REPORT

Phase II Environmental Site Assessment

Proposed Freud Pump Station Isolation Shaft Property

GLWA CS-120, Arcadis Project No. 30047523

Detroit, Michigan

Arcadis of Michigan, LLC
607 Shelby Street, Suite 400
Detroit, MI 48226

December 23, 2021 **NTH Project No. 61-200414-02C**

NTH Consultants, Ltd.
41780 Six Mile Road, Suite 200
Northville, MI 48168

NTH Consultants, Ltd.

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Jeff Swartz, P.E.
Arcadis of Michigan, LLC
607 Shelby Street, Suite 400
Detroit, Michigan 48226

December 23, 2021
NTH Project No. 61-200414-02C

RE: Report on Phase II Environmental Site Assessment
Proposed Freud Pump Station Isolation Shaft Project
GLWA CS-120, Arcadis Project No. 30047523
Detroit, Michigan

Dear Mr. Swartz:

NTH Consultants, Ltd. (NTH) is pleased to submit this report on Phase II Environmental Site Assessment (ESA) for the above referenced project. This study was performed in accordance with the scope of services outlined in our proposal (NTH Proposal No. 61-200414-DD) dated revised September 23, 2021.

We appreciate the opportunity to assist you with this project. Should you have any questions or require additional information, please call us at 248-662-2741.

Sincerely,

NTH Consultants, Ltd.

DocuSigned by:
CC62C3695D554CC...

Cliff J. Andrews
Principal Professional

DocuSigned by:
Charles J. Roarty Jr.
1B505E3681BF483...

Charles J. Roarty, Jr. P.E.
Senior Vice President

CJA/CJR/mam

Attachments

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APPENDICES

1.0 EXECUTIVE SUMMARY

This report presents the results of a Phase II Environmental Site Assessment (ESA) for the Proposed Freud Pump Station Isolation Shaft project in Detroit, Michigan. Great Lakes Water Authority (GLWA) intends to purchase the following 19 parcels:

Street Address	Parcel Information
12415 Freud Street	The parcel is approximately 3,000 square feet in size and is vacant land.
686 Conner Street	The parcel is approximately 2,880 square feet in size and is vacant land.
682 Connor Street	The parcel is approximately 2,880 square feet in size and is vacant land.
692 Conner Street	The parcel is approximately 2,880 square feet in size and is vacant land.
700 Conner Street	The parcel is approximately 3,840 square feet in size and contains single-story vacant party store.
701 Conner Street	The parcel is approximately 2,940 square feet in size and is vacant land.
707 Conner Street	The parcel is approximately 2,940 square feet in size and is vacant land.
710 Conner Street	The parcel is approximately 2,880 square feet in size and is vacant land.
713 Conner Street	The parcel is approximately 2,940 square feet in size and contains a vacant two-story residential dwelling.
716 Conner Street	The parcel is approximately 2,880 square feet in size and is vacant land.
681 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.
687 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.
693 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.
700 Navahoe Street	The parcel is approximately 4,000 square feet in size and is vacant land.
703 Navahoe Street	The parcel is approximately 4,000 square feet in size and is vacant land.
710 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.
711 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.
717 Navahoe Street	The parcel is approximately 3,500 square feet in size and contains a vacant two-story residential dwelling.
705 Algonquin Street	The parcel is approximately 4,080 square feet in size and contains an occupied two-story residential dwelling.

No recognized environmental conditions (RECs) or evidence of potential environmental concerns were identified at 700 and 713 Connor Street, 717 Navahoe Street, and 705 Algonquin Street parcels during the Phase I ESA. Additionally, no access was provided to the 707 Connor Street and 687 Navahoe Street parcels. Thus, this Phase II ESA was conducted on the following 13 parcels (collectively referenced as a property in this report):

Street Address	Parcel Information
12415 Freud Street	The parcel is approximately 3,000 square feet in size and is vacant land.
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The Phase II ESA was conducted to evaluate RECs identified at the property during NTH's Phase I ESA. This study included a geophysical survey and a subsurface investigation comprising of soil borings and collection and analysis of soil samples.

The results of soil analysis identified volatile organic compounds (VOCs), polynuclear aromatics (PNAs), and heavy metals above Michigan Department of Environment, Great Lakes, and Energy (EGLE) – Part 201 generic residential cleanup criteria and screening levels (GRCC). Thus, based upon these results, the property is considered a *facility,* as defined by 1994 P.A. 451, Part 201, as amended.

Benzene, ethylbenzene, isopropyl benzene, 1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, xylenes, and naphthalene were detected above EGLE's Nonresidential Volatilization to Indoor Pathway (VIAP) Screening Levels, dated September 4, 2020.

This summary should not be reviewed separately from the remainder of the report, and is not a substitute for a thorough review of the entire report.

2.0 INTRODUCTION

NTH Consultants, Ltd. (NTH) was retained by Arcadis of Michigan, LLC (Arcadis) on behalf of Great Lakes Water Authority (GLWA) to conduct a Phase II Environmental Site Assessment (ESA) for the Freud Pump Station Isolation Shaft project in Detroit, Michigan.

NTH conducted a Phase I ESA for the 32 parcels and the results of this study were presented in a report dated September 17, 2021. Since completion of the Phase I ESA, GLWA reduced the number of parcels to be acquired. The following 19 parcels will be acquired by GLWA:

Street Address	Parcel Information
12415 Freud Street	The parcel is approximately 3,000 square feet in size and is vacant land.
686 Conner Street	The parcel is approximately 2,880 square feet in size and is vacant land.
682 Connor Street	The parcel is approximately 2,880 square feet in size and is vacant land.
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717 Navahoe Street	The parcel is approximately 3,500 square feet in size and contains a vacant two-story residential dwelling.
705 Algonquin Street	The parcel is approximately 4,080 square feet in size and contains an occupied two-story residential dwelling.

NTH's Phase I ESA identified the following evidence of recognized environmental conditions (RECs) or potential environmental concerns for the above referenced parcels:

- The property formerly contained residential and commercial structures. It is unknown if all the former structures had basements. The environmental nature and origin of the fill soils used during demolition activity specifically to backfill the basement excavations are unknown.

- The former gas station at 692 Connor Street parcel had no readily available information regarding the previous occupants' hazardous materials management and waste disposal practices.

- Sanborn fire insurance maps depict two underground storage tanks (USTs) on the 692 Conner Street parcel. No documented information regarding removal/closure of the reported tanks was available.

No RECs were identified at 700 and 713 Connor Street, 717 Navahoe Street, and 705 Algonquin Street parcels during the Phase I ESA. Additionally, no access was provided to the 707 Connor Street and 687 Navahoe Street parcels as of this date. As such, this Phase II ESA reports covers the following 13 parcels (collectively referenced as a property in this report):

Street Address	Parcel Information
12415 Freud Street	The parcel is approximately 3,000 square feet in size and is vacant land.
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Street Address	Parcel Information
700 Navahoe Street	The parcel is approximately 4,000 square feet in size and is vacant land.
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The objective of this Phase II ESA was to evaluate the RECs to the extent possible and where access was feasible.

3.0 SCOPE OF SERVICES

The scope of services for the Phase II ESA comprised of the following key tasks:

- A geophysical survey using ground penetrating radar (GPR) was conducted at 692 Connor Street parcel, where former gas station was located.

- Soil borings were drilled to evaluate the RECs, and to facilitate the collection of soil samples for analyses.

- Soil samples were screened in the field for the presence of total volatile organic compounds (VOCs) using a portable photoionization detector (PID).

- Representative soil samples were submitted to NTH's subcontracted laboratory for analyses.

- Information gathered during the Phase II ESA was evaluated and this report was prepared.

4.0 FIELD INVESTIGATION

NTH retained Fibertec Environmental Services (FES) to perform a geophysical survey at the 692 Connor Street parcel to identify anomalies indicative of underground storage tank (UST). FES conducted the survey on November 11, 2021, using ground penetrating radar (GPR) unit. The GPR survey did not identify any anomalies indicative of USTs.

Fifteen geoprobe borings, designated as GP-1 through GP-5, GP-7 through GP-9, and GP-11 through GP-17 were drilled on November 11, 2021, by FES in the presence of Alex Provencher of NTH. The borings were advanced to approximate depths of 10 to 20 feet.

The rationale for the locating the borings is presented in the following table:

Boring No.	Parcel	Rationale
1	686 Conner Street	Evaluate backfill soil used during demolition of former residential dwelling.
2, 3, and 4	692 Conner Street	Evaluate past use as a gas station, unknown status of USTs, and backfill soil used during demolition of the commercial building.
5	701 Conner Street	Evaluate backfill soil used during demolition of former residential dwelling.
7	710 Conner Street	Evaluate backfill soil used during demolition of former residential dwelling.
8	716 Conner Street	Evaluate backfill soil used during demolition of former residential dwelling.
9	681 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.
11	693 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.
12	682 Conner Street	Evaluate backfill soil used during demolition of former residential dwelling.
13	703 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.
14	711 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.
15	700 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.
16	710 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.
17	12415 Freud Street	Evaluate past use as a gas station, unknown status of USTs, and backfill soil used during demolition of the commercial building.

The approximate locations of the borings are depicted on the Boring Location Plan in Appendix A.

The geoprobe drilling technique involves mechanically driving or pushing a 2-inch outside diameter stainless steel sampling tool, with a disposable clear acetate liner, to a desired sampling depth. This technique does not generate soil cuttings because the geoprobe rods push soils away from the rods as the tool string advances through the hole. The geoprobe equipment/tools were steam-cleaned prior to use and between each successive boring location to minimize the possibility of cross-contamination. Upon completion of drilling activities and after collecting samples, the boreholes were backfilled with excavated soil and hydrated bentonite chips.

Soil samples retrieved from the borings were screened in the field with RAE Systems MiniRae™ PID. The PID is capable of detecting total volatile organic compounds (VOCs) to a detection level of one part per million (ppm). The PID was calibrated prior to taking field measurements. The field PID measurements on the soil samples are shown on the boring logs in Appendix A. As indicated, PID readings ranged from less than the detection limit of the instrument to 413 ppm. Petroleum odors were noted in soil samples collected from GP-3, GP-4, GP-9, GP-13, and GP-17.

5.0 SUBSURFACE DATA

Subsurface conditions observed in each boring are presented on the Log of Geoprobe Borings in Appendix A. The stratification shown on the boring logs represents the approximate boundary between soil types; the actual transition may be more gradual. In addition, the soil layers are described based on field classification of observed soil samples; accordingly, the soil layer descriptions are considered generalized.

The subsurface conditions at the boring locations comprised of up to 8.5 feet of sandy and clayey fill soil mixed with pieces of asphalt, brick, concrete, glass, and wood (i.e., rubble materials or urban fill). The fill soil is underlain by native clayey soils to the explored depths. No groundwater was encountered in the borings.

6.0 ANALYTICAL TESTING

Soil samples for analysis were selected based on the results of the field screening including visual and olfactory observations, and PID measurements. The samples were placed in laboratory-supplied containers and stored in an ice-chilled cooler. The samples were released to FES' laboratory in accordance with NTH's chain-of-custody procedures.

The analytical parameters included VOCs, polynuclear aromatic compounds (PNAs), and the Michigan 10 metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc). The soil samples submitted for VOC analysis were prepared in the field using Michigan-modified methanol preservation (EPA Method 5035). Laboratory data for the soil samples are included in Appendix B.

7.0 EVALUATION OF ANALYTICAL DATA

The soil analytical data were compared to the EGLE-established GRCC, dated December 30, 2013, and updated June 25, 2018, pursuant to 1994 P.A. 451, Part 201, as amended. Specifically, the results were compared to the Part 201 residential direct contact (DC) criteria, drinking water protection (DWP) criteria, groundwater/surface water interface protection (GSIP) criteria, soil volatilization to indoor air criteria (SVIIC), infinite source soil volatilization to ambient air criteria (VSIC), particulate soil inhalation criteria (PSIC), soil saturation concentration screening levels (SSCSL).

The results of heavy metals analysis were also compared to the statewide default background (SWDB) concentrations as established by EGLE. The results of metals analysis were only compared to GRCC if the concentration of that metal was above the SWDB.

The soil data were also compared to the EGLE's Residential and Nonresidential Volatilization to Indoor Pathway (VIAP) Screening Levels, dated September 4, 2020. The sample information and soil analytical data along with Part 201 GRCC are summarized in a table in Appendix A.

7.1 Volatile Organic Compounds (VOCs)

VOCs in the soil samples were either not detected above laboratory method detection limits (MDLs) or where detected, the reported levels were below Part 201 GRCC, except for the following:

Contaminant	Boring / Sample Location	GRCC Exceeded
Benzene	GP-3 S-3	DWP
n-Butylbenzene	GP-3 S-3	DWP
Ethylbenzene	GP-3 S-2 and S-3	DWP and GSIP
2-Methylnaphthalene	GP-3 S-3	GSIP
Naphthalene	GP-3 S-2 and S-3	GSIP
n-Propylbenzene	GP-3 S-2 and S-3	DWP
1,2,4-Trimethylbenzene	GP-4 S-2	GSIP
	GP-3 S-2 and S-3	DWP and GSIP
1,3,5-Trimethylbenzene	GP-3 S-2 and S-3	DWP and GSIP
Xylenes	GP-4 S-2	GSIP
	GP-3 S-2 and S-3	DWP and GSIP

Benzene, ethylbenzene, isopropyl benzene, 1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and xylenes were detected above EGLE's Nonresidential VIAP Screening Levels.

7.2 Polynuclear Aromatics (PNAs)

The analyzed PNAs in the soil samples were either not detected above MDLs or where detected, the reported levels were below Part 201 GRCC, except for the following:

Contaminant	Boring / Sample Location	GRCC Exceeded
2-Methylnaphthalene	GP-3 S-2	GSIP
Naphthalene	GP-3 S-2 and S-3	GSIP

Naphthalene was detected above EGLE's Nonresidential VIAP Screening Level.

7.3 Heavy Metals

The following heavy metals were detected in the soil samples above Part 201 GRCC:

Metal	Boring / Sample Location	GRCC Exceeded
Arsenic	GP-12 S-1 and S-2	DWP and GSIP
	GP-1 S-2, GP-11 S-2, and GP-16 S-1	DWP, GSIP, and DC
Chromium	GP-16 S-1	GSIP
Lead	GP-17 S-2	DC
Selenium	GP-1 S-2, GP-2 S-2, GP-5 S-2, GP-15 S-1, GP-16 S-1, and GP-17 S-2	GSIP
Zinc	GP-17 S-2	GSIP

8.0 CONCLUSIONS

NTH's Phase II ESA at the property comprised of geophysical survey at 692 Connor Street parcel, drilling of 15 soil borings, and collection and analysis of soil samples to evaluate the RECs identified during the Phase I ESA. No anomalies indicative of USTs was identified during the geophysical survey.

The following analytical parameters were identified above Part 201 GRCC in the soil samples collected from the borings drilled at the property:

Parcel	Boring / Sample Location	Contaminant	CAS Nos.	Part 201 GRCC Exceeded
686 Conner Street	GP-1 S-2	Arsenic	7440-38-2	DWP, GSIP, and DC
		Selenium	7782-49-2	GSIP
692 Conner Street	GP-2 S-2	Selenium	7782-49-2	GSIP
	GP-3 S-2 and S-3	Ethylbenzene	100-41-4	DWP and GSIP
		2-Methylnaphthalene	91-57-6	GSIP
		Naphthalene	91-20-3	GSIP
		n-Propylbenzene	103-65-1	DWP
		1,2,4-Trimethylbenzene	95-63-6	DWP and GSIP
		1,3,5-Trimethylbenzene	108-67-8	DWP and GSIP

Parcel	Boring / Sample Location	Contaminant	CAS Nos.	Part 201 GRCC Exceeded
		Xylenes	1330-20-7	DWP and GSIP
	GP-3 S-3	Benzene	71-43-2	DWP
		n-Butylbenzene	104-51-8	
	GP-4 S-2	Xylenes	1330-20-7	GSIP
701 Conner Street	GP-5 S-2	Selenium	7782-49-2	GSIP
710 Conner Street	**GP-7**	**None detected**		
716 Conner Street	**GP-8**	**None detected**		
681 Navahoe Street	**GP-9**	**None detected**		
693 Navahoe Street	GP-11 S-2	Arsenic	7440-38-2	DWP, GSIP, and DC
682 Conner Street	GP-12 S-1 and S-2	Arsenic	7440-38-2	DWP and GSIP
703 Navahoe Street	**GP-13**	**None detected**		
711 Navahoe Street	**GP-14**	**None detected**		
700 Navahoe Street	GP-15 S-1	Selenium	7782-49-2	GSIP
710 Navahoe Street	GP-16 S-1	Arsenic	7440-38-2	DWP, GSIP, and DC
		Chromium	7440-47-3	GSIP
		Selenium	7782-49-2	GSIP
12415 Freud Street	GP-17 S-2	Lead	7439-92-1	DC
		Selenium	7782-49-2	GSIP
		Zinc	7440-66-6	

Based on the above data, 682, 686, 692, and 701 Conner