S-2: 5'-10': Light brown, fine to medium SAND, moist.					
9						0.8						
10						0.4						
11						0.5						
12						1.2				SAND		
13	S-3	10-15	60	36		0.3	S-3: 10'-13': Light brown, fine to medium SAND, moist					No Equipment Installed
14						0.4						
						0.4						No Equipment Installed
						N/A	13'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2105

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2105
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2019
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	47		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.				
16						0.6					
17						0.8					
18						0.6				SAND	
19						0.3					
20						N/A	End of exploration at 20 feet.				20
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2105

REMARKS

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2106
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2019
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	42		0.6	S-1: 0'-5': Dark brown, TOPSOIL, moist.			TOPSOIL	0.5	No Equipment Installed
						0.2	0.5'-1.2': Light brown, fine to medium SAND, moist. 1.2'-1.5': Rock.			SAND	1.9	
2		2-3			2-3	0.1	1.5'-1.9': Light brown, fine to medium SAND, moist. 1.9'-2.4': Brown, CLAY, and fine to medium SAND, moist.			CLAY & SAND	2.4	
3						0.3	2.4'-4': Light brown, fine to medium SAND, moist.					
4						N/A	4'-5': No recovery.					
5	S-2	5-10	60	38	5-6	1.0	S-2: 5'-9': Light brown, fine to medium SAND, moist.					
6						1.1						
7						0.8						
8						1.3	9'-10': No recovery.			SAND		
9						N/A						
10	S-3	10-15	60	42		0.9	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
11						1.1						
12						1.4						
13						0.4	14'-15': No recovery.					
14												

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2106

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2106
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/19/2019
Finish Date: 6/19/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	46		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						1.4					
17						1.4					
18						0.8					
19						1.3					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2106

REMARKS

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2107
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	46		0.5	S-1: 0'-4': Dark brown, TOPSOIL, moist. 0.4'-1': Dark brown, fine to medium SAND, moist. 1'-1.9': Brown, fine to medium SAND, moist. 1.9'-2.8': Brown, CLAY, moist.			TOPSOIL	0.4	No Equipment Installed
2					2-3	0.8				SAND	1.9	
3		2-3				1.1	2.8'-3.2': Dense, brown, fine to medium SAND, some Clay, moist. 3.2'-4': Brown, fine to medium SAND, moist.			CLAY	2.8	
4						0.8						
5						N/A	4'-5': No recovery.					No Equipment Installed
6	S-2	5-10	60	48		1.3	S-2: 5'-5.5': Brown to light brown, fine to medium SAND, moist. 5.5'-5.9': Brown, fine to medium SAND, little Clay, moist. 5.9'-6.1': Light brown, fine to medium SAND.					
7		6-7			6-7	0.8						
8						1.4	6.1'-6.4': Brown, fine to medium SAND, little Clay, moist. 6.4'-9': Brown to light brown, fine to medium SAND, moist.					
9						0.8						
10						N/A	9'-10': No recovery.			SAND		
11	S-3	10-15	60	44		1.1	S-3: 0'-14': Light brown, fine to medium SAND, moist.					
12						1.0						
13						0.7						No Equipment Installed
14						1.2	14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2107

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2107
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	60		N/A	S-4: 15'-20': Light brown, fine to medium SAND, moist.			SAND	20
16						1.0					
17						1.5					
18						1.1					
19						1.3					
20						1.2					
21							End of exploration at 20 feet.				
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2107

REMARKS

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2108
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
1	S-1	0-5	60	45		0.9	S-1: 0'-8': Dark brown, TOPSOIL, moist. 0.8'-1': Dark brown, fine to medium SAND, moist.			TOPSOIL	No Equipment Installed
		1-2			1-2	0.3	1'-2': Dark brown to brown, fine to medium SAND, moist.				
2						1.0	2'-2.6': Brown, fine to medium SAND, moist, rock fragments present.				
3		3-4			3-4	0.6	2.6'-3.3': Medium dense, brown, fine to medium SAND, little Clay, moist.				
4						N/A	3.3'-4': Brown to light brown, fine to medium SAND, moist.				
5							4'-5': No recovery.				
6	S-2	5-10	60	50		1.2	S-2: 5'-6': Dark brown to light brown, fine to medium SAND, moist.				
7						1.3					
8						0.4	6'-10': Brown to light brown, fine to medium SAND, moist.				
9						0.4					
10						0.7					
11	S-3	10-15	60	46		1.3	S-3: 10'-14': Brown to light brown, fine to medium SAND, moist.				SAND
12						0.3					
13						0.4					
14						0.7	14'-15': No recovery.				

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2108

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2108
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	45		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.				
16						0.6					
17						1.2					
18						1.1				SAND	
19						1.1					
20						N/A	End of exploration at 20 feet.				20
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2108

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2109
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
1	S-1	0-5	60	48	0-1	0.8	S-1: 0'-1.5': Dark brown, CLAY, little fine to medium Sand, moist, roots present. 1.5'-2': Brown, fine to medium SAND, moist.			CLAY	No Equipment Installed
2						0.5					
3		2-3			2-3	0.6	2'-3': Dark brown to brown, fine to medium SAND, moist.				
4						0.6	3'-4': Brown fine to medium SAND, moist.				
5						N/A	4'-5': No recovery.				
6	S-2	5-10	60	46		0.9	S-2: 5'-5.9': Light brown, fine to medium SAND, moist. 5.9'-6': Medium dense, brown, fine to medium SAND, little Clay, moist.				
7						1.1	6'-7': Brown to light brown, fine to medium SAND, moist. 7'-7.2': Medium dense, brown, fine to medium SAND, little Clay, moist.				
8						1.3	7.2'-8.1': Brown to light brown, fine to medium SAND, moist. 8.1'-8.2': Medium dense, brown, fine to medium SAND, little Clay, moist.			SAND	
9						1.0	8.2'-9': Brown to light brown, fine to medium SAND, moist.				
10						N/A	9'-10': No recovery.				
11	S-3	10-15	60	45		0.7	S-3: 10'-14': Brown to light brown, fine to medium SAND, moist.				
12						0.9					
13						1.4					
14						0.6	14'-15': No recovery.				

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2109

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2109
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	47		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						1.0					
17						1.1					
18						1.0					
19						0.7					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2109

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2110
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	45		0.7	S-1: 0'-1': Dark brown, CLAY, little fine to medium Sand, moist, roots present.			CLAY	1	No Equipment Installed
2		1-2			1-2	0.4	1'-2': Dark brown to brown, fine to medium SAND, moist.					
3						0.9	2'-3': Light brown, fine to medium SAND, moist.			SAND	3	
4		3-4			3-4	0.9	3'-3.5': Brown, CLAY, some fine to medium Sand, moist. 3.5'-4': Brown, fine to medium SAND, moist.			CLAY	4	
5						N/A	4'-5': No recovery.					No Equipment Installed
6	S-2	5-10	60	44		1.1	S-2: 5'-6': Brown to light brown, fine to coarse SAND, rock fragments, moist.					
7						1.1	6'-9': Brown to light brown, fine to medium SAND, moist.					
8						0.6						
9						0.9	9'-10': No recovery.					No Equipment Installed
10						N/A				SAND		
11	S-3	10-15	60	41		0.7	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
12						0.2						
13						0.5						No Equipment Installed
14						0.8	14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2110

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2110
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/20/2019
Finish Date: 6/20/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	43		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						0.7					
17						0.5					
18						0.4					
19						0.4					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2110

REMARKS

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2111
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	45	0-1	0.3	S-1: 0'-2': Dark brown, fine to medium SAND / TOPSOIL, moist, roots present. 0.2'-1': Dark brown fine to medium SAND, moist. 1'-2': Brown, fine to medium SAND, moist.			TOPSOIL	0.2	No Equipment Installed
2						0.0				SAND		
3		2-3			2-3	0.2	2'-2.4': Brown, fine to medium SAND, with rock fragments, moist. 2.4'-3.4': Brown, CLAY, moist.			CLAY	2.4	
4						0.1	3.4'-4': Brown, fine to coarse SAND, moist				3.4	
5						N/A	4'-5': No recovery.					
6	S-2	5-10	60	41		0.4	S-2: 5'-9': Light brown, fine to medium SAND, moist.					No Equipment Installed
7						0.3						
8						0.5						
9						0.6	9'-10': No recovery.					
10						N/A				SAND		
11	S-3	10-15	60	43		0.4	S-3: 10'-11': Brown to light brown, fine to medium SAND, moist.					No Equipment Installed
12						0.8	11'-12': Brown to light brown, fine to medium SAND, moist, roots present.					
13						0.8	12'-14': Brown to light brown, fine to medium SAND, moist.					
14						0.7	14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2111

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2111
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	45		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist.			SAND	
16						0.7					
17						0.8					
18						0.8					
19						0.7					
20						N/A	19'-20': No recovery.				20
21							End of exploration at 20 feet.				
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2111

REMARKS

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2112
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	52		0.1	S-1: 0'-1': Brown, CLAY, little fine to medium Sand, moist, roots present.			CLAY	1	No Equipment Installed
						0.2	1'-2': Brown, fine to medium SAND, moist.			SAND	2	
2					2-3	0.3	2'-3.9': Brown, CLAY, moist.					
3		2-3					3.9'-4': Brown, fine to coarse SAND, moist.			CLAY		
4					4-5	0.1	4'-5': Brown, CLAY, moist.				3.9	
		4-5				0.4				SAND	4	
5										CLAY	5	
6	S-2	5-10	60	46		0.3	S-2: 5'-6.8': Light brown, fine to coarse SAND, moist.					
7						0.3	6.8'-7.2': Brown, fine to medium SAND, moist, rock fragments.					
8						0.3	7.2'-9': Light brown, fine to medium SAND, moist.					
9						0.6	9'-10': No recovery.					
10						N/A				SAND		
11	S-3	10-15	60	40		0.6	S-3: 10'-12': Light brown, fine to medium SAND, moist.					
12						0.0	12'-13': Light brown, fine to medium SAND, moist, roots present.					
13						0.0						
14						0.7	13'-14': Light brown, fine to medium SAND, moist.					
							14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2112

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2112
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	37		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						0.4					
17						0.8					
18						0.1					
19						0.2					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2112

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
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Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2113
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	52		0.6	S-1: 0'-2': Dark brown, TOPSOIL, moist. 0.2'-1': Dark brown to brown, fine to medium SAND, moist.			TOPSOIL	0.2	No Equipment Installed
2		1-2			1-2	0.1	1'-3.3': Light brown, fine to medium SAND, moist.			SAND		
3						0.2						
3					3-4	0.4	3.3'-4.1': Brown, CLAY, moist.				3.3	
4		3-4				0.4	4.1'-5': Brown, fine to medium SAND, moist.			CLAY	4.1	
5						0.4						
5	S-2	5-10	60	48		0.0	S-2: 5'-9': Brown to light brown, fine to medium SAND, moist.					
6						0.0						
7						0.0						
8						0.0						
9						N/A	9'-10': No recovery.			SAND		
10	S-3	10-15	60	44		0.9	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
11						2.0						
12						0.9						
13						1.3						
14							14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2113

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2113
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	40		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist.			SAND	
16						1.3					
17						1.6					
18						2.1					
19						1.3					
20						N/A	19'-20': No recovery.				20
21							End of exploration at 20 feet.				
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2113

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2114
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	60	0-1	0.8	S-1: 0'-1': Dark brown, TOPSOIL, moist, roots, leaves an branches present. 1'-2.5': Brown, fine to medium SAND, moist.			TOPSOIL	1	No Equipment Installed
2						0.5				SAND	2.5	
3						0.4	2.5'-3.3': Brown, CLAY, moist.			CLAY	3.3	
4		3-4			3-4	0.0	3.3'-4.6': Brown, fine to medium SAND, moist.					
5						0.3	4.6'-5': Brown, fine to coarse SAND, moist.					SAND
6	S-2	5-10	60	50		0.6	S-2: 5'-6.1': Brown, fine to coarse SAND, moist.					
7						0.3	6.1'-6.7': Brown, fine to medium SAND, moist. 6.7'-8': Brown, fine to medium SAND, rock fragments, moist.					
8						1.8						
9						1.3	8'-10': Brown, fine to medium SAND, moist.					
10						1.5						
11	S-3	10-15	60	45		2.0	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
12						2.4						
13						1.6						
14						1.1	14'-15': No recovery.					

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2114

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2114
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	44		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist.				
16						0.3					
17						1.9					
18						0.4				SAND	
19						1.3					
20						N/A	19'-20': No recovery.				20
21							End of exploration at 20 feet.				
22											
23											
24											
25											
26											
27											
28											

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:
MJS

Boring No.:
HS-SB-2114

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2115
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)	Equipment Installed
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)						
1	S-1	0-5	60	55	0-1	0.7	S-1: 0'-4': Dark brown, TOPSOIL, moist, roots present. 0.4'-1.5': Brown, fine to medium SAND, moist. 1.5'-3.4': Brown, CLAY, moist.			TOPSOIL	0.4	No Equipment Installed
						0.5				SAND	1.5	
2						0.8				CLAY		
3		3-4			3-4	1.0	3.4'-5': Light brown, fine to medium SAND, moist.				3.4	
4						0.8						No Equipment Installed
5	S-2	5-10	60	50		1.4	S-2: 5'-6': Light brown, fine to coarse SAND, moist.					
6						0.7	6'-7': Brown, fine to medium SAND, moist, roots.					
7						0.8	7'-10': Light brown, fine to medium SAND, moist.					
8						1.5						
9						1.6				SAND		
10	S-3	10-15	60	45		1.1	S-3: 10'-14': Light brown, fine to medium SAND, moist.					
11						1.7						
12						0.6						
13						0.9	14'-15': No recovery.					
14												

Granular Soils
Blows/FT Density
0-4 -- Very Loose
4-10 -- Loose
10-30 -- Medium Dense
30-50 -- Dense
>50 -- Very Dense

Cohesive Soils
Blows/FT Consistency
<2 -- Very Soft
2-4 -- Soft
4-8 -- M. Stiff
8-15 -- Stiff
15-30 -- V. Stiff
>30 -- Hard

Plasticity
SM Thread Diameter Rolled
None SILT
1/4" Clayey SILT
1/8" SILT & CLAY
1/16" CLAY & SILT
1/32" Silty CLAY
1/64" CLAY

MISSDIG Ticket Number:
B91621870

Logger Initials:

MJS

Boring No.:

HS-SB-2115

REMARKS

16.0062335.52 T006 WOLVERINE HOUSE STREET LOGS.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 7/11/2019

GEOPROBE LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, MI

EXPLORATION NO.: HS-SB-2115
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: KHM & BLW

Logged By: MJS
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligns

Start Date: 6/21/2019
Finish Date: 6/21/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plain South Zone, NAD83

Type of Rig: Geoprobe
Rig Model: 6620 DT
Drilling Method: Direct Push

Sampler Type: Direct Push
Sampler O.D. (in.): 3.0
Sampler Length (in.): 60

Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample						Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.)	Stratum Description	Depth (ft.)
	No.	Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)					
15	S-4	15-20	60	39		N/A	S-4: 15'-19': Light brown, fine to medium SAND, moist. 19'-20': No recovery.			SAND	20
16						0.6					
17						0.9					
18						0.4					
19						0.2					
20						N/A	End of exploration at 20 feet.				
21											
22											
23											
24											
25											
26											
27											
28											

Granular Soils
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1/4" Clayey SILT
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MISSDIG Ticket Number:
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REMARKS