Rose & Westra
A Division of GZA

GEOTECHNICAL
ENVIRONMENTAL
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WATER
CONSTRUCTION MANAGEMENT

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MEMORANDUM

To: Abby Hendershott, EGLE

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

Date: September 3, 2019

File No.: 16.0062335.52 / 16.0062335.53

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 August 12, 2019 U.S. EPA MPR (attached).

SITE INVESTIGATION ACTIONS

Continued effort for access to off-site drilling locations. Completed drilling at location MW-23 for installation of a total of four wells. The MW-23 boring log is attached.

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

Completed drilling on adjoining parcel in a depression.

All off-site monitoring wells have been surveyed.

Clearing for fence installation began as well as communication with Kent County Road Commission regarding fence installation in House Street right-of-way continued.

SITE ANALYTICAL DATA RECIEVED

Analytical results from off-site drilling in the above-mentioned depressed area were recently received and provided to the agency and property owner.

PFAS soil data received since the last update from the on-Site investigation is also summarized in the attached tables.

SITE MAPPING

A revised map will be provided once survey information is available.

SITE ANTICIPATED ACTIONS AND SCHEDULE FOR NEXT REPORTING PERIOD

It is likely drilling at off-site location PMW-12 will commence September 3. Drilling may also occur at PMW-24. 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.

R&W/GZA is also working on approval for waste disposal. An additional composite sample was requested from the disposal facility, collected, and has been submitted for analysis.

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\August 2019 Update\WWW-House Street-MDEQMonthlyUpdate-09032019-F.docx

TABLE 1
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]	U.S. EPA Residential Soil Regional Removal Management Levels[3]	HS-SB-2106	HS-SB-2106	HS-SB-2106	HS-SB-2107	HS-SB-2107	HS-SB-2108	HS-SB-2108	HS-SB-2109	HS-SB-2109	HS-SB-2110	HS-SB-2110	HS-SB-2111	HS-SB-2111	HS-SB-2112	HS-SB-2112	HS-SB-2113	HS-SB-2113
Sample Name				HS-SB-2106 (2-3)	HS-SB-2106 (2-3) DUP	HS-SB-2106 (5-6)	HS-SB-2107 (2-3)	HS-SB-2107 (6-7)	HS-SB-2108 (1-2)	HS-SB-2108 (3-4)	HS-SB-2109 (0-1)	HS-SB-2109 (2-3)	HS-SB-2110 (1-2)	HS-SB-2110 (3-4)	HS-SB-2111 (0-1)	HS-SB-2111 (2-3)	HS-SB-2112 (2-3)	HS-SB-2112 (4-5)	HS-SB-2113 (1-2)	HS-SB-2113 (3-4)
Depth Interval (Feet below ground surface)				2 - 3	2 - 3	5 - 6	2 - 3	6 - 7	1 - 2	3 - 4	0 - 1	2 - 3	1 - 2	3 - 4	0 - 1	2 - 3	2 - 3	4 - 5	1 - 2	3 - 4
Boring Location				House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site
Laboratory Sample ID(s)				UG09018-001	UG09018-003	UG09018-002	UG09018-004	UG09018-005	UG09018-006	UG09018-007	UG09018-008	UG09018-009	UG09018-010	UG09018-011	UG09018-012	UG09018-013	UG09018-014	UG09018-015	UG09018-016	UG09018-017
Sample Date				7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019
Parameter (µg/kg)																				
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	<10	<10	<12	<11	<10	<11	<9.9	<11	<10	<10	<11	<10	<9.6	<11	<11	<11	<13
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	<10	<10	<12	<11	<10	<11	<9.9	<11	<10	<10	<11	<10	<9.6	<11	<11	<11	<13
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	<2.1	<2	<2.3	<2.2	<2	<2.1	<2	<2.3	<2.1	<2.1	<2.1	<2.1	<1.9	<2.2	<2.2	4	<2.7
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	<2.1	<2	<2.3	<2.2	<2	<2.1	<2	<2.3	<2.1	<2.1	<2.1	<2.1	<1.9	<2.2	<2.2	<2.2	<2.7
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	3,800,000	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	6.3	<6.6
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	150	13
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	***5.6***	***5.1***	***9.7***	***13***	<5.1	***31***	***23***	***76***	***9.7***	***36***	***45***	***14***	***35***	***110***	***15***	***71***	***41***
PFOA + PFOS (Calculated)	NCL	NCL	NCL	5.6	5.1	9.7	13	ND	31	23	76	9.7	36	45	14	35	110	15	71	41
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	<5.1	<5.1	<5.8	<5.4	<5.1	<5.4	<5	<5.7	<5.2	<5.2	<5.4	<5.1	<4.8	<5.6	<5.5	<5.5	<6.6
Total PFAS (Calculated)	NCL	NCL	NCL	5.6	5.1	9.7	13	ND	31	23	76	9.7	36	45	14	35	110	15	230	54

TABLE 1
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]	U.S. EPA Residential Soil Regional Removal Management Levels[3]	HS-SB-2114	HS-SB-2114	HS-SB-2115	HS-SB-2115	HS-SB-2116	HS-SB-2116	HS-SB-2117	HS-SB-2117	HS-SB-2117	HS-SB-2118	HS-SB-2118	HS-SB-2119	HS-SB-2119	HS-SB-2120	HS-SB-2120	HS-SB-2120
Sample Name				HS-SB-2114 (0-1)	HS-SB-2114 (3-4)	HS-SB-2115 (0-1)	HS-SB-2115 (3-4)	HS-SB-2116 (0-1)	HS-SB-2116 (3-4)	HS-SB-2117 (0-1)	HS-SB-2117 (2-3)	HS-SB-2117 (2-3) DUP	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)
Depth Interval (Feet below ground surface)				0 - 1	3 - 4	0 - 1	3 - 4	0 - 1	3 - 4	0 - 1	2 - 3	2 - 3	0 - 1	3 - 4	0 - 1	3 - 4	1 - 2	1 - 2	4 - 5
Boring Location				House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site
Laboratory Sample ID(s)				UG09018-018	UG09018-019	UG09013-001	UG09013-002	UG09013-003	UG09013-004	UG09013-005	UG09013-006	UG09013-007	UG09013-008	UG09013-009	UG09013-010	UG09013-011	UG09013-012	UG09013-013	UG09013-014
Sample Date				7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019
Parameter (µg/kg)																			
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	NCL	NCL	NCL	<12	<9.9	<11	<11	<11	<12	<10	<9.9	<12	<11	<9.9	<10	<10	<9.9	<9.6	<12
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	NCL	NCL	NCL	<12	<9.9	<11	<11	<11	<12	<10	<9.9	<12	<11	<9.9	<10	<10	<9.9	<9.6	<12
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	NCL	NCL	NCL	<2.3	<2	<2.2	<2.1	<2.3	<2.4	<2	<2	<2.3	11	19	12	9.7	21	10	<2.3
N-Methyl perfluorooctane sulfonamide (MeFOSA)	NCL	NCL	NCL	<2.3	<2	<2.2	<2.1	<2.3	<2.4	<2	<2	<2.3	<2.1	3.1	4.4	5.9	2.4	<1.9	<2.3
Perfluorobutane sulfonic acid (PFBS)	NCL	NCL	3,800,000	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorodecane sulfonic acid (PFDS)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	5.7	<5	20	15	15	<5.8
Perfluoroheptane sulfonic acid (PFHpS)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorononane sulfonic acid (PFNS)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorooctane sulfonamide (FOSA)	NCL	NCL	NCL	31	<5	36	<5.3	<5.7	<6.1	190	<4.9	<5.8	87	110	76	130	270	220	<5.8
Perfluoropentane sulfonic acid (PFPeS)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorohexane sulfonic acid (PFHxS)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorobutanoic acid (PFBA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorodecanoic acid (PFDA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorododecanoic acid (PFDoDA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluoroheptanoic acid (PFHpA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorohexanoic acid (PFHxA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorononanoic acid (PFNA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorooctanoic acid (PFOA)	NCL	10,000	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	5.2	<4.9	<4.8	<5.8
Perfluorooctane sulfonic acid (PFOS)	NCL	0.24	NCL	***72***	***47***	***47***	***8.1***	***12***	***15***	***100***	***24***	***61***	<5.3	<4.9	***26***	***180***	***110***	***120***	***250***
PFOA + PFOS (Calculated)	NCL	NCL	NCL	72	47	47	8.1	12	15	100	24	61	ND	ND	26	190	110	120	250
Perfluoropentanoic acid (PFPeA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorotetradecanoic acid (PFTeDA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluorotridecanoic acid (PFTrDA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Perfluoroundecanoic acid (PFUnDA)	NCL	NCL	NCL	<5.8	<5	<5.6	<5.3	<5.7	<6.1	<5	<4.9	<5.8	<5.3	<4.9	<5	<5	<4.9	<4.8	<5.8
Total PFAS (Calculated)	NCL	NCL	NCL	100	47	83	8.1	12	15	290	24	61	98	140	120	350	420	370	250

TABLE 1 NOTES
1855 House Street NE
Plainfield Township, Kent County, MI

NOTES:

1. Concentration and criteria units are micrograms per kilogram (µg/kg) or parts per billion (ppb). Calculated criteria and concentrations are rounded to two significant digits. "ND" indicates the parameters used in the calculation were not detected. "NC" indicates not calculated.
2. 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:
   "NCL" indicates no criterion listed in EGLE Table 2.
3. U.S. EPA Residential Soil Regional Removal Management Levels (RMLs) were based on "Generic RML Tables," updated November 2018.
4. 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).
5. Bold, italic number with thick line border or italic parameter name indicates that parameter was detected above the Michigan Part 201 Soil Cleanup Criteria. 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.
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.

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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: August 12, 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 July 12, 2019 *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 Actions[1] (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 July 3 to August 2, 2019: "*. . . significant developments 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) July 8, 2019: R&W/GZA began drilling efforts for delineation task around the five TCLP chromium exceedances at the Site (2019 WP, Section 3.6.1). This work was on-going as of August 2, 2019.

2) July 12, 2019: Submittal of the final 2019 WP.

3) Access was obtained to the two westerly adjoining parcels.

4) Draft Air Monitoring Plan was submitted to EPA.

Table 1 summarizes the borings completed and associated samples collected during this reporting period. The boring locations in the southwestern investigation area (completed last reporting period) are shown on attached Figure 1. Borings completed in the five TCLP delineation areas are shown on working drafts included as Figures 2A-2E.

Boring logs for soil borings identified as HS-SB-2116 to HS-SB-2224 are attached.

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

ANALYTICAL DATA RECIEVED

Soil analytical data received during this reporting period is summarized in Tables 1A through 1F. No groundwater data was received during this period.

ANTICIPATED ACTIONS AND SCHEDULE FOR NEXT REPORTING PERIOD

During the next reporting period, August 3 to September 5, 2019, R&W/GZA, the following tasks are anticipated to begin or be completed:

1) Complete Section 3.6.1 of the 2019 WP, Chromium TCLP soil delineation
2) Begin west adjacent suspect wetland areas investigation, Section 3.5 of the 2019 WP
3) Begin clearing and installation of fencing
4) Complete additional boring logs from this reporting period and a portion of those completed during the next reporting period

IDENTIFIED PROBLEMS AND RESOLUTIONS

No significant problems were identified during this reporting period. As the GPS accuracy can waiver significantly at the Site, R&W/GZA worked closely with START to locate the delineation borings around the five chromium TCLP exceedances.

APPROVED 2019 WP MODIFICATIONS

No modifications were approved during this reporting period. R&W/GZA did evaluate potential alterations to the scope of Section 3.5 boring locations with both START and EPA. This is on-going.

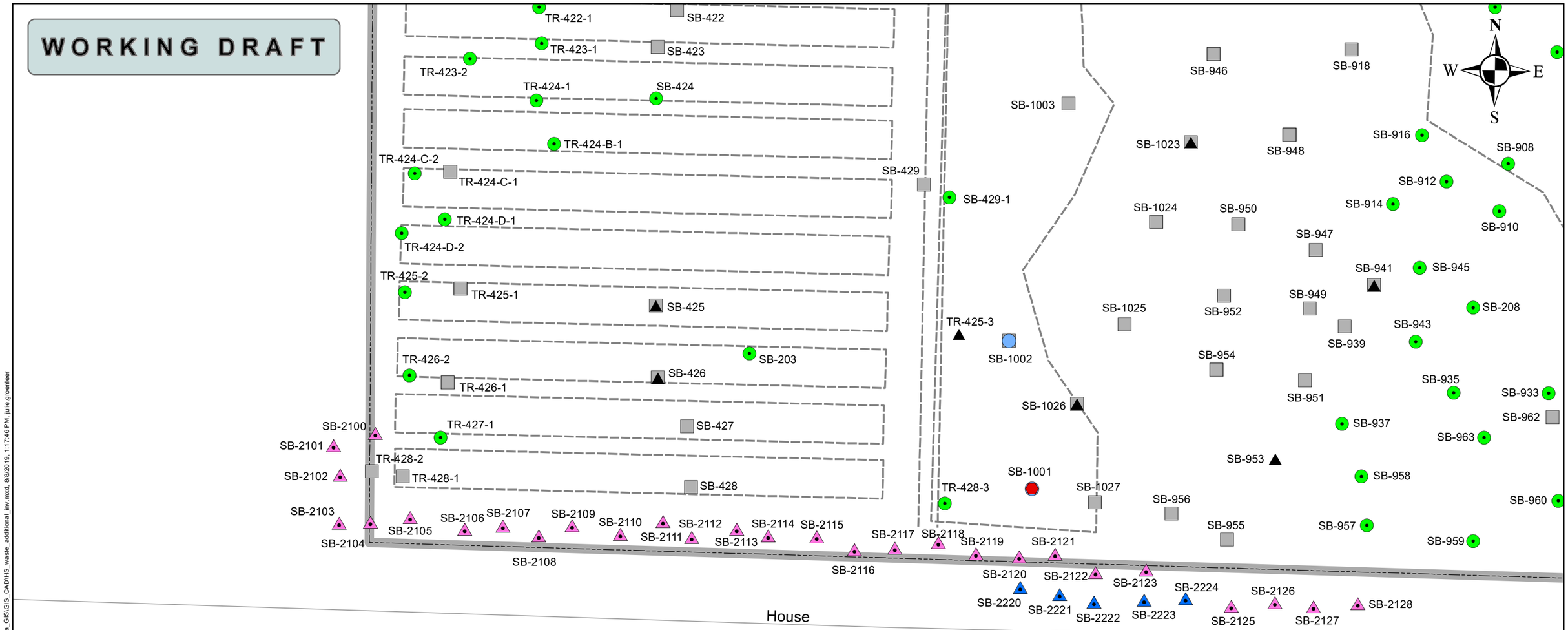
House Street Soil Boring Locations
2019 Delineation

Sampling Program	Sample Location	Start Date	End Date	Start Depth (ft)	End Depth (ft)	Sampled yet?	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	<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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	YES	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	<LOD | <LOD	7 | 5	4 | 3	4 | 2
TCLP Investigation	HS-SB-4100	8-Jul-19	8-Jul-19	0	20	YES	12-13	15-16	NA	17-Jul-19	0.6	1.8	NA	4	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	8	5	NA
TCLP Investigation	HS-SB-4101	8-Jul-19	8-Jul-19	0	20	YES	12-13	15-16	NA	17-Jul-19	1.4	1.7	NA	<LOD	<LOD	NA	23	<LOD	NA	<LOD	<LOD	NA	3	4	NA
TCLP Investigation	HS-SB-4102	8-Jul-19	8-Jul-19	0	20	YES	3-4	4-5	NA	17-Jul-19	0.0	0.0	NA	3	5.0	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	9	9	NA
TCLP Investigation	HS-SB-4103	9-Jul-19	9-Jul-19	0	20	YES	12-13	15-16	NA	17-Jul-19	1.0	0.8	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	4	5	NA
TCLP Investigation	HS-SB-4105	8-Jul-19	8-Jul-19	0	20	YES	12-13	15-16	NA	18-Jul-19	6.5	6.1	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	4	4	NA
TCLP Investigation	HS-SB-4106	9-Jul-19	9-Jul-19	0	20	YES	12-13	15-16	NA	18-Jul-19	3.4	7.6	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	4	4	NA
TCLP Investigation	HS-SB-4107	9-Jul-19	9-Jul-19	0	20	YES	3-4	5-6	NA	18-Jul-19	0.8	1.3	NA	8	5.0	NA	43	40	NA	<LOD	<LOD	NA	11	9	NA
TCLP Investigation	HS-SB-4135	8-Jul-19	25-Jul-19	0	20	YES	12-13	15-16	NA	25-Jul-19	0.3	0.0	NA	<LOD	2.0	NA	<LOD	61	NA	<LOD	<LOD	NA	8	12	NA
TCLP Investigation	HS-SB-4137	9-Jul-19	25-Jul-19	0	20	YES	12-13	15-16	NA	25-Jul-19	1.4	1.0	NA	6	4.0	NA	47	38	NA	<LOD	<LOD	NA	10	11	NA
TCLP Investigation	HS-SB-4138	9-Jul-19	25-Jul-19	0	20	YES	11-12	13-14	NA	25-Jul-19	1.4	NA	NA	<LOD	NA	NA	<LOD	NA	NA	<LOD	NA	NA	10	NA	NA
TCLP Investigation	HS-SB-4139	9-Jul-19	25-Jul-19	0	20	YES	7-8	10-11	NA	25-Jul-19	1.1	1.3	NA	7	5.0	NA	42	33	NA	<LOD	<LOD	NA	11	12	NA
TCLP Investigation	HS-SB-4200	11-Jul-19	11-Jul-19	0	20	YES	12-13	15-16	NA	18-Jul-19	0.3	0.4	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	4	3	NA
TCLP Investigation	HS-SB-4206	10-Jul-19	10-Jul-19	0	20	YES	7-8	10-11	NA	17-Jul-19	1.1	1.1	NA	13	<LOD	NA	28	<LOD	NA	<LOD	<LOD	NA	14	6	NA
TCLP Investigation	HS-SB-4210	10-Jul-19	10-Jul-19	0	20	YES	7-8	10-11	NA	18-Jul-19	1.9	3.1	NA	6	<LOD	NA	38	<LOD	NA	<LOD	<LOD	NA	9	<LOD	NA
TCLP Investigation	HS-SB-4264	11-Jul-19	11-Jul-19	0	20	YES	12-13	15-16	NA	23-Jul-19	0.4	0.4	NA	6	6.0	NA	41	39	NA	<LOD	<LOD	NA	10	10	NA
TCLP Investigation	HS-SB-4265	11-Jul-19	11-Jul-19	0	20	YES	12-13	15-16	NA	23-Jul-19	0.9	0.7	NA	3	5.0	NA	46	<LOD	NA	<LOD	<LOD	NA	10	8	NA
TCLP Investigation	HS-SB-4266	10-Jul-19	10-Jul-19	0	20	YES	11-12	14-15	NA	23-Jul-19	3.0	2.3	NA	3	3.0	NA	32	43	NA	<LOD	<LOD	NA	15	11	NA
TCLP Investigation	HS-SB-4267	10-Jul-19	10-Jul-19	0	20	YES	12-13	15-16	NA	23-Jul-19	3.3	3.6	NA	5	2.0	NA	63	25	NA	<LOD	<LOD	NA	12	6	NA
TCLP Investigation	HS-SB-4268	10-Jul-19	10-Jul-19	0	20	YES	12-13	15-16	NA	23-Jul-19	1.2	1.1	NA	3	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	11	4	NA
TCLP Investigation	HS-SB-4269	11-Jul-19	11-Jul-19	0	20	YES	8-9	11-12	NA	22-Jul-19	4.8	0.4	NA	4	6.0	NA	1638	56	NA	<LOD	<LOD	NA	13	12	NA
TCLP Investigation	HS-SB-4271	11-Jul-19	22-Jul-19	0	20	YES	5-6	8-9	NA	22-Jul-19	0.6	0.8	NA	3	3.0	NA	2434	40	NA	<LOD	<LOD	NA	12	8	NA
TCLP Investigation	HS-SB-4274	16-Jul-19	25-Jul-19	0	20	YES	6-7	8-9	NA	25-Jul-19	0.2	0.7	NA	5	2	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	11	3	NA
TCLP Investigation	HS-SB-4300	11-Jul-19	11-Jul-19	0	20	YES	6-7	8-9	NA	18-Jul-19	0.1	0.2	NA	4	5	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	8	7	NA
TCLP Investigation	HS-SB-4302	10-Jul-19	10-Jul-19	0	20	YES	6-7	8-9	NA	22-Jul-19	1.5	1.1	NA	4	7	NA	36	32	NA	<LOD	<LOD	NA	7	10	NA
TCLP Investigation	HS-SB-4303	12-Jul-19	12-Jul-19	0	20	YES	5-6	7-8	NA	19-Jul-19	0.7	0.8	NA	2	4	NA	34	<LOD	NA	<LOD	<LOD	NA	10	8	NA
TCLP Investigation	HS-SB-4307	15-Jul-19	15-Jul-19	0	20	YES	5-6	8-9	NA	19-Jul-19	3.5	2.5	NA	3	4	NA	40	59	NA	3	<LOD	NA	10	12	NA
TCLP Investigation	HS-SB-4309	15-Jul-19	15-Jul-19	0	20	YES	5-6	8-9	NA	22-Jul-19	3.8	3.3	NA	7	4	NA	40	22	NA	<LOD	<LOD	NA	16	8	NA
TCLP Investigation	HS-SB-4310	16-Jul-19	19-Jul-19	0	20	YES	5-6	8-9	NA	19-Jul-19	0.5	0.1	NA	5	12	NA	39	37	NA	<LOD	<LOD	NA	13	14	NA
TCLP Investigation	HS-SB-4311	16-Jul-19	19-Jul-19	0	20	YES	5-6	8-9	NA	19-Jul-19	0.0	0.3	NA	5	5	NA	53	46	NA	<LOD	<LOD	NA	13	10	NA
TCLP Investigation	HS-SB-4312	16-Jul-19	19-Jul-19	0	20	YES	2-3	5-6	NA	19-Jul-19	0.0	0.0	NA	7	5	NA	3154	226	NA	<LOD	<LOD	NA	15	13	NA
TCLP Investigation	HS-SB-4313	16-Jul-19	19-Jul-19	0	20	YES	7-8	10-11	NA	19-Jul-19	0.0	0.3	NA	6	<LOD	NA	29	<LOD	NA	<LOD	<LOD	NA	10	3	NA
TCLP Investigation	HS-SB-4314	17-Jul-19	22-Jul-19	0	20	YES	5-6	8-9	NA	22-Jul-19	0.6	0.6	NA	<LOD	8	NA	<LOD	54	NA	<LOD	<LOD	NA	4	10	NA
TCLP Investigation	HS-SB-4315	18-Jul-19	22-Jul-19	0	20	YES	7-8	10-11	NA	22-Jul-19	0.0	0.0	NA	5	4	NA	29	27	NA	<LOD	<LOD	NA	10	10	NA
TCLP Investigation	HS-SB-4400	12-Jul-19	12-Jul-19	0	20	YES	11-12	13-14	NA	23-Jul-19	1.4	2.2	NA	5	2	NA	49	53	NA	<LOD	<LOD	NA	15	7	NA
TCLP Investigation	HS-SB-4403	15-Jul-19	15-Jul-19	0	20	YES	5-6	7-8	NA	24-Jul-19	2.5	2.7	NA	5	7	NA	33	<LOD	NA	<LOD	<LOD	NA	10	9	NA
TCLP Investigation	HS-SB-4404	16-Jul-19	24-Jul-19	0	20	YES	11-12	13-14	NA	24-Jul-19	0.0	0.0	NA	8	2	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	11	3	NA

House Street Soil Boring Locations
2019 Delineation

Sampling Program	Sample Location	Start Date	End Date	Start Depth (ft)	End Depth (ft)	Sampled yet?	Samples Analyzed			Date Samples Sent to Lab	PID Readings for Samples Analyzed			XRF Results for Samples Analyzed								
TCLP Investigation	HS-SB-4407	15-Jul-19	23-Jul-19	0	20	YES	6-7	9-10	NA	23-Jul-19	86.3	9.9	NA	5	3	NA	9256	<LOD	NA	<LOD	<LOD	NA	13	8	NA
TCLP Investigation	HS-SB-4408	16-Jul-19	14-Jul-19	0	20	YES	8-9	11-12	NA	24-Jul-19	2.3	0.0	NA	6	<LOD	NA	914	<LOD	NA	<LOD	<LOD	NA	10	4	NA
TCLP Investigation	HS-SB-4410	16-Jul-19	24-Jul-19	0	20	YES	10-11	13-14	NA	24-Jul-19	0.0	0.0	NA	6	<LOD	NA	35	<LOD	NA	<LOD	<LOD	NA	12	4	NA
TCLP Investigation	HS-SB-4413	17-Jul-19	24-Jul-19	0	20	YES	6-7	8-9	NA	24-Jul-19	0.4	1.2	NA	5	6	NA	40	<LOD	NA	<LOD	<LOD	NA	10	11	NA
TCLP Investigation	HS-SB-4414	17-Jul-19	24-Jul-19	0	20	YES	3-4	5-6	NA	24-Jul-19	0.0	0.3	NA	<LOD	9	NA	3447	54	NA	<LOD	<LOD	NA	14	12	NA
TCLP Investigation	HS-SB-4416	18-Jul-19	24-Jul-19	0	20	YES	6-7	9-10	NA	24-Jul-19	NR	NA	NA	8	NA	NA	5184	NA	NA	<LOD	NA	NA	14	NA	NA
TCLP Investigation	HS-SB-4417	18-Jul-19	24-Jul-19	0	20	YES	4-5	6-7	NA	24-Jul-19	0.0	0.2	NA	5	5	NA	79	33	NA	<LOD	<LOD	NA	22	10	NA
TCLP Investigation	HS-SB-4418	18-Jul-19	24-Jul-19	0	20	YES	4-5	6-7	NA	24-Jul-19	0.1	0.0	NA	13	3	NA	39	<LOD	NA	<LOD	<LOD	NA	13	9	NA
TCLP Investigation	HS-SB-4419	18-Jul-19	24-Jul-19	0	20	YES	4-5	6-7	NA	24-Jul-19	0.0	0.0	NA	7	7	NA	39	44	NA	<LOD	<LOD	NA	14	12	NA
TCLP Investigation	HS-SB-4420	18-Jul-19	24-Jul-19	0	20	YES	4-5	6-7	NA	24-Jul-19	0.5	1.2	NA	7	6	NA	54	37	NA	<LOD	<LOD	NA	12	11	NA
TCLP Investigation	HS-SB-4500	25-Jul-19	25-Jul-19	0	20	YES	6-7	16-17	NA	30-Jul-19	1.9	1.4	NA	3	<LOD	NA	27	<LOD	NA	<LOD	<LOD	NA	7	5	NA
TCLP Investigation	HS-SB-4502	26-Jul-19	26-Jul-19	0	20	YES	5-6	7-8	NA	31-Jul-19	0.7	0.8	NA	6	4	NA	23	<LOD	NA	<LOD	<LOD	NA	14	11	NA
TCLP Investigation	HS-SB-4503	26-Jul-19	26-Jul-19	0	20	YES	5-6	7-8	NA	31-Jul-19	0.7	0.7	NA	<LOD	2	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	6	5	NA
TCLP Investigation	HS-SB-4504	26-Jul-19	26-Jul-19	0	20	YES	5-6	7-8	NA	30-Jul-19	0.8	0.6	NA	4	2	NA	36	<LOD	NA	<LOD	<LOD	NA	14	<LOD	NA
TCLP Investigation	HS-SB-4505	29-Jul-19	29-Jul-19	0	20	YES	6-7	8-9	NA	30-Jul-19	0.0	0.0	NA	3	5	NA	<LOD	25	NA	<LOD	<LOD	NA	7	11	NA
TCLP Investigation	HS-SB-4506	29-Jul-19	29-Jul-19	0	20	YES	4-5	6-7	NA	30-Jul-19	0.0	0.0	NA	6	3	NA	4208	28	NA	<LOD	<LOD	NA	12	8	NA
TCLP Investigation	HS-SB-4507	29-Jul-19	29-Jul-19	0	20	YES	6-7	8-9	NA	31-Jul-19	0.0	0.0	NA	5	5	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	10	10	NA
TCLP Investigation	HS-SB-4508	29-Jul-19	29-Jul-19	0	20	YES	6-7	8-9	NA	31-Jul-19	0.0	0.0	NA	7	3	NA	<LOD	24	NA	<LOD	<LOD	NA	7	11	NA
TCLP Investigation	HS-SB-4600	29-Jul-19	31-Jul-19	0	20	YES	5-6	10-11	NA	31-Jul-19	0.0	0.0	NA	<LOD	<LOD	NA	3350	1004	NA	<LOD	<LOD	NA	8	10	NA
TCLP Investigation	HS-SB-4602	29-Jul-19	31-Jul-19	0	20	YES	4-5	6-7	NA	31-Jul-19	0.0	0.0	NA	25	3	NA	2021	5118	NA	<LOD	<LOD	NA	53	13	NA
TCLP Investigation	HS-SB-4603	29-Jul-19	31-Jul-19	0	20	YES	2-3	12-13	NA	31-Jul-19	0.0	0.0	NA	<LOD	<LOD	NA	3056	<LOD	NA	<LOD	<LOD	NA	105	5	NA
TCLP Investigation	HS-SB-4604	30-Jul-19	31-Jul-19	0	20	YES	12-13	14-15	NA	31-Jul-19	1.0	1.9	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	7	5	NA
TCLP Investigation	HS-SB-4605	30-Jul-19	31-Jul-19	0	20	YES	5-6	7-8	NA	31-Jul-19	0.8	0.7	NA	3	<LOD	NA	<LOD	40	NA	<LOD	<LOD	NA	11	5	NA
TCLP Investigation	HS-SB-4606	30-Jul-19	31-Jul-19	0	20	YES	5-6	7-8	NA	31-Jul-19	0.0	0.0	NA	5	<LOD	NA	869	<LOD	NA	<LOD	<LOD	NA	20	6	NA
TCLP Investigation	HS-SB-4607	30-Jul-19	31-Jul-19	0	20	YES	4-5	6-7	NA	31-Jul-19	0.0	0.0	NA	2	4	NA	62	<LOD	NA	<LOD	<LOD	NA	10	9	NA
TCLP Investigation	HS-SB-4608	31-Jul-18	31-Jul-19	0	20	YES	7-8	10-11	NA	31-Jul-19	0.0	0.0	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	9	6	NA
TCLP Investigation	HS-SB-4609	31-Jul-18	1-Aug-19	0	20	YES	13-14	16-17	NA	1-Aug-19	0.6	1.0	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	6	7	NA
TCLP Investigation	HS-SB-4610	31-Jul-18	1-Aug-19	0	20	YES	13-14	16-17	NA	1-Aug-19	1.1	1.0	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	<LOD	<LOD	NA	6	6	NA

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 ST SITE BOUNDARY

0 30 60 120

Scale in Feet

NOTES
1. SOIL BORING STATUS UDATED THROUGH 8/8/2019.

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

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 1
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1"=60'	
DATE: **08-08-2019**	PROJECT NO. **16.0062355.52**	REVISION NO.	

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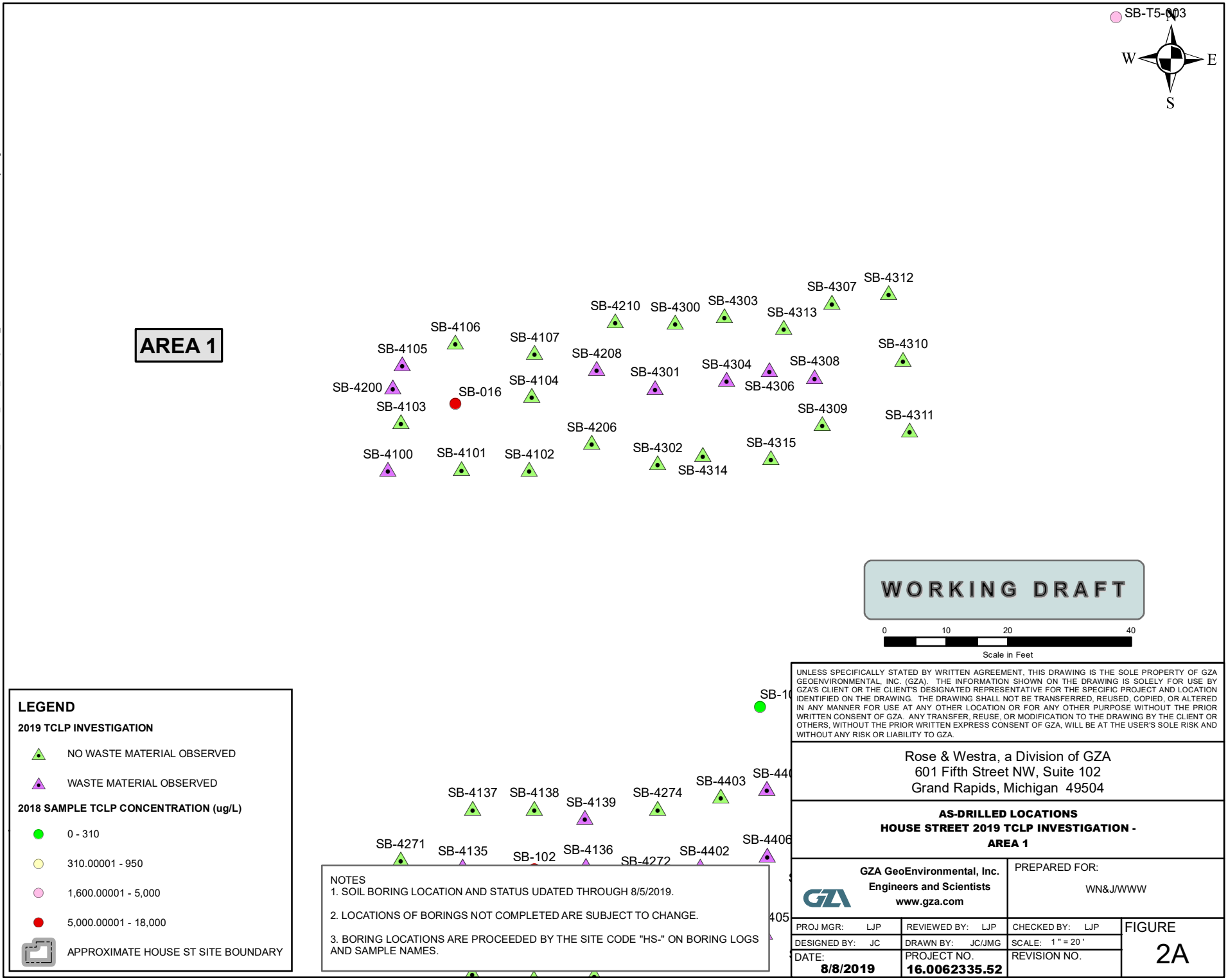

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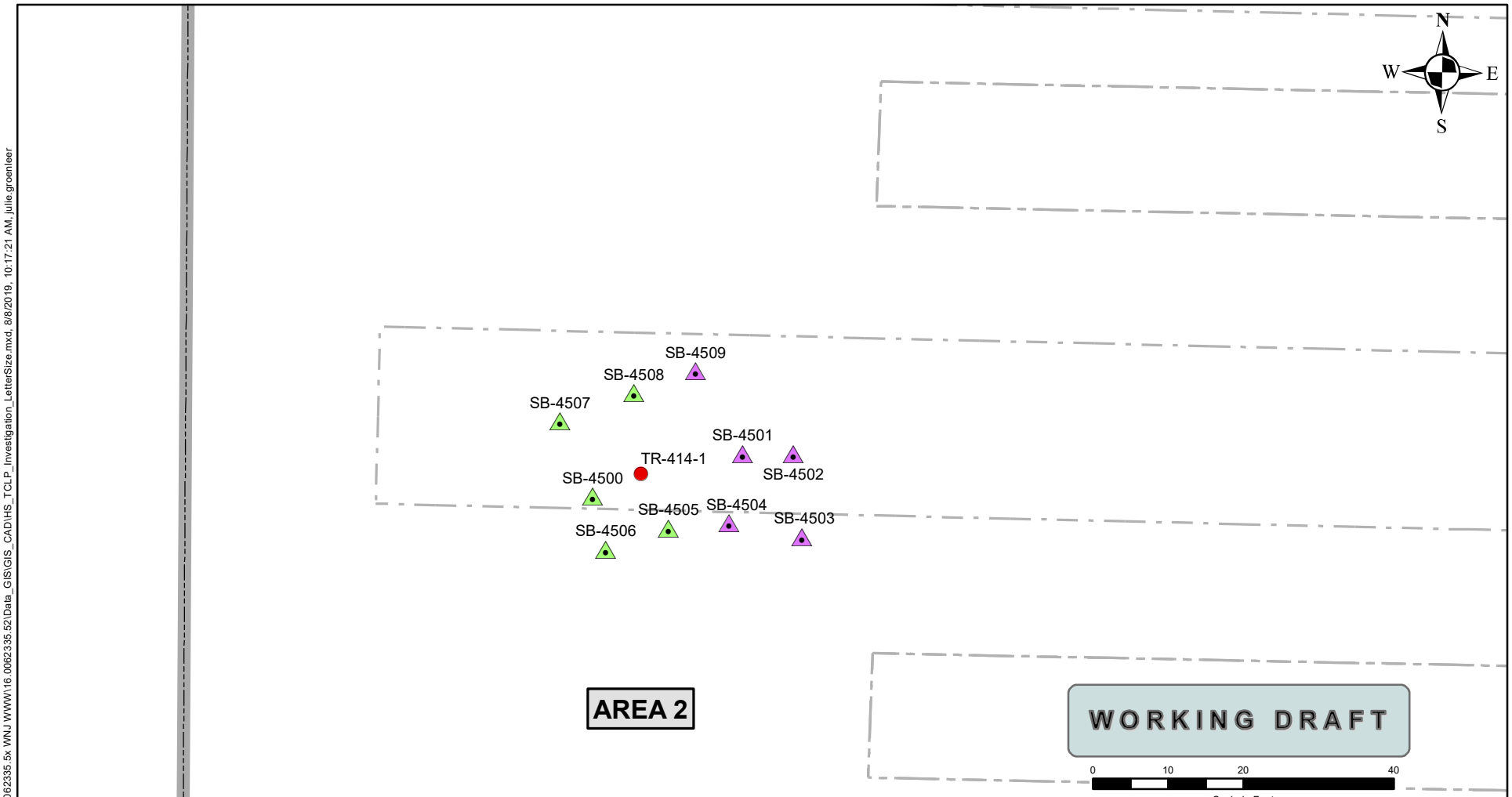
AS-DRILLED LOCATIONS
HOUSE STREET 2019 TCLP INVESTIGATION -
AREA 1

GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR: WN&J/WWW

PROJ MGR: LJP	REVIEWED BY: LJP	CHECKED BY: LJP	FIGURE
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1 " = 20 '	2A
DATE: 8/8/2019	PROJECT NO. 16.0062335.52	REVISION NO.	



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LEGEND

2019 TCLP INVESTIGATION

- NO WASTE MATERIAL OBSERVED
- WASTE MATERIAL OBSERVED

2018 SAMPLE TCLP CONCENTRATION (ug/L)

- 5,000.00001 - 18,000
- 1966 PROPOSED SITE PLAN
- APPROXIMATE HOUSE ST SITE BOUNDARY

NOTES
1. SOIL BORING LOCATION AND STATUS UDATED THROUGH 8/5/2019.

2. LOCATIONS OF BORINGS NOT COMPLETED ARE SUBJECT TO CHANGE.

3. BORING LOCATIONS ARE PROCEEDED BY THE SITE CODE "HS-" ON BORING LOGS AND SAMPLE NAMES.

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Grand Rapids, Michigan 49504

AS-DRILLED LOCATIONS
HOUSE STREET 2019 TCLP INVESTIGATION -
AREA 2

GZA GeoEnvironmental, Inc.
Engineers and Scientists
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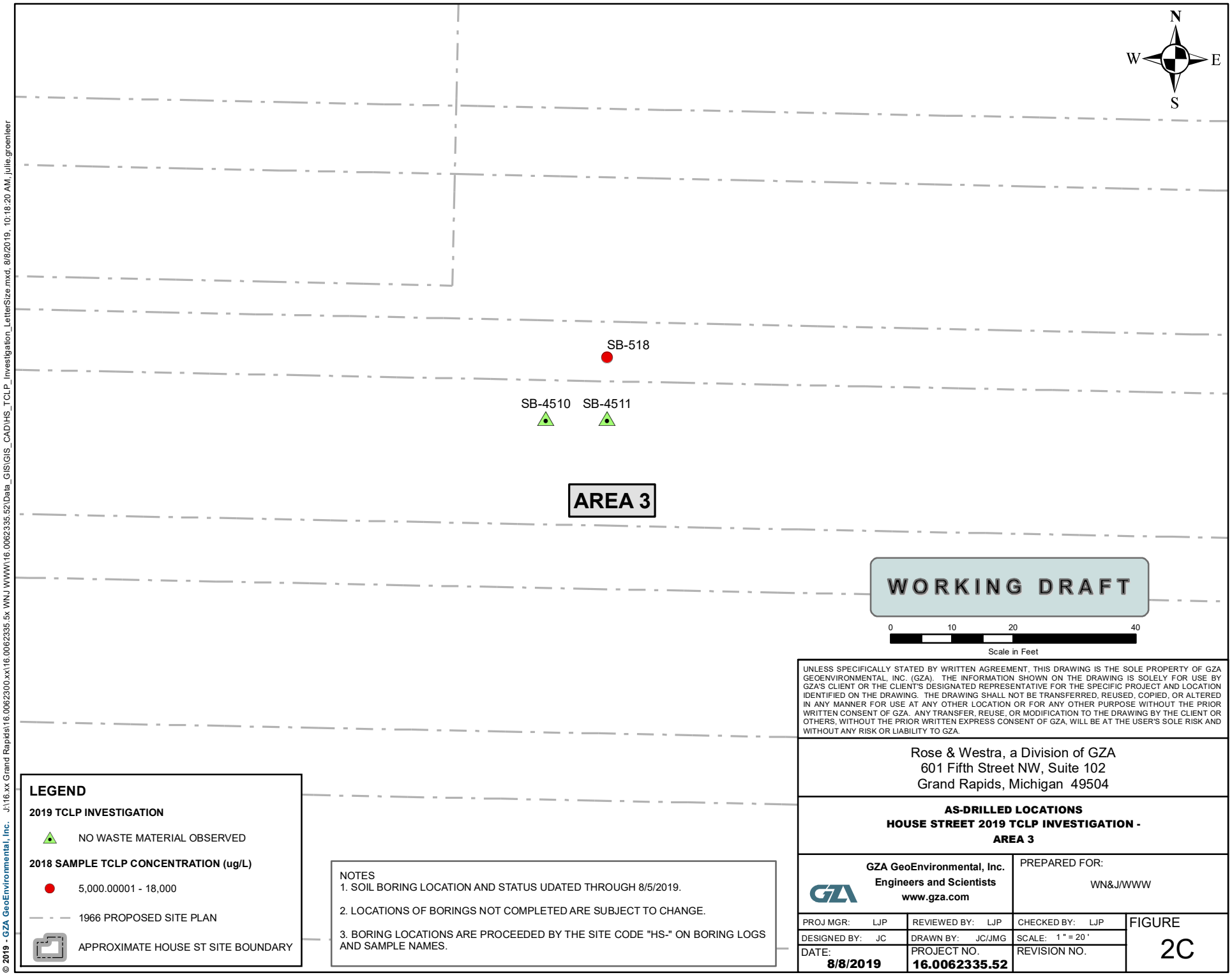
PREPARED FOR: WN&J/WWW

PROJ MGR: LJP	REVIEWED BY: LJP	CHECKED BY: LJP	FIGURE 2B
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1 " = 20 '	
DATE: 8/8/2019	PROJECT NO. 16.0062335.52	REVISION NO.	



LEGEND

2019 TCLP INVESTIGATION

NO WASTE MATERIAL OBSERVED

2018 SAMPLE TCLP CONCENTRATION (ug/L)

5,000.00001 - 18,000

1966 PROPOSED SITE PLAN

APPROXIMATE HOUSE ST SITE BOUNDARY

NOTES
1. SOIL BORING LOCATION AND STATUS UDATED THROUGH 8/5/2019.

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3. BORING LOCATIONS ARE PROCEEDED BY THE SITE CODE "HS-" ON BORING LOGS AND SAMPLE NAMES.

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AS-DRILLED LOCATIONS
HOUSE STREET 2019 TCLP INVESTIGATION -
AREA 3

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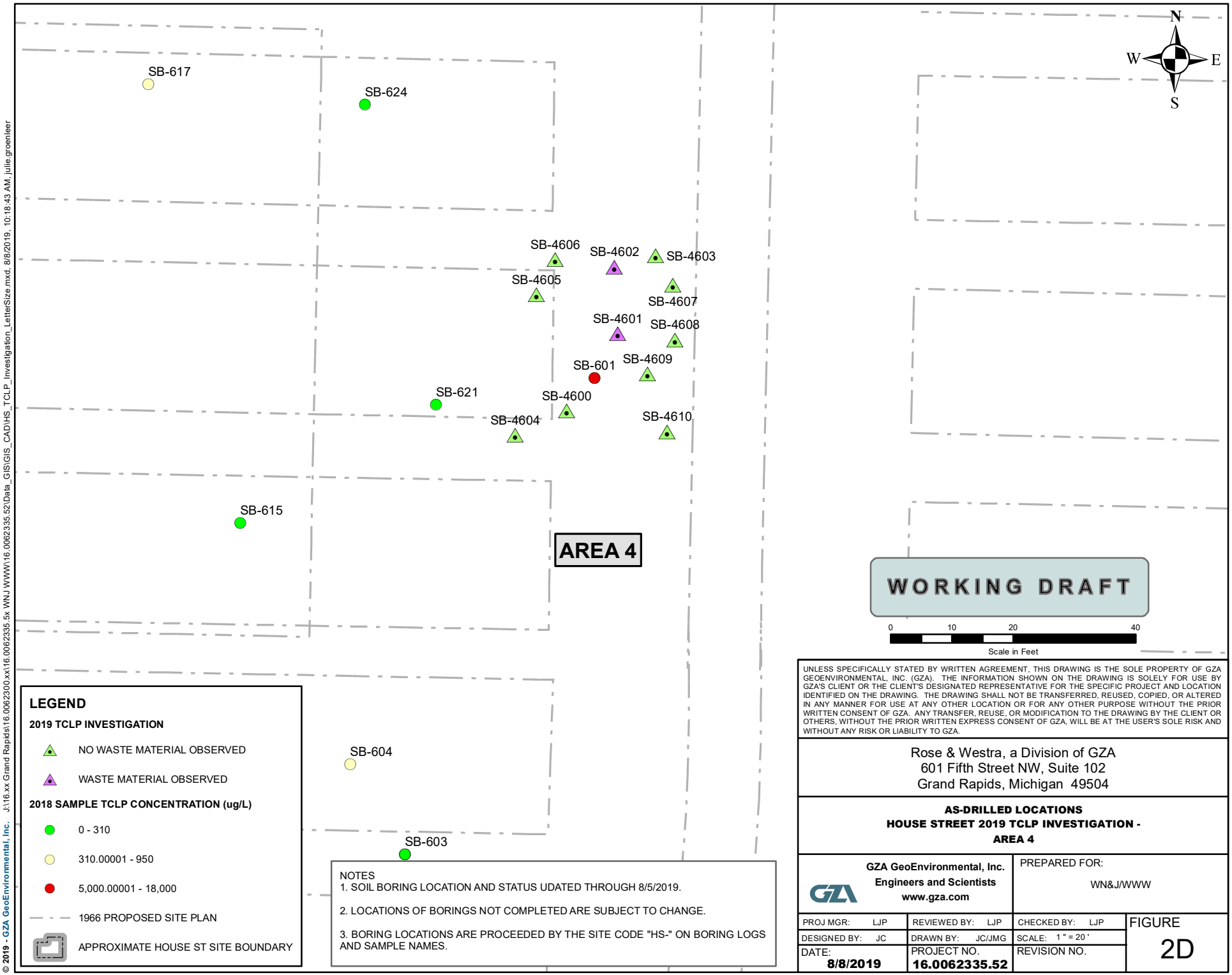
PREPARED FOR:
WN&J/WWW

PROJ MGR: LJP	REVIEWED BY: LJP	CHECKED BY: LJP	FIGURE
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1 " = 20 '	2C
DATE: **8/8/2019**	PROJECT NO. **16.0062335.52**	REVISION NO.	



LEGEND

2019 TCLP INVESTIGATION

- NO WASTE MATERIAL OBSERVED
- WASTE MATERIAL OBSERVED

2018 SAMPLE TCLP CONCENTRATION (ug/L)

- 0 - 310
- 310.00001 - 950
- 5,000.00001 - 18,000
- 1966 PROPOSED SITE PLAN
- APPROXIMATE HOUSE ST SITE BOUNDARY

NOTES
1. SOIL BORING LOCATION AND STATUS UDATED THROUGH 8/5/2019.

2. LOCATIONS OF BORINGS NOT COMPLETED ARE SUBJECT TO CHANGE.

3. BORING LOCATIONS ARE PROCEEDED BY THE SITE CODE "HS-" ON BORING LOGS AND SAMPLE NAMES.

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AS-DRILLED LOCATIONS
HOUSE STREET 2019 TCLP INVESTIGATION -
AREA 4

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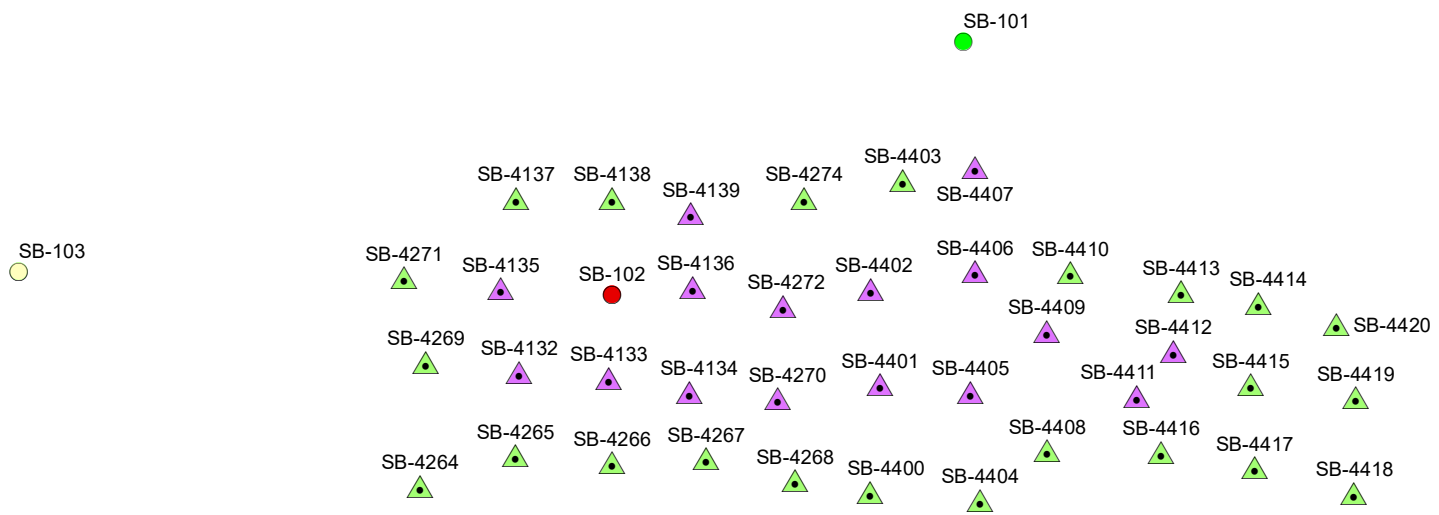
PREPARED FOR:
WN&J/WWW

PROJ MGR: LJP	REVIEWED BY: LJP	CHECKED BY: LJP	FIGURE
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1 " = 20 '	2D
DATE: **8/8/2019**	PROJECT NO. **16.0062335.52**	REVISION NO.	



AREA 5

N
W E
S

WORKING DRAFT

0 10 20 40
Scale in Feet

LEGEND

2019 TCLP INVESTIGATION

- NO WASTE MATERIAL OBSERVED
- WASTE MATERIAL OBSERVED

2018 SAMPLE TCLP CONCENTRATION (ug/L)

- 0 - 310
- 310.00001 - 950
- 5,000.00001 - 18,000
- APPROXIMATE HOUSE ST SITE BOUNDARY

NOTES
1. SOIL BORING STATUS UDATED THROUGH 8/5/2019.
2. LOCATIONS OF BORINGS NOT COMPLETED ARE SUBJECT TO CHANGE.
3. BORING LOCATIONS ARE PROCEEDED BY THE SITE CODE "HS-" ON BORING LOGS AND SAMPLE NAMES.

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Grand Rapids, Michigan 49504

AS-DRILLED LOCATIONS
HOUSE STREET 2019 TCLP INVESTIGATION -
AREA 5

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PREPARED FOR: WN&J/WWW

PROJ MGR: LJP	REVIEWED BY: LJP	CHECKED BY: LJP	FIGURE 2E
DESIGNED BY: JC	DRAWN BY: JC/JMG	SCALE: 1 " = 20 '	
DATE: 8/8/2019	PROJECT NO. 16.0062335.52	REVISION NO.	

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: Bromodichloromentane + 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-Dibromoethane (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: Bromodichloromentane + 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
Benzidine	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	11,000	<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 & 19061882-01A	UF21044-007 & 19061882-02A	UF21044-008 & 19061882-03A	UF21044-009 & 19061882-04A	UF21044-010 & 19061882-05A
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)																		
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	<40,000	<19,000	<19,000	<19,000	<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	<40,000	<19,000	<19,000	<19,000	<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	<40	<40	<40	47	<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	<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-2104	HS-SB-2104	HS-SB-2105	HS-SB-2105	HS-SB-2106	HS-SB-2106	HS-SB-2106	HS-SB-2107	HS-SB-2107
Sample Name										HS-SB-2104 (1-2)	HS-SB-2104 (3-4)	HS-SB-105 (2-3)	HS-SB-2105 (3-4)	HS-SB-2106 (2-3)	HS-SB-2106 (2-3) DUP	HS-SB-2106 (5-6)	HS-SB-2107 (2-3)`	HS-SB-2107 (6-7)
Depth Interval (Feet below ground surface)										1 - 2	3 - 4	2 - 3	3 - 4	2 - 3	2 - 3	5 - 6	2 - 3	6 - 7
Boring Location										House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site
Laboratory Sample ID(s)										19062077-17A	19062077-18A	19070158-01A	19070158-02A	19070158-04A	19070158-05A	19070158-06A	19070158-07A	19070158-08A
Sample Date										6/28/2019	6/28/2019	6/28/2019	6/28/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019
Parameter (µg/kg)																		
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	350	<20,000	<19,000	<20,000	<19,000	<19,000	<19,000	<19,000	<20,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<190	<20,000	<19,000	<20,000	<19,000	<19,000	<19,000	<19,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000									
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<40	<40	<40	<40	<40	<40	<40	<40	<39
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
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	NC	NC
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	NC	NC
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL									
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL									
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL									
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	<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-2108	HS-SB-2108	HS-SB-2109	HS-SB-2109	HS-SB-2110	HS-SB-2110	HS-SB-2111	HS-SB-2111	HS-SB-2112
Sample Name										HS-SB-2108 (1-2)	HS-SB-2108 (3-4)	HS-SB-2109 (0-1)	HS-SB-2109 (2-3)	HS-SB-2110 (1-2)	HS-SB-2110 (3-4)	HS-SB-2111 (0-1)	HS-SB-2111 (2-3)	HS-SB-2112 (2-3)
Depth Interval (Feet below ground surface)										1 - 2	3 - 4	0 - 1	2 - 3	1 - 2	3 - 4	0 - 1	2 - 3	2 - 3
Boring Location										House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site
Laboratory Sample ID(s)										19070158-09A	19070158-10A	19070158-11A	19070158-12A	19070158-13A	19070158-14A	19070158-15A	19070158-16A	19070158-17A
Sample Date										7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/1/2019	7/2/2019
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	<19,000	<19,000	<19,000	<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	<20,000	<19,000	<19,000	<19,000	<19,000	<19,000	<19,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000									
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<40	<40	<40	41	<40	<40	<40	<40	<40
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
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	NC	NC
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	NC	NC
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL									
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL									
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL									
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	<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-2112	HS-SB-2113	HS-SB-2113	HS-SB-2114	HS-SB-2114	HS-SB-2115	HS-SB-2115	HS-SB-2116	HS-SB-2116
Sample Name										HS-SB-2112 (4-5)	HS-SB-2113 (1-2)	HS-SB-2113 (3-4)	HS-SB-2114 (0-1)	HS-SB-2114 (3-4)	HS-SB-2115 (0-1)	HS-SB-2115 (3-4)	HS-SB-2116 (0-1)	HS-SB-2116 (3-4)
Depth Interval (Feet below ground surface)										4 - 5	1 - 2	3 - 4	0 - 1	3 - 4	0 - 1	3 - 4	0 - 1	3 - 4
Boring Location										House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site
Laboratory Sample ID(s)										19070158-18A	19070158-19A	19070158-20A	19070158-21A	19070158-22A	19070158-23A	19070158-24A	19070158-25A	19070158-26A
Sample Date										7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019
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	<19,000	<20,000	<19,000	<19,000	<19,000	<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	<19,000	<19,000	<20,000	<19,000	<19,000	<19,000	<20,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000									
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<40	42	<40	50	<40	79	<40	52	<40
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
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	NC	NC
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	NC	NC
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL									
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL									
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL									
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	<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-2117	HS-SB-2117	HS-SB-2117	HS-SB-2118	HS-SB-2118	HS-SB-2119	HS-SB-2119	HS-SB-2120	HS-SB-2120
Sample Name										HS-SB-2117 (0-1)	HS-SB-2117 (2-3)	HS-SB-2117 (2-3) DUP	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
Depth Interval (Feet below ground surface)										0 - 1	2 - 3	2 - 3	0 - 1	3 - 4	0 - 1	3 - 4	1 - 2	1 - 2
Boring Location										House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site	House St Site
Laboratory Sample ID(s)										19070158-27A	19070158-28A	19070158-29A	19070640-01A	19070640-02A	19070640-03A	19070640-04A	19070640-05A	19070640-06A
Sample Date										7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019	7/2/2019
Parameter (µg/kg)																		
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<19,000	<20,000	<20,000	<19,000	<19,000	<19,000	<18,000	<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	<20,000	<20,000	<19,000	<19,000	<19,000	<18,000	<19,000	<19,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000									
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	60	<40	<40	42	<40	<39	<40	<40	<40
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL									
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	NC	NC
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	NC	NC
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL									
Phosphorus	NA	1,300,000	20,000 (EE)	NLV	NLV	67,000,000	1,000,000,000 (D)	NCL	NCL									
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL									
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	<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-2120	HS-SB-2125	HS-SB-2125	HS-SB-2125	HS-SB-2125	HS-SB-2125	HS-SB-2126	HS-SB-2126	HS-SB-2126
Sample Name										HS-SB-2120 (4-5)	HS-SB-2125 (1-2)	HS-SB-2125 (7-8)	HS-SB-2125 (25-27)	HS-SB-2125 (30-32)	HS-SB-2125 (35-37)	HS-SB-2126 (2-3)	HS-SB-2126 (8-9)	HS-SB-2126 (25-27)
Depth Interval (Feet below ground surface)										4 - 5	1 - 2	7 - 8	25 - 27	30 - 32	35 - 37	2 - 3	8 - 9	25 - 27
Boring Location										House St Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										19070640-07A	19062077-08A	19062077-09A	19062077-10A	19070158-03A	19062077-11A	UF27082-001 & 19061882-06A	UF27082-002 & 19061882-07A	19062077-03A
Sample Date										7/2/2019	6/27/2019	6/27/2019	6/27/2019	6/28/2019	6/28/2019	6/25/2019	6/25/2019	6/27/2019
Parameter (µg/kg)																		
Acetic Acid	NA	84,000	180,000 (G)	NLV	NLV	17,000,000,000	130,000,000	NCL	NCL	<19,000	<20,000	<19,000	<19,000	<19,000	<19,000	<19,000	<19,000	<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	<20,000	<19,000	<19,000	<19,000	<19,000	<19,000	<19,000	<20,000
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	<39	45	<40	<40	<39	59	<40	<40	<40
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	440	810	NC
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	ND	ND	NC
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	<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-2126	HS-SB-2126	HS-SB-2127	HS-SB-2127	HS-SB-2128	HS-SB-2128	HS-SB-2220	HS-SB-2220	HS-SB-2221
Sample Name										HS-SB-2126 (31-33)	HS-SB-2126 (37-39)	HS-SB-2127 (3-4)	HS-SB-2127 (8-9)	HS-SB-2128 (2-3)	HS-SB-2128 (8-9)	HS-SB-2220 (3-4)	HS-SB-2220 (8-9)	HS-SB-2221 (0-1)
Depth Interval (Feet below ground surface)										31 - 33	37 - 39	3 - 4	8 - 9	2 - 3	8 - 9	3 - 4	8 - 9	0 - 1
Boring Location										Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										19062077-04A	19062077-05A	UF27082-003 & 19061882-08A	UF27082-004 & 19061882-09A	UF27082-005 & 19061882-10A	UF27082-006 & 19061882-11A	19062077-06A	19062077-07A	19062077-01A
Sample Date										6/27/2019	6/27/2019	6/25/2019	6/25/2019	6/26/2019	6/26/2019	6/27/2019	6/27/2019	6/27/2019
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	<19,000	<19,000	<19,000	<19,000	<20,000	<19,000
Formic Acid	NA	200,000	ID	1,500,000	210,000	130,000,000	320,000,000 (C)	NCL	87,000	<19,000	<19,000	<19,000	<19,000	<19,000	<19,000	<19,000	<20,000	<19,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000			140	68 [J]	92 [J]	78 [J]			
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<40	<40	<40	<40	<40	<39	<40	<40	<40
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL			<1,100	<1,200	<1,100	<1,100			
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL			1,200	420	1,300	540			
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	NC	NC	1200	420	1300	540	NC	NC	NC
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NA	NCL	NC	NC	ND	ND	ND	ND	NC	NC	NC
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL			9,300 [J]	19,000	<11,000	15,000			
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***			
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL			<11,000	<12,000	<11,000	<11,000			
Sulfide (Acid Soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<100,000	<100,000	<100,000	<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-2221	HS-SB-2223	HS-SB-2223	HS-SB-2224	HS-SB-2224	HS-SB-2224	HS-SB-2224	HS-SB-2224
Sample Name										HS-SB-2221 (8-9)	HS-SB-2223 (1-2)	HS-SB-2223 (8-9)	HS-SB-2224 (1-2)	HS-SB-2224 (6-7)	HS-SB-2224 (20-22)	HS-SB-2224 (31-33)	HS-SB-2224 (37-39)
Depth Interval (Feet below ground surface)										8 - 9	1 - 2	8 - 9	1 - 2	6 - 7	20 - 22	31 - 33	37 - 39
Boring Location										Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
Laboratory Sample ID(s)										19062077-02A	UF27082-007 & 19061882-12A	UF27082-008 & 19061882-13A	19062077-12A	19062077-13A	19062077-14A	19062077-15A	19062077-16A
Sample Date										6/27/2019	6/26/2019	6/26/2019	6/28/2019	6/28/2019	6/28/2019	6/28/2019	6/28/2019
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	<19,000	<19,000	<20,000	<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	<20,000	<19,000	<19,000	<20,000	<19,000	<19,000
Cyanide - Total	390	4,000	100	NLV	NLV	250,000	12,000	NCL	69,000		85 [J]	57 [J]					
Cyanide, Available	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	<40	<40	<40	<40	<40	<40	<40	<40
Ammonia - N (gas diffusion)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL		<1,200	<1,200					
Nitrate-Nitrite - N (soluble)	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL	NCL		670	640					
Nitrate-Nitrite - N + Ammonia - N (Calculated)	NA	200,000 (N)	NCL	NCL	NCL	NCL	NCL	NCL	380,000,000	NC	670	640	NC	NC	NC	NC	NC
Unionized Ammonia (Calculated based on pH 8.0, 20°C)	NA	NCL	580 (CC)	NCL	NCL	NCL	NCL	NA	NCL	NC	ND	ND	NC	NC	NC	NC	NC
Chloride (soluble)	NA	5,000,000	NCL	NLV	NLV	ID	500,000 (F)	NCL	NCL		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		***140,000***	***140,000***					
Sulfate (soluble)	NA	5,000,000	NA	NLV	NLV	ID	ID	NCL	NCL		<12,000	<12,000					
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	<100,000

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 (PFTrDA)	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 (PFTrDA)	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

TABLES 1A TO 1E NOTES
1855 House Street NE
Plainfield Township, Kent County, MI

NOTES:

1. Concentration and criteria units are micrograms per kilogram (µg/kg) or parts per billion (ppb). Calculated criteria and concentrations are rounded to two significant digits. "ND" indicates the parameters used in the calculation were not detected. "NC" indicates not calculated.
2. 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.
   "NLL" indicates the substance is not likely to leach under most soil conditions.
   "NLV" indicates the substance is not likely to volatilize under most conditions.
   Footnotes Include:
   (B) - Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.
   (C) - The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (C_{sat}).
   (D) - The calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 ppb.
   (F) - Criterion is based on adverse impacts to plant life and phytotoxicity.
   (G) - Groundwater surface water interface protection (GSIP) criterion depends on the pH or water hardness, or both, of the receiving surface water.
   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 $CaCO_3$/L) and pH (7.5 standard units) used in the calculations were the lowest (most-conservative) of the calculated mean and median of the Rogue River surface water samples collected in Rockford, MI at the former tannery (TA-SW-01, TA-SW-02, TA-SW-03, TA-SW-05, and TA-SW-07) rounded to two significant digits and water hardness or pH for the Rogue River near Rockford published in United States Geological Survey Circular 323, "Water Resources of the Grand Rapids Area, Michigan," Table 1, 1954.
   (M) - Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
   (N) - Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5 µg/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 µg/kg.
   (CC) - The generic soil GSI protection criteria for unionized ammonia are 580 µg/kg and 1,100 µg/kg for cold water and warm water surface water, respectively. The percent conversion factor in the table for cold water (20°C or 68°F) and pH (8.0 standard units) is 3.82%.
   (DD) - Residential direct contact criteria are protective of both prenatal and postnatal exposure.
   (EE) - The applicable GSI criteria for phosphorus is 1,000 µg/L. The footnote does not specify a GSIP criterion, however, the GSIP for phosphorus refers to Footnote EE. Conservatively, a value of 20 times the GSI criterion (20,000 µg/kg) was used.
3. 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).
4. U.S. EPA Residential Soil Regional Removal Management Levels (RMLs) were based on "Generic RML Tables," updated November 2018.
5. 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).
6. 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.
7. 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.
8. 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 1F
SUMMARY OF SOIL SAMPLE ANALYSIS - TCLP METALS
1855 House Street NE
Plainfield Township, Kent County, MI

Sample Location	RCRA Maximum Concentration	HS-SB-4100	HS-SB-4100	HS-SB-4100	HS-SB-4101	HS-SB-4101	HS-SB-4102	HS-SB-4102	HS-SB-4103	HS-SB-4103	HS-SB-4105	HS-SB-4105	HS-SB-4106	HS-SB-4106	HS-SB-4107	HS-SB-4107	HS-SB-4200	HS-SB-4200
Sample Name		HS-SB-4100 (12-13)	HS-SB-4100 (12-13) DUP	HS-SB-4100 (15-16)	HS-SB-4101 (12-13)	HS-SB-4101 (15-16)	HS-SB-4102 (3-4)	HS-SB-4102 (4-5)	HS-SB-4103 (12-13)	HS-SB-4103 (15-16)	HS-SB-4105 (12-13)	HS-SB-4105 (15-16)	HS-SB-4106 (12-13)	HS-SB-4106 (15-16)	HS-SB-4107 (3-4)	HS-SB-4107 (5-6)	HS-SB-4200 (12-13)	HS-SB-4200 (15-16)
Depth Interval (Feet below ground surface)		12 - 13	12 - 13	15 - 16	12 - 13	15 - 16	3 - 4	4 - 5	12 - 13	15 - 16	12 - 13	15 - 16	12 - 13	15 - 16	3 - 4	5 - 6	12 - 13	15 - 16
Laboratory Sample ID		UG20001-001	UG20001-002	UG20001-003	UG20001-004	UG20001-005	UG20001-006	UG20001-007	UG20001-010	UG20001-011	UG20001-014	UG20001-015	UG20001-016	UG20001-017	UG20001-018	UG20001-019	UG20001-012	UG20001-013
Sample Date		07/17/2019	07/17/2019	07/17/2019	07/17/2019	07/17/2019	07/17/2019	07/17/2019	07/17/2019	07/17/2019	07/18/2019	07/18/2019	07/18/2019	07/18/2019	07/18/2019	07/18/2019	07/18/2019	07/18/2019
Parameter (µg/L)																		
Chromium	5,000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100

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

Sample Location	RCRA Maximum Concentration	HS-SB-4206	HS-SB-4206	HS-SB-4210	HS-SB-4210	HS-SB-4300	HS-SB-4300	HS-SB-4303	HS-SB-4303	HS-SB-4307	HS-SB-4307	HS-SB-4307	HS-SB-4310	HS-SB-4310	HS-SB-4311	HS-SB-4311	HS-SB-4312	HS-SB-4312
Sample Name		HS-SB-4206 (10-11)	HS-SB-4206 (7-8)	HS-SB-4210 (10-11)	HS-SB-4210 (7-8)	HS-SB-4300 (6-7)	HS-SB-4300 (8-9)	HS-SB-4303 (5-6)	HS-SB-4303 (7-8)	HS-SB-4307 (5-6)	HS-SB-4307 (5-6) DUP	HS-SB-4307 (8-9)	HS-SB-4310 (5-6)	HS-SB-4310 (8-9)	HS-SB-4311 (5-6)	HS-SB-4311 (8-9)	HS-SB-4312 (2-3)	HS-SB-4312 (5-6)
Depth Interval (Feet below ground surface)		10 - 11	7 - 8	10 - 11	7 - 8	6 - 7	8 - 9	5 - 6	7 - 8	5 - 6	5 - 6	8 - 9	5 - 6	8 - 9	5 - 6	8 - 9	2 - 3	5 - 6
Laboratory Sample ID		UG20001-009	UG20001-008	UG20001-021	UG20001-020	UG20001-022	UG20001-023	UG20001-024	UG20001-025	UG20001-028	UG20001-029	UG20001-030	UG20001-033	UG20001-034	UG20001-035	UG20001-036	UG20001-031	UG20001-032
Sample Date		07/17/2019	07/17/2019	07/18/2019	07/18/2019	07/18/2019	07/18/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019	07/19/2019
Parameter (µg/L)																		
Chromium	5,000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100

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

Sample Location	RCRA Maximum Concentration	HS-SB-4313	HS-SB-4313	HS-SB-4407
Sample Name		HS-SB-4313 (10-11)	HS-SB-4313 (7-8)	HS-SB-4407 (6-7)
Depth Interval (Feet below ground surface)		10 - 11	7 - 8	6 - 7
Laboratory Sample ID		UG20001-027	UG20001-026	UG24104-001
Sample Date		07/19/2019	07/19/2019	07/23/2019
Parameter (µg/L)				
Chromium	5,000	<100	<100	1,600

TABLE 1F NOTES
1855 House Street NE
Plainfield Township, Kent County, MI

NOTES:

1. Concentration and criteria units are micrograms per Liter (µg/L) or parts per billion (ppb).
2. RCRA Maximum Concentration criteria are based on "Table 1, Maximum Concentration of Contaminants for the Toxicity Characteristic," 40 CFR 261.24, last amended March 13, 2002.
3. Bold, italic number with thick line border or italic parameter name indicates that parameter was detected above the RCRA Maximum Concentration.
4. Abbreviations include:
   "< RL" indicates the parameter was analyzed for but not detected above the method detection limit; RL = Reporting Limit.
   "DUP" indicates a duplicate sample.

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2116
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)	Equipment Installed
	C-1	0-5	60	55	0-1	NR	C-1:	1	TOPSOIL 0.1	No Equipment Installed
	S-1	0-1				0.8	S-1: 0-0.1': Brown, TOPSOIL, moist.			
1							0.1-1': Brown, fine to medium SAND, little Silt, rock			
	S-2	1-2				0.4	fragments, moist.	2		
							S-2: Brown, fine to medium SAND, trace Silt, moist.		SAND	
2										
	S-3	2-3				0.4	S-3: Brown, fine to medium SAND, trace Silt, moist.	3		
3									3	
	S-4	3-4			3-4	0.6	S-4: Brown, CLAY, trace Sand, moist.			
4										
	S-5	4-5				0.7	S-5: Brown, CLAY, trace Sand, moist.		CLAY	
5										
	C-2	5-10	60	48		NR	C-2:		5.4	
	S-6	5-6				0.8	S-6: 5-5.4': Brown, CLAY, trace Sand, moist.			
6							5.4-6': Light brown, fine to medium SAND, trace Silt, moist.			
	S-7	6-7				0.7	S-7: Light brown, fine to medium SAND, trace Silt, moist.			
7										
	S-8	7-8				0.9	S-8: Light brown, fine to medium SAND, trace Silt, moist.			
8										
	S-9	8-9				0.8	S-9: Light brown, fine to medium SAND, trace Silt, moist.			
9										
	S-10	9-10				N/A	S-10: Light brown, fine to medium SAND, trace Silt, moist.			
10									SAND	
	C-3	10-15	60	43		NR	C-3:			
	S-11	10-11				0.9	S-11: Light brown, fine to medium SAND, trace Silt, moist.			
11										
	S-12	11-12				1.7	S-12: Light brown, fine to medium SAND, trace Silt, moist.			
12										
	S-13	12-13				1.1	S-13: Light brown, fine to medium SAND, trace Silt, moist.			
13										
	S-14	13-14				0.7	S-14: Light brown, fine to medium SAND, trace Silt, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2116

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2116
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	43		NR	C-4:			
	S-16	15-16				0.8	S-16: Light brown, fine to medium SAND, trace Silt, moist.			
16	S-17	16-17				0.8	S-17: Light brown, fine to medium SAND, trace Silt, moist.			
17	S-18	17-18				0.6	S-18: Light brown, fine to medium SAND, trace Silt, moist.		SAND	
18	S-19	18-19				0.7	S-19: Light brown, fine to medium SAND, trace Silt, moist.			
19	S-20	19-20				N/A	S-20: No recovery.			
20										20
							End of exploration at 20 feet.			
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2116

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2117** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/24/2019 **Finish Date:** 6/24/2019 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	48	0-1	NR	C-1:	1		
	S-1	0-1				0.5	S-1: 0-0.7': Brown, TOPSOIL, moist.		TOPSOIL 0.7	
1	S-2	1-2				0.1	0.7-1': Brown, fine to medium SAND, little Silt, moist, organics present. S-2: Brown, fine to medium SAND, little Silt, moist.	2		No Equipment Installed
2	S-3	2-3			2-3	0.0	S-3: Brown, fine to medium SAND, little Silt, moist.	3		
3	S-4	3-4				0.0	S-4: Brown, fine to medium SAND, little Silt, moist.			
4	S-5	4-5				N/A	S-5: No recovery.			
5	C-2	5-10	60	46		NR	C-2:			
	S-6	5-6				0.3	S-6: Light brown, fine to medium SAND, trace Silt, lenses of Clay, moist.			
6	S-7	6-7				0.0	S-7: Light brown, fine to medium SAND, trace Silt, lenses of Clay, moist.			
7	S-8	7-8				0.0	S-8: Light brown, fine to medium SAND, trace Silt, moist.		SAND	
8	S-9	8-9				0.0	S-9: Light brown, fine to medium SAND, trace Silt, moist.			
9	S-10	9-10				N/A	S-10: No recovery.			
10	C-3	10-15	60	39		NR	C-3:			
	S-11	10-11				0.7	S-11: Light brown, fine to medium SAND, trace Silt, moist.			
11	S-12	11-12				0.0	S-12: Light brown, fine to medium SAND, trace Silt, moist.			
12	S-13	12-13				0.3	S-13: Light brown, fine to medium SAND, trace Silt, moist.			
13	S-14	13-14				0.0	S-14: Light brown, fine to medium SAND, trace Silt, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2117

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2117** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	43		NR	C-4:			
	S-16	15-16				0.0	S-16: 15-15.2': Brown, fine to medium SAND, trace Silt, moist.			
16	S-17	16-17				0.0	15.2-16': Light brown, fine to medium SAND, trace Silt, moist.			
17							S-17: Light brown, fine to medium SAND, trace Silt, moist.		SAND	
	S-18	17-18				0.2	S-18: Light brown, fine to medium SAND, trace Silt, moist.			
18	S-19	18-19				0.3	S-19: Light brown, fine to medium SAND, trace Silt, moist.			
19	S-20	19-20				N/A	S-20: No recovery.			
20										20
							End of exploration at 20 feet.			
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2117

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2118** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/24/2019 **Finish Date:** 6/24/2019 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60		0-1	NR	C-1:	1			
	S-1	0-1				0.0	S-1: 0-0.7': Dark brown, TOPSOIL, moist.		TOPSOIL	0.6	
1							0.7-1': Light brown, fine to medium SAND, trace Silt, moist,				
	S-2	1-2				0.1	organics present.	2			No Equipment Installed
							S-2: Light brown, fine to medium SAND, trace Silt, moist,				
2							organics present.				
	S-3	2-3				0.1	S-3: Light brown, fine to medium SAND, trace Silt, moist,	3	SAND		
							organics present.				
3					3-4						
	S-4	3-4				0.1	S-4: 3-3.8': Light brown, fine to medium SAND, trace Silt,				
							Clay lenses, moist, organics present.			3.7	
4							3.8-4': Brown, CLAY, trace fine Sand, moist.				
	S-5	4-5				N/A	S-5: No recovery.		CLAY		
5										5	
	C-2	5-10	60	47		NR	C-2:				
	S-6	5-6				0.0	S-6: 5-5.9': Light brown, fine to medium SAND, trace Silt,				
6							moist.				
	S-7	6-7				0.3	5.9-6': Brown, fine to medium SAND, little Silt, moist.				
							S-7: Brown, fine to medium SAND, little Silt, moist, rock at				
7							6.9'.				
	S-8	7-8				0.2	S-8: Brown, fine to medium SAND, little Silt, moist.				
8											
	S-9	8-9				0.0	S-9: 8-8.4': Brown, fine to medium SAND, little Silt, moist.				
							8.4-9': Light brown, fine to medium SAND, trace Silt, moist.				
9											
	S-10	9-10				N/A	S-10: No recovery.				
10									SAND		
	C-3	10-15	60	44		NR	C-3:				
	S-11	10-11				0.0	S-11: Brown, fine to medium SAND, little Silt, moist.				
11											
	S-12	11-12				0.1	S-12: Brown, fine to medium SAND, little Silt, moist.				
12											
	S-13	12-13				0.1	S-13: Brown, fine to medium SAND, little Silt, moist.				
13											
	S-14	13-14				0.1	S-14: Brown, fine to medium SAND, little Silt, moist.				
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was measured at 0.0 ppmv.
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2118

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2118
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	40		NR	C-4:			
	S-16	15-16				0.0	S-16: Brown, fine to medium SAND, little Silt, moist.		SAND	
16	S-17	16-17				0.1	S-17: Brown, fine to medium SAND, little Silt, moist.			
17	S-18	17-18				0.1	S-18: 17-17.5': Brown, fine to medium SAND, little Silt, moist.			17.5
18							17.5-18': Brown, CLAY, trace fine Sand, moist.		CLAY	18
	S-19	18-19				0.0	S-19: Brown, fine to medium SAND, little Silt, Clay lenses, moist.			
19	S-20	19-20				N/A	S-20: No recovery.		SAND	
20							End of exploration at 20 feet.			20
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2118

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2119** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/24/2019 **Finish Date:** 6/24/2019 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60		0-1	NR	C-1:	1		
	S-1	0-1				0.1	S-1: 0-0.8': Dark brown, TOPSOIL, moist.		TOPSOIL 0.8	
1							0.8-1': Brown, fine to medium SAND, little Clay, moist,			
	S-2	1-2				0.0	organics present.	2		No Equipment Installed
							S-2: Light brown, fine to medium SAND, trace Silt, moist.			
2									SAND	
	S-3	2-3				0.0	S-3: 2-2.4': Light brown, fine to medium SAND, trace Silt,	3		
							moist.			
3					3-4		2.4-3': Light brown, fine to medium SAND, trace Silt, moist,		3	
	S-4	3-4				0.0	organics present.			
							S-4: Brown, CLAY, trace fine Sand, rock fragments, moist.			
4										
	S-5	4-5				0.1	S-5: Brown, CLAY, trace fine Sand, rock fragments, moist.		CLAY	
5										
	C-2	5-10	60	41		NR	C-2:			
	S-6	5-6				0.1	S-6: 5-5.9': Brown, CLAY, trace fine Sand, moist.			
6							5.9-6': Light brown, fine to medium SAND, trace Clay, moist.		5.9	
	S-7	6-7				0.0	S-7: Light brown, fine to medium SAND, trace Clay, moist.			
7										
	S-8	7-8				0.0	S-8: Light brown, fine to medium SAND, trace Clay, moist.			
8										
	S-9	8-9				0.0	S-9: Light brown, fine to medium SAND, trace Clay, moist.			
9										
	S-10	9-10				N/A	S-10: No recovery.			
10									SAND	
	C-3	10-15	60	41		NR	C-3:			
	S-11	10-11				0.1	S-11: Light brown, fine to medium SAND, trace Clay, moist.			
11										
	S-12	11-12				0.1	S-12: Light brown, fine to medium SAND, trace Clay, Clay			
							lenses, moist.			
12										
	S-13	12-13				0.4	S-13: Light brown, fine to medium SAND, trace Clay, Clay			
							lenses, moist.			
13										
	S-14	13-14				0.1	S-14: Light brown, fine to medium SAND, trace Clay, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv. Background was measured at 0.0 ppmv.
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2119

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2119
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	50		NR	C-4:			
	S-16	15-16				0.0	S-16: Light brown, fine to medium SAND, moist.			
16									SAND	
	S-17	16-17				0.0	S-17: Light brown, fine to medium SAND, moist.			
17										
	S-18	17-18				0.0	S-18: 17-17.7': Light brown, fine to medium SAND, moist.			
							17.7-18': Brown, CLAY, moist.			17.7
18	S-19	18-19				0.0	S-19: Brown, CLAY, moist.			
19									CLAY	
	S-20	19-20				0.0	S-20: Brown, CLAY, moist.			
20										20
							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

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2119

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2120
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/25/2019
Finish Date: 6/25/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	54		NR	C-1:	1			
	S-1	0-1				1.9	S-1: 0-0.8': Dark brown, TOPSOIL, moist.		TOPSOIL	0.8	
1					1-2		0.8-1': Brown, fine to medium SAND, little Clay, moist.				
	S-2	1-2				1.8	S-2: 1-1.4': Brown, fine to medium SAND, little Clay, moist.	2			No Equipment Installed
2							1.4-2': Light brown, fine to medium SAND, moist.				
	S-3	2-3				1.0	S-3: Light brown, fine to medium SAND, moist.	3			
3									SAND		
	S-4	3-4				0.6	S-4: Light brown, fine to medium SAND, moist.				
4					4-5						
	S-5	4-5				0.4	S-5: 4-4.2': Light brown, fine to medium SAND, moist.			4.2	
							4.2-4.4': Brown, CLAY, moist.		CLAY	4.4	
5							4.4-5': Light brown, fine to medium SAND, moist.		SAND		
	C-2	5-10	60	41		NR	C-2:			5.3	
	S-6	5-6				1.4	S-6: 5-5.3': Light brown, fine to medium SAND, moist.				
6							5.3-6': Brown, CLAY, moist		CLAY		
	S-7	6-7				0.5	S-7: 6-6.4': Brown, CLAY, moist.			6.4	
							6.4-7': Light brown, fine to medium SAND, moist.				
7	S-8	7-8				1.2	S-8: Light brown, fine to medium SAND, moist.				
8	S-9	8-9				1.7	S-9: Light brown, fine to medium SAND, moist.				
9	S-10	9-10				N/A	S-10: No recovery.				
10	C-3	10-15	60	43		NR	C-3:		SAND		
	S-11	10-11				1.1	S-11: Light brown, fine to medium SAND, moist.				
11	S-12	11-12				1.5	S-12: Light brown, fine to medium SAND, Clay lenses, moist.				
12	S-13	12-13				0.7	S-13: Light brown, fine to medium SAND, moist.				
13	S-14	13-14				0.8	S-14: Light brown, fine to medium SAND, moist.				
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2120

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2120** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/25/2019 **Finish Date:** 6/25/2019 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	58		NR	C-4:		SAND	
	S-16	15-16				1.1	S-16: Light brown, fine to medium SAND, moist.			
16	S-17	16-17				1.1	S-17: 16-16.1': Light brown, fine to medium SAND, Clay lenses, moist.			16.5
17							16.1-17': Brown, CLAY, moist.			
	S-18	17-18				1.1	S-18: Brown, CLAY, moist.			
18	S-19	18-19				1.4	S-19: Brown, CLAY, moist.		CLAY	
19	S-20	19-20				1.0	S-20: Brown, CLAY, moist.			
20										20
							End of exploration at 20 feet.			
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:

B91621870

REMARKS

Logger Initials:

Sean Stevenson

Boring No.:

HS-SB-2120

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2121** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/25/2019 **Finish Date:** 6/25/2019 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	40		NR	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				0.2	S-1: 0-0.4': Dark brown, TOPSOIL, moist.			
1							0.4-1': Dark brown, fine to medium SAND, little Clay, moist.			
	S-2	1-2				0.0	S-2: 1-1.4': Dark brown, fine to medium SAND, little Clay, moist.	2		No Equipment Installed
2							1.4-1.7': Brown, fine to medium SAND, moist.			
	S-3	2-3				0.3	1.7-2': Dark brown, fine to medium SAND, moist.	3		
							S-3: 2-2.2': Dark brown, fine to medium SAND, moist.			
3	S-4	3-4				0.1	2.2-3': Light brown, fine to medium SAND, moist. S-4: 3-3.3': Light brown, fine to medium SAND, moist.		SAND	
4	S-5	4-5				N/A	S-5: No recovery.			
5	C-2	5-10	60	47		NR	C-2:		5.4	
	S-6	5-6				0.1	S-6: 5-5.4': Light brown, fine SAND, moist.			
6							5.4-6': Brown, CLAY, moist.		CLAY	
	S-7	6-7				0.1	S-7: 6-6.6': Brown, CLAY, moist.			
							6.6-7': Light brown, fine to medium SAND, moist.		6.6	
7	S-8	7-8				0.5	S-8: Light brown, fine to medium SAND, moist.			
8	S-9	8-9				0.1	S-9: Light brown, fine to medium SAND, moist.			
9	S-10	9-10				N/A	S-10: No recovery.			
10	C-3	10-15	60	43		NR	C-3:		SAND	
	S-11	10-11				0.5	S-11: Light brown, fine to medium SAND, moist.			
11	S-12	11-12				0.3	S-12: Light brown, fine to medium SAND, moist.			
12	S-13	12-13				0.6	S-13: Light brown, fine to medium SAND, moist.			
13	S-14	13-14				0.4	S-14: Light brown, fine to medium SAND, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2121

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2121
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/25/2019
Finish Date: 6/25/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

Offset of Boring From Original Location:
NA

Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	55		NR	C-4:			
	S-16	15-16				0.4	S-16: Light brown, fine to medium SAND, moist.			
16	S-17	16-17				0.3	S-17: Light brown, fine to medium SAND, moist.		SAND	
17	S-18	17-18				0.0	S-18: 17-17.6': Light brown, fine to medium SAND, moist. 17.6-18': Light brown, fine to medium SAND, wet.			
18	S-19	18-19				0.2	S-19: 18-18.1': Light brown, fine to medium SAND, wet. 18.1-19': Brown, CLAY, moist.			18.1
19	S-20	19-20				0.2	S-20: 19-20': Brown, CLAY, moist.		CLAY	
20							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

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2121

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2122
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/25/2019
Finish Date: 6/25/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	37		NR	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				0.0	S-1: 0-0.4': Dark brown, TOPSOIL, moist.			
1							0.4-1': Brown, fine to medium SAND, moist.			
	S-2	1-2				0.1	S-2: 1-1.5': Brown, fine to medium SAND, moist.	2		No Equipment Installed
							1.5-2': Dark brown, fine to medium SAND, moist.			
2	S-3	2-3				0.1	S-3: Dark brown, fine to medium SAND, moist.	3		
3	S-4	3-4				0.3	S-4: Dark brown, fine to medium SAND, moist.		SAND	
4	S-5	4-5				N/A	S-5: No recovery.			
5	C-2	5-10	60	56		NR	C-2:			
	S-6	5-6				0.4	S-6: Light brown, fine to medium SAND, moist.			
6									6	
	S-7	6-7				0.5	S-7: Brown, CLAY, moist.			
7	S-8	7-8				0.0	S-8: Brown, CLAY, moist.		CLAY	
8	S-9	8-9				0.2	S-9: Brown, CLAY, moist.			
9									9.1	
	S-10	9-10				0.2	S-10: 9-9.1': Brown, CLAY, moist.			
							9.1-10': Light brown, fine to medium SAND, moist.			
10	C-3	10-15	60	40		NR	C-3:			
	S-11	10-11				0.1	S-11: Light brown, fine to medium SAND, moist.			
11	S-12	11-12				0.5	S-12: Light brown, fine to medium SAND, moist.		SAND	
12	S-13	12-13				1.0	S-13: Light brown, fine to medium SAND, moist.			
13	S-14	13-14				0.9	S-14: Light brown, fine to medium SAND, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2122

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2122** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/25/2019
Finish Date: 6/25/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	47		NR	C-4:			
	S-16	15-16				0.3	S-16: Light brown, fine to medium SAND, moist.		SAND	
16	S-17	16-17				0.6	S-17: Light brown, fine to medium SAND, moist.			
17	S-18	17-18				0.5	S-18: 17-17.2': Light brown, fine to medium SAND, moist.			17.2
							17.2-18': Brown, CLAY, moist.			
18	S-19	18-19				0.5	S-19: Brown, CLAY, moist.		CLAY	
										18.8
19	S-20	19-20				N/A	S-20: No recovery.		SAND	
20							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

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2122

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2123** **SHEET: 1 of 1** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/25/2019 **Finish Date:** 6/25/2019 **Final Depth (ft.):** 6.9	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: NA **Rig Model:** NA **Drilling Method:** Hand Auger	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
0	S-1	0-1				0.5	S-1: 0-0.4': Dark brown, TOPSOIL, moist. 0.4-1': Brown, fine to medium SAND, little Clay, moist, roots present.	1	TOPSOIL	0.4	No Equipment Installed
1	S-2	1-2				0.5	S-2: 1-1.5': Light brown, fine to medium SAND, moist. 1.5-2': Light brown, fine to medium SAND, moist, roots present.	2			
2	S-3	2-3				0.5	S-3: Light brown, fine to medium SAND, moist, roots present.	3			
3	S-4	3-4				0.8	S-4: 3-3.5': Light brown, fine to medium SAND, moist, roots present. 3.5-4': Brown, fine to medium SAND, rock fragments, moist, roots present.		SAND		
4	S-5	4-5				0.5	S-5: 4-4.5': Brown, fine to medium SAND, rock fragments, moist, roots present.				
5	S-6	5-6	NA	NA		0.4	4.5-5': Brown, fine to medium SAND, moist. S-6: Brown, fine to medium SAND, plastic fragments, moist.				
6	S-7	6-6.5				1.7	S-7: Brown, fine to medium SAND, fill material, moist.				
7	S-8	6.5-6.9				2.7	S-8: Brown, fine to medium SAND, fill material, moist, leather fragments present.			6.9	
8							End of exploration at 6.9 feet.				
9											
10											
11											
12											
13											
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2123

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2125** **SHEET: 1 of 3** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** G. Geerligs / T. Ulrich	**Start Date:** 6/25/2019 **Finish Date:** 6/27/2019 **Final Depth (ft.):** 40	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	40		NR	C-1:	1			
	S-1	0-1				0.5	S-1: 0-0.6': Dark brown, TOPSOIL, moist, roots present.		TOPSOIL	0.6	
1					1-2		0.6-1': Brown, CLAY, trace fine to coarse Sand, moist.				
	S-2	1-2				0.6	S-2: 1-1.3': Brown, CLAY, trace fine to coarse Sand, moist.	2	CLAY	1.3	No Equipment Installed
							1.3-2': Brown, fine to coarse SAND, wood fragments, moist.				
2	S-3	2-3				0.4	S-3: Brown to light brown, fine to medium SAND, moist.	3			
3	S-4	3-4				0.3	S-4: Light brown, fine to medium SAND, moist, roots present.				
4									SAND		
	S-5	4-5				N/A	S-5: No recovery.				
5	C-2	5-10	60	49		NR	C-2:				
	S-6	5-6				0.5	S-6: Light brown, fine to medium SAND, moist, roots present.				
6	S-7	6-7				0.3	S-7: 6-6.3': Light brown, fine to medium SAND, moist, roots present.			6.3	
									CLAY	6.7	
7					7-8		6.3-6.7': Brown, CLAY, moist, roots present.				
	S-8	7-8				0.7	6.7-6.8': Brown, fine to medium SAND, some Clay, moist.				
							6.8-7': Brown to light brown, fine to medium SAND, moist.				
8							S-8: Brown to light brown, fine to medium SAND, moist.				
	S-9	8-9				0.6	S-9: Brown to light brown, fine to medium SAND, moist.				
9	S-10	9-10				1.2	S-10: Brown to light brown, fine to medium SAND, moist.				
10									SAND		
	C-3	10-15	60	60		NR	C-3:				
	S-11	10-11				0.7	S-11: Brown to light brown, fine to medium SAND, moist.				
11	S-12	11-12				0.8	S-12: Brown to light brown, fine to medium SAND, moist.				
12	S-13	12-13				0.7	S-13: 12-12.4': Brown to light brown, fine to medium SAND, moist.			12.4	
13							12.4-13': Brown, CLAY, moist.				
	S-14	13-14				0.3	S-14: Brown, CLAY, moist.		CLAY		
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2125

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2125
SHEET: 2 of 3
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/25/2019
Finish Date: 6/27/2019
Final Depth (ft.): 40

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-15	14-15				0.6	S-15: Brown, CLAY, moist.		CLAY	
15										15
	C-4	15-20	60	46		NR	C-4:		SAND	15.5
	S-16	15-16				1.1	S-16: 15-15.5': Brown to light brown, fine to medium SAND, moist.			
16	S-17	16-17				1.1	15.5-16': Brown, CLAY, moist.		CLAY	16.4
							S-17: 16-16.5': Brown, CLAY, moist.			
17							16.5-17': Light brown, fine to medium SAND, moist.			
	S-18	17-18				0.8	S-18: Light brown, fine to medium SAND, moist.			
18	S-19	18-19				1.4	S-19: Light brown, fine to medium SAND, moist.			
19	S-20	19-20				N/A	S-20: No recovery.			
20	C-5	20-25	60	40		NR	C-5:			
	S-21	20-21				1.9	S-21: 20-20.8': Light brown, fine to medium SAND, trace Silt, moist.			
21	S-22	21-22				1.5	20.8-21': Brown, fine to medium SAND, trace Silt, moist.			
							S-22: Brown, fine to medium SAND, trace Silt, moist.			
22	S-23	22-23				0.1	S-23: 22-22.7': Brown, fine to medium SAND, trace Silt, moist.		SAND	
23							22.7-23': Light brown, fine to medium SAND, trace Silt,			
	S-24	23-24				1.8	moist.			
							S-24: Light brown, fine to medium SAND, trace Silt, moist.			
24	S-25	24-25				N/A	S-25: No recovery.			
25	C-6	25-30	60	35	25-27	NR	C-6:			
	S-26	25-26				1.8	S-26: Light brown, fine to medium SAND, trace Silt, moist.			
26	S-27	26-27				1.5	S-27: Light brown, fine to medium SAND, trace Silt, moist.			
27	S-28	27-28				1.3	S-28: Light brown, fine to medium SAND, trace Silt, moist.			
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2125

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2125** **SHEET: 3 of 3** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** G. Geerligs / T. Ulrich	**Start Date:** 6/25/2019 **Finish Date:** 6/27/2019 **Final Depth (ft.):** 40	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-29	28-29				N/A	S-29: No recovery.			
29	S-30	29-30				N/A	S-30: No recovery.			
30	C-7	30-35	60	40	30-32	NR	C-7:			
	S-31	30-31				2.7	S-31: Light brown, fine to medium SAND, trace Silt, moist.			
31	S-32	31-32				1.6	S-32: Light brown, fine to medium SAND, trace Silt, moist.			
32	S-33	32-33				2.7	S-33: Light brown, fine to medium SAND, trace Silt, moist.			
33	S-34	33-34				0.8	S-34: Light brown, fine to medium SAND, trace Silt, moist.			
34	S-35	34-35				N/A	S-35: No recovery.		SAND	
35	C-8	35-40	60	45		NR	C-8:			
	S-36	35-36				2.0	S-36: Light brown, fine to medium SAND, trace Silt, moist.			
36	S-37	36-37				1.2	S-37: Light brown, fine to medium SAND, trace Silt, moist.			
37	S-38	37-38				2.3	S-38: Light brown, fine to medium SAND, little Silt, moist.			
38	S-39	38-39				1.9	S-39: Light brown, fine to medium SAND, little Silt, moist.			
39	S-40	39-40				N/A	S-40: No recovery.			
40							End of exploration at 40 feet.			40
41										
42										

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

MISSDIG Ticket Number:

B91621870

REMARKS

Logger Initials:

Sean Stevenson

Boring No.:

HS-SB-2125

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2126** **SHEET: 1 of 3** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** G. Geerligs / T. Ulrich	**Start Date:** 6/24/2019 **Finish Date:** 6/26/2019 **Final Depth (ft.):** 40	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 7822 DT V3 **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	30		NR	C-1:	1	TOPSOIL	0.3	
	S-1	0-1				1.2	S-1: 0-0.3': Dark brown, TOPSOIL, moist.				
1							0.3-0.8': Dark brown, fine to medium SAND, trace Gravel,				
	S-2	1-2				0.5	moist.	2	SAND		No Equipment Installed
							0.8-1': Dark brown to brown, fine to medium SAND, moist.				
2					2-3		S-2: 1-1.5': Light brown, fine to medium SAND, trace				
	S-3	2-3				0.7	Gravel, moist.	3		2.2	
							1.5-2': Dark brown, fine to medium SAND and CLAY, moist.				
3							S-3: 2-2.2': Light brown, fine to medium SAND, moist.				
	S-4	3-4				N/A	2.2-3': Brown, SILT & CLAY, moist.				
							S-4: No recovery.		CLAY		
4											
	S-5	4-5				N/A	S-5: No recovery.				
5										5	
	C-2	5-10	60	52		NR	C-2:		SAND	5.5	
	S-6	5-6				0.7	S-6: 5-5.5': Brown, fine to medium SAND, moist.				
6							5.5-6': Brown, SILT & CLAY, moist.		CLAY		
	S-7	6-7				2.0	S-7: 6-6.3': Brown, SILT & CLAY, moist.			6.3	
							6.3-7': Brown, fine to medium SAND, moist.				
7											
	S-8	7-8				0.4	S-8: Brown, fine to medium SAND, moist.				
8					8-9						
	S-9	8-9				0.6	S-9: Brown, fine to medium SAND, moist.				
9											
	S-10	9-10				0.6	S-10: 9-9.3': Brown, fine to medium SAND, moist.		SAND		
							9.3-10': Light brown, fine to medium SAND, moist.				
10											
	C-3	10-15	60	60		NR	C-3:				
	S-11	10-11				0.7	S-11: 10-10.2': Light brown, fine to medium SAND, moist.				
11							10.2'-10.3': Dark brown, fine to medium SAND, moist, roots				
	S-12	11-12				0.6	present.				
							10.3-11': Light brown to brown, fine to medium SAND,			11.8	
12							moist.				
	S-13	12-13				0.1	S-12: 11-11.8': Light brown to brown, fine to medium SAND,				
							moist.				
13							11.8-12': Brown, SILT & CLAY, moist.		CLAY		
	S-14	13-14				0.2	S-13: Brown, SILT & CLAY, moist.				
							S-14: Brown, SILT & CLAY, moist.				
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2126

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2126
SHEET: 2 of 3
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/24/2019
Finish Date: 6/26/2019
Final Depth (ft.): 40

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-15	14-15				0.5	S-15: Brown, SILT & CLAY, moist.		CLAY	
15										15
	C-4	15-20	60	38		NR	C-4:		SAND	15.2
	S-16	15-16				0.8	S-16: 15-15.2': Brown, fine to medium SAND, moist.			15.3
16							15.2-15.3': Brown, CLAY, moist.		CLAY	
	S-17	16-17				0.8	15.3-16': Light brown, fine to medium SAND, moist.		SAND	
							S-17: 16-16.5': Light brown, fine to medium SAND, moist.			16.5
17							16.5-17': Brown, CLAY, moist.		CLAY	17
	S-18	17-18				0.9	S-18: Light brown, fine to medium SAND, moist.			
18										
	S-19	18-19				1.0	S-19: Light brown, fine to medium SAND, moist.			
19										
	S-20	19-20				N/A	S-20: No recovery.			
20										
	C-5	20-25	60	30		NR	C-5:			
	S-21	20-21				0.6	S-21: Light brown, fine to medium SAND, moist.			
21										
	S-22	21-22				0.6	S-22: Light brown, fine to medium SAND, moist.			
22										
	S-23	22-23				0.4	S-23: Light brown, fine to medium SAND, moist.			
									SAND	
23										
	S-24	23-24				N/A	S-24: No recovery.			
24										
	S-25	24-25				N/A	S-25: No recovery.			
25										
	C-6	25-30	60	36	25-27	NR	C-6:			
	S-26	25-26				0.8	S-26: Light brown, fine to medium SAND, moist.			
26										
	S-27	26-27				0.8	S-27: Light brown, fine to medium SAND, moist.			
27										
	S-28	27-28				0.2	S-28: Light brown, fine to medium SAND, moist.			
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2126

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2126
SHEET: 3 of 3
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/24/2019
Finish Date: 6/26/2019
Final Depth (ft.): 40

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-29	28-29				N/A	S-29: No recovery.			
29	S-30	29-30				N/A	S-30: No recovery.			
30	C-7	30-35	60	48		NR	C-7:			
	S-31	30-31				0.5	S-31: Light brown, fine to medium SAND, moist.			
31	S-32	31-32			31-33	0.5	S-32: Light brown, fine to medium SAND, moist.			
32	S-33	32-33				0.4	S-33: Light brown, fine to medium SAND, moist.			
33	S-34	33-34				0.7	S-34: 32-32.3': Light brown, fine to medium SAND, moist. 32.3-33': Light brown, fine SAND, trace Silt, moist.			
34	S-35	34-35				N/A	S-35: No recovery.		SAND	
35	C-8	35-40	60	45		NR	C-8:			
	S-36	35-36				0.3	S-36: Light brown, fine SAND, trace Silt, moist.			
36	S-37	36-37				0.1	S-37: Light brown, fine SAND, trace Silt, moist.			
37	S-38	37-38			37-39	0.2	S-38: Light brown, fine SAND, trace Silt, moist.			
38	S-39	38-39				0.5	S-39: 38-38.8': Light brown, fine SAND, trace Silt, moist. 38.8-39': No recovery.			
39	S-40	39-40				N/A	S-40: No recovery.			
40							End of exploration at 40 feet.			40
41										
42										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2126

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2127
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83
Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	40		NR	C-1:	1	TOPSOIL 0.5	
	S-1	0-1				0.7	S-1: 0-0.5': Dark brown, TOPSOIL, moist.			
1							0.5-1': Dark brown, fine to medium SAND, moist.			
	S-2	1-2				0.6	S-2: 1-1.8': Brown, fine to medium SAND, moist.	2	SAND	
							1.8-2': Brown, SILT & CLAY, some fine to medium Sand,		1.8	
2							moist.			
	S-3	2-3				0.3	S-3: 2-2.3': Brown, SILT & CLAY, some fine to medium	3	CLAY	Sand 0-4'
							Sand, moist.			
3					3-4		2.3-3': Brown, SILT & CLAY, moist.		3	
	S-4	3-4				0.1	S-4: Brown, fine to medium SAND, moist.			
4										
	S-5	4-5				N/A	S-5: No recovery.			
5										
	C-2	5-10	60	46		NR	C-2:			
	S-6	5-6				0.6	S-6: Brown to light brown, fine to medium SAND, moist.			
6										
	S-7	6-7				0.7	S-7: Brown to light brown, fine to medium SAND, moist,			
							roots present.			
7										
	S-8	7-8				0.3	S-8: Brown to light brown, fine to medium SAND, moist.			
8					8-9					
	S-9	8-9				0.6	S-9: 8-8.8': Brown to light brown, fine to medium SAND,			
							moist.		SAND	Bentonite 4-13
9							8.8-9': No recovery.			
	S-10	9-10				N/A	S-10: No recovery.			
10										1" PVC Riser 0-15'
	C-3	10-15	60	56		NR	C-3:			
	S-11	10-11				1.1	S-11: 10-10.8': Brown, fine to medium SAND, moist.			
11							10.8-11': Light brown, fine to medium SAND, moist.			
	S-12	11-12				0.5	S-12: Light brown, fine to medium SAND, moist.			
12										
	S-13	12-13				0.4	S-13: Light brown, fine to medium SAND, moist.			
13										
	S-14	13-14				0.8	S-14: Brown, fine to medium SAND, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2127

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2127
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

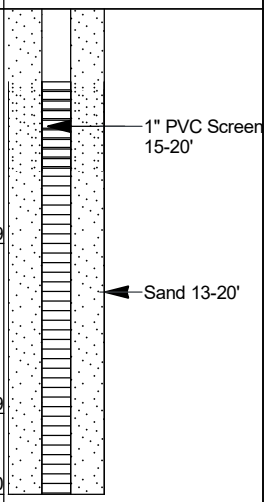
Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

Offset of Boring From Original Location:
NA

Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) / Stratum Description / Depth (ft.)
15	S-15	14-15				1.2	S-15: Brown, fine to medium SAND, moist.		
	C-4	15-20	60	55		NR	C-4:		
	S-16	15-16				0.9	S-16: Brown, fine to medium SAND, wet.		SAND
16	S-17	16-17				0.5	S-17: 16-16.8': Brown, fine to medium SAND, moist.		
							16.8-17': Brown, CLAY, wet.		
17									16.9
	S-18	17-18				0.8	S-18: Brown, CLAY, wet.		
18									CLAY
	S-19	18-19				0.4	S-19: 18-18.7': Brown, CLAY, wet.		
							18.7-19': Brown, CLAY, wet.		
19									19
	S-20	19-20				0.3	S-20: 19-19.3': Light brown, fine to medium SAND, moist.		
							19.3-20': Light brown, fine to coarse SAND, moist.		SAND
20									20
							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

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2127

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2128** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	44		NR	C-1:	1			
	S-1	0-1				0.8	S-1: 0-0.7': Dark brown, TOPSOIL, moist, roots present.		TOPSOIL	0.7	
1							0.7-1': Brown, fine to medium SAND, moist.				
	S-2	1-2				0.3	S-2: 1-1.7': Brown, fine to medium SAND, moist.	2	SAND		No Equipment Installed
							1.7-2': Brown, CLAY, some fine to medium Sand, moist.			1.7	
2					2-3						
	S-3	2-3				0.3	S-3: Brown, CLAY, some fine to medium Sand, moist.	3			
3									CLAY		
	S-4	3-4				0.3	S-4: 3-3.7': Brown, CLAY, moist.				
							3.7-4': No recovery.			3.7	
4											
	S-5	4-5				N/A	S-5: No recovery.				
5									SAND		
	C-2	5-10	60	49		NR	C-2:				
	S-6	5-6				0.9	S-6: Brown, fine to medium SAND, moist.				
6										6	
	S-7	6-7				0.8	S-7: 6-6.1': Brown, CLAY, moist.		CLAY	6.1	
							6.1-7': Light brown, fine to medium SAND, moist.				
7											
	S-8	7-8				0.8	S-8: Light brown, fine to medium SAND, moist.				
8					8-9						
	S-9	8-9				0.8	S-9: Light brown, fine to medium SAND, moist.				
9											
	S-10	9-10				0.9	S-10: Light brown, fine to medium SAND, moist.				
10											
	C-3	10-15	60	60		NR	C-3:		SAND		
	S-11	10-11				0.8	S-11: Light brown, fine to medium SAND, moist.				
11											
	S-12	11-12				0.8	S-12: 11-11.2': Dark brown, fine to medium SAND, moist.				
							11.2-12': Light brown, fine to medium SAND, moist.				
12											
	S-13	12-13				0.4	S-13: Light brown to brown, fine to medium SAND, moist.				
13											
	S-14	13-14				0.9	S-14: Brown, fine to medium SAND, moist.				
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2128

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2128
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: G. Geerligs / T. Ulrich

Start Date: 6/24/2019
Finish Date: 6/24/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

Offset of Boring From Original Location:
NA

Ground Elevation: See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				0.5	S-15: 14-14.6': Brown, fine to medium SAND, moist. 14.6-15': Brown, CLAY, moist.		SAND	14.6
	C-4	15-20	60	41		NR	C-4:			
	S-16	15-16				0.1	S-16: Brown, CLAY, moist.			
16	S-17	16-17				2.2	S-17: Brown, CLAY, moist.		CLAY	
17										17
	S-18	17-18				1.8	S-18: Light brown, fine to medium SAND, moist.			
18	S-19	18-19				1.0	S-19: Brown to light brown, fine to coarse SAND, rock fragment, moist.		SAND	
19	S-20	19-20				N/A	S-20: No recovery.			
20							End of exploration at 20 feet.			20
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2128

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2220
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Alex Chlopik
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/27/2019
Finish Date: 6/27/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	47		NR	C-1:	1	TOPSOIL 0.4	
	S-1	0-1				2.3	S-1: 0-0.4': Dark brown, TOPSOIL, moist.			
1							0.4'-1': Light brown, fine to medium SAND, moist.			
	S-2	1-2				0.1	S-2: Light brown, fine to medium SAND, moist.	2	SAND	No Equipment Installed
2										
	S-3	2-3				1.3	S-3: 2-2.2': Light brown, fine to medium SAND, moist.	3	2.2	
							2.2-3': Brown, CLAY, moist.			
3					3-4					
	S-4	3-4				4.4	S-4: Brown, CLAY, moist.			
4										
	S-5	4-5				N/A	S-5: No recovery.		CLAY	
5										
	C-2	5-10	60	51		NR	C-2:			
	S-6	5-6				1.5	S-6: 5-5.8': Brown, CLAY, moist.		5.8	
6							5.8-6': Light brown, fine to medium SAND, trace Silt, moist.			
	S-7	6-7				1.3	S-7: Light brown, fine to medium SAND, trace Silt, moist.			
7										
	S-8	7-8				1.5	S-8: Light brown, fine to medium SAND, trace Silt, moist.			
8					8-9					
	S-9	8-9				1.4	S-9: Light brown, fine to medium SAND, trace Silt, moist.			
9										
	S-10	9-10				2.2	S-10: Light brown, fine to medium SAND, trace Silt, moist.			
10									SAND	
	C-3	10-15	60	42		NR	C-3:			
	S-11	10-11				1.1	S-11: Brown, fine to medium SAND, trace Silt, moist.			
11										
	S-12	11-12				1.7	S-12: Brown, fine to medium SAND, trace Silt, moist.			
12										
	S-13	12-13				1.4	S-13: Brown, fine to medium SAND, trace Silt, moist.			
13										
	S-14	13-14				1.2	S-14: Brown, fine to medium SAND, trace Silt, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Alex Chlopik

Boring No.:
HS-SB-2220

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2220** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Alex Chlopik
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/27/2019
Finish Date: 6/27/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

Type of Rig: Geoprobe
Rig Model: 7822 DT V3
Drilling Method: Direct Push

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				1.6	S-15: No recovery.			
	C-4	15-20	60	57		NR	C-4:			
	S-16	15-16				1.6	S-16: Brown, fine to medium SAND, trace Silt, moist.		SAND	
16	S-17	16-17				1.4	S-17: Brown, fine to medium SAND, trace Silt, moist.			
17										17
	S-18	17-18				1.4	S-18: Brown, CLAY, trace Silt, moist.			
18	S-19	18-19				1.7	S-19: Brown, CLAY, trace Silt, moist.		CLAY	
19	S-20	19-20				1.8	S-20: Brown, CLAY, trace Silt, moist.			
20										20
							End of exploration at 20 feet.			
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Alex Chlopik

Boring No.:
HS-SB-2220

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2221** **SHEET: 1 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/26/2019
Finish Date: 6/26/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	47	0-1	NR	C-1:	1		
	S-1	0-1				0.2	S-1: 0-0.8': Dark brown, TOPSOIL, moist.		TOPSOIL 0.8	
1							0.8-2': Dark brown, fine to medium SAND, little Silt, moist.			
	S-2	1-2				0.2	S-2: Light brown, fine to medium SAND, moist.	2		No Equipment Installed
2	S-3	2-3				0.0	S-3: Light brown, fine to medium SAND, moist.	3		
3	S-4	3-4				0.0	S-4: Light brown, fine to medium SAND, moist.		SAND	
4	S-5	4-5				N/A	S-5: No recovery.			
5									5.1	
	C-2	5-10	60	47		NR	C-2:			
	S-6	5-6				0.0	S-6: 5-5.1': Light brown, fine to medium SAND, moist.			
6							5.1-6': Brown, CLAY, moist.		CLAY	
	S-7	6-7				0.3	S-7: 6-6.3': Brown, CLAY, moist.		6.3	
							6.3-7': Light brown, fine to medium SAND, moist.			
7	S-8	7-8				0.0	S-8: Light brown, fine to medium SAND, moist.			
8	S-9	8-9			8-9	0.1	S-9: Light brown, fine to medium SAND, Clay lenses, moist.			
9	S-10	9-10				N/A	S-10: No recovery.			
10	C-3	10-15	60	48		NR	C-3:		SAND	
	S-11	10-11				0.0	S-11: Light brown, fine to medium SAND, Clay lenses, moist.			
11	S-12	11-12				0.1	S-12: Light brown, fine to medium SAND, Clay lenses, moist.			
12	S-13	12-13				0.0	S-13: Light brown, fine to medium SAND, Clay lenses, moist.			
13	S-14	13-14				0.6	S-14: Light brown, fine to medium SAND, Clay lenses, moist.			
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2221

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2221
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/26/2019
Finish Date: 6/26/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	57		NR	C-4:			
	S-16	15-16				0.2	S-16: Light brown, fine to medium SAND, moist.		SAND	
16	S-17	16-17				0.1	S-17: Light brown, fine to medium SAND, moist.			
17										17.1
	S-18	17-18				0.0	S-18: 17-17.1': Light brown, fine to medium SAND, moist. 17.1-18': Brown, CLAY, moist.			
18	S-19	18-19				0.2	S-19: Brown, CLAY, moist.		CLAY	
19	S-20	19-20				0.2	S-20: Brown, CLAY, moist.			
20										20
							End of exploration at 20 feet.			
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2221

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2222
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/26/2019
Finish Date: 6/26/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83
Offset of Boring From Original Location:
NA
Ground Elevation: See Survey **V. Datum:** See Survey

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	46		NR	C-1:	1	TOPSOIL	0.5	
	S-1	0-1				1.0	S-1: 0-0.5': Dark brown, TOPSOIL, moist.				
1							0.5-1': Brown, fine to medium SAND, moist.				
	S-2	1-2				0.7	S-2: 1-1.2': Dark brown, fine to medium SAND, some Silt, moist.	2			No Equipment Installed
2							1.2-1.8': Brown, CLAY, moist.				
	S-3	2-3				0.4	1.8-1.9': Dark brown, fine to medium SAND, some Silt, moist.	3			
3	S-4	3-4				0.6	1.9-2': Light brown, fine to medium SAND, moist. S-3: Light brown, fine to medium SAND, moist. S-4: Light brown, fine to medium SAND, moist.		SAND		
4	S-5	4-5				N/A	S-5: No recovery.				
5	C-2	5-10	60	47		NR	C-2:				
	S-6	5-6				1.0	S-6: 5-5.2': Light brown, fine to medium SAND, leather at 5.0', moist.			5.6	
6	S-7	6-7				1.4	5.2-5.7': Brown, CLAY, moist. 5.7-5.9': Rock fragments.		CLAY		
7	S-8	7-8				1.0	5.9-6': Brown, CLAY, moist. S-7: Brown, CLAY, moist. S-8: 7-7.8': Brown, CLAY, moist.			7.8	
8	S-9	8-9				0.4	7.8-8': Light brown, fine to medium SAND, moist. S-9: Light brown, fine to medium SAND, moist.				
9	S-10	9-10				N/A	S-10: No recovery.				
10	C-3	10-15	60	40		NR	C-3:				
	S-11	10-11				0.3	S-11: Light brown, fine to medium SAND, little Silt, trace Clay, moist.		SAND		
11	S-12	11-12				0.9	S-12: Light brown, fine to medium SAND, little Silt, trace Clay, moist.				
12	S-13	12-13				0.5	S-13: Light brown, fine to medium SAND, little Silt, trace Clay, moist.				
13	S-14	13-14				1.2	S-14: Light brown, fine to medium SAND, little Silt, trace Clay, moist.				
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2222

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2222** **SHEET: 2 of 2** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/26/2019 **Finish Date:** 6/26/2019 **Final Depth (ft.):** 20	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	57		NR	C-4:		SAND	
	S-16	15-16				0.7	S-16: 15-16.6': Light brown, fine to medium SAND, moist.			
16							16.6-17': Brown, CLAY, moist.			
	S-17	16-17				0.3	S-17: Brown, CLAY, moist.			16.6
17	S-18	17-18				0.3	S-18: Brown, CLAY, moist.			
18	S-19	18-19				0.6	S-19: Brown, CLAY, moist.		CLAY	
19	S-20	19-20				0.6	S-20: Brown, CLAY, moist.			
20							End of exploration at 20 feet.			20
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:

B91621870

REMARKS

Logger Initials:

Sean Stevenson

Boring No.:

HS-SB-2222

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2223
SHEET: 1 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/26/2019
Finish Date: 6/26/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)	Equipment Installed
	C-1	0-5	60	35		NR	C-1:	1	TOPSOIL	0.5	No Equipment Installed
	S-1	0-1				0.6	S-1: 0-0.5': Dark brown, TOPSOIL, moist.				
1					1-2		0.5-1': Brown, fine to medium SAND, rock fragments, moist.				
	S-2	1-2				0.5	S-2: Brown, fine to medium SAND, moist, roots present.	2			
2	S-3	2-3				0.6	S-3: Brown, fine to medium SAND, moist, roots present.	3			
3	S-4	3-4				N/A	S-4: No recovery		SAND		
4	S-5	4-5				N/A	S-5: No recovery.				
5	C-2	5-10	60	52		NR	C-2:				
	S-6	5-6				1.0	S-6: Light brown, fine to medium SAND, moist.				
6	S-7	6-7				0.5	S-7: 6-6.3': Light brown, fine to medium SAND, moist.			6.3	
							6.3-7': Brown, CLAY, moist.				
7	S-8	7-8				0.9	S-8: Brown, CLAY, moist.		CLAY		
8					8-9						
	S-9	8-9				0.9	S-9: 8-8.7': Brown, CLAY, moist.				
							8.7-9: Light brown, fine to medium SAND, moist.			8.7	
9	S-10	9-10				1.1	S-10: Light brown, fine to medium SAND, moist.				
10	C-3	10-15	60	47		NR	C-3:				
	S-11	10-11				1.1	S-11: Light brown, fine to medium SAND, moist.				
11	S-12	11-12				0.7	S-12: Light brown, fine to medium SAND, moist.		SAND		
12	S-13	12-13				0.9	S-13: Light brown, fine to medium SAND, moist.				
13	S-14	13-14				1.0	S-14: 13-13.3': Light brown, fine to medium SAND, moist.			13.3	
							13.3-14': Brown, CLAY, Sand lenses, moist.		CLAY		
14											

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2223

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA
GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2223
SHEET: 2 of 2
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/26/2019
Finish Date: 6/26/2019
Final Depth (ft.): 20

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
15	S-15	14-15				N/A	S-15: No recovery.			
	C-4	15-20	60	56		NR	C-4:			
	S-16	15-16				0.8	S-16: Brown, CLAY, moist			
16	S-17	16-17				0.8	S-17: Brown, CLAY, moist		CLAY	
17	S-18	17-18				1.0	S-18: Brown, CLAY, moist			
18										18
	S-19	18-19				0.7	S-19: Light brown, fine to medium SAND, moist.			
19	S-20	19-20				0.6	S-20: Light brown, fine to medium SAND, moist.		SAND	
20										20
							End of exploration at 20 feet.			
21										
22										
23										
24										
25										
26										
27										
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2223

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2224** **SHEET: 1 of 3** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/27/2019
Finish Date: 6/28/2019
Final Depth (ft.): 40

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description Depth (ft.)	Equipment Installed
	C-1	0-5	60	44		NR	C-1:	1	TOPSOIL 0.5	No Equipment Installed
	S-1	0-1				0.6	S-1: 0-0.5': Black, TOPSOIL, moist.			
1					1-2		0.5-0.9': Dark brown, fine to medium SAND, little Silt, moist.			
	S-2	1-2				0.8	0.9-1': Light brown, fine to medium SAND, trace Silt, moist.	2		
							S-2: 1-1.3': Dark brown, fine to medium SAND, little Silt, fill, moist.			
2	S-3	2-3				0.6	1.3-2': Brown, fine to medium SAND, little Silt, moist.	3		
							S-3: Brown, fine to medium SAND, little Silt, trace fine Gravel, moist.		SAND	
3	S-4	3-4				1.0	S-4: 3-3.7': Light brown, fine to medium SAND, trace Silt, moist.			
4	S-5	4-5				N/A	3.7-4': No recovery. S-5: No recovery.			
5	C-2	5-10	60	50		NR	C-2:		5.3	
	S-6	5-6				0.7	S-6: 5-5.3': Light brown, fine to medium SAND, trace Silt, moist.			
6					6-7		5.3-6': Brown, CLAY, trace fine Sand, moist.			
	S-7	6-7				0.9	S-7: Brown, CLAY, trace fine Sand, moist.		CLAY	
7	S-8	7-8				0.9	S-8: 7-7.8': Brown, CLAY, trace fine Sand, moist, roots present.			
									7.8	
8							7.8-8': Light brown, fine to medium SAND, trace Silt, moist.			
	S-9	8-9				0.8	S-9: Light brown, fine to medium SAND, trace Silt, moist.			
9	S-10	9-10				0.9	S-10: Light brown, fine to medium SAND, trace Silt, moist.			
10	C-3	10-15	60	53		NR	C-3:		SAND	
	S-11	10-11				0.4	S-11: Light brown, fine to medium SAND, trace Silt, moist.			
11	S-12	11-12				0.6	S-12: Light brown, fine to medium SAND, trace Silt, moist.			
12	S-13	12-13				0.3	S-13: 12-12.6': Light brown, fine to medium SAND, trace Silt, moist.		12.6	
13							12.6-13': Brown, CLAY, trace fine Sand, moist.			
	S-14	13-14				0.8	S-14: Brown, CLAY, trace fine Sand, moist.		CLAY	
14										

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

MISSDIG Ticket Number:
B91621870

REMARKS

1. Field screening of samples for organic vapors was performed with a MiniRAE 3000 photoionization detector equipped with a 10.6 eV lamp. Readings above background levels are shown in parts per million by volume (ppmv) of isobutylene. ND represents <0.1 ppmv
2. Groundwater was not encountered during drilling or upon completion.
3. Borehole was backfilled with Bentonite upon completion.

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2224

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**Wolverine World Wide House Street Rockford, Michigan**	**EXPLORATION NO.: HS-SB-2224** **SHEET: 2 of 3** **PROJECT NO: 16.0062335.52** **REVIEWED BY: BLW**

Logged By: Sean Stevenson **Drilling Co.:** Stearns Drilling **Foreman:** Gary Geerligs	**Start Date:** 6/27/2019 **Finish Date:** 6/28/2019 **Final Depth (ft.):** 40	**BORING COORDINATES (International Feet):** **N** TBD **E** TBD **H. Datum:** MI State Plane S Zone NAD83
Type of Rig: Geoprobe **Rig Model:** 6620 DT **Drilling Method:** Direct Push	**Sampler Type:** Macro Core **Sampler O.D. (in.):** 2.25" **Sampler Length (in.):** 5.0'	**Offset of Boring From Original Location:** NA **Ground Elevation:** See Survey **V. Datum:** See Survey

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-15	14-15				0.5	S-15: Brown, CLAY, trace fine Sand, moist.			
15										
	C-4	15-20	60	58		NR	C-4:			
	S-16	15-16				1.4	S-16: Brown, CLAY, trace fine Sand, moist.			
16									CLAY	
	S-17	16-17				1.9	S-17: Brown, CLAY, trace fine Sand, moist.			
17										
	S-18	17-18				0.9	S-18: 17-17.8': Brown, CLAY, trace fine Sand, moist.			
							17.8-18': Light brown, fine to medium SAND, trace Silt,			17.8
18							moist.			
	S-19	18-19				0.7	S-19: Light brown, fine to medium SAND, trace Silt, moist.			
19										
	S-20	19-20				0.3	S-20: Light brown, fine to medium SAND, trace Silt, moist.			
20										
	C-5	20-25	60	41	20-22	NR	C-5:			
	S-21	20-21				1.1	S-21: Light brown, fine to medium SAND, trace Silt, moist.			
21										
	S-22	21-22				0.6	S-22: Light brown, fine to medium SAND, trace Silt, moist.			
22										
	S-23	22-23				0.8	S-23: Light brown, fine to medium SAND, trace Silt, moist.			
23									SAND	
	S-24	23-24				0.8	S-24: 23-23.7': Light brown, fine to medium SAND, trace			
							Silt, moist.			
24							23.7-24': No recovery.			
	S-25	24-25				N/A	S-25: No recovery.			
25										
	C-6	25-30	60	51		NR	C-6:			
	S-26	25-26				1.2	S-26: Light brown, fine to medium SAND, trace Silt, moist.			
26										
	S-27	26-27				1.4	S-27: Light brown, fine to medium SAND, trace Silt, moist.			
27										
	S-28	27-28				0.8	S-28: Light brown, fine to medium SAND, trace Silt, moist.			
28										

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

MISSDIG Ticket Number:
B91621870

REMARKS

Logger Initials:
Sean Stevenson

Boring No.:
HS-SB-2224

WOLVERINE WORLD WIDE.GPJ; GZA GEOPROBE WITH EQUIP WOLVERINE; 8/8/2019

GEOPROBE LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

Wolverine World Wide
House Street
Rockford, Michigan

EXPLORATION NO.: HS-SB-2224
SHEET: 3 of 3
PROJECT NO: 16.0062335.52
REVIEWED BY: BLW

Logged By: Sean Stevenson
Drilling Co.: Stearns Drilling
Foreman: Gary Geerligs

Start Date: 6/27/2019
Finish Date: 6/28/2019
Final Depth (ft.): 40

BORING COORDINATES (International Feet):
N TBD **E** TBD
H. Datum: MI State Plane S Zone NAD83

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

Sampler Type: Macro Core
Sampler O.D. (in.): 2.25"
Sampler Length (in.): 5.0'

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

Depth (ft)	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Submitted To Lab	PID (ppm)	Sample Description & Configuration Modified Burmister	Remark	Elev. (ft.) Stratum Description	Depth (ft.)
	S-29	28-29				0.5	S-29: Light brown, fine to medium SAND, trace Silt, moist.			
29	S-30	29-30				1.1	S-30: Light brown, fine to medium SAND, trace Silt, moist.			
30	C-7	30-35	60	48		NR	C-7:			
	S-31	30-31				0.9	S-31: 30-30.6': Light brown, fine SAND, trace Silt, moist.			
31	S-32	31-32			31-33	1.8	30.7-31': Light brown, fine to medium SAND, trace Silt, moist. S-32: Light brown, fine to medium SAND, trace Silt, moist.			
32	S-33	32-33				1.8	S-33: Light brown, fine to medium SAND, trace Silt, moist.			
33	S-34	33-34				0.9	S-34: Light brown, fine to medium SAND, trace Silt, moist.			
34	S-35	34-35				N/A	S-35: No recovery.		SAND	
35	C-8	35-40	60	47		NR	C-8:			
	S-36	35-36				0.7	S-36: Light brown, fine to medium SAND, trace Silt, moist.			
36	S-37	36-37				1.3	S-37: Light brown, fine to medium SAND, trace Silt, moist.			
37	S-38	37-38			37-39	0.5	S-38: Light brown, fine to medium SAND, trace Silt, moist.			
38	S-39	38-39				0.4	S-39: Light brown, fine to medium SAND, trace Silt, moist.			
39	S-40	39-40				N/A	S-40: No recovery.			
40							End of exploration at 40 feet.			40
41										
42										

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MISSDIG Ticket Number:
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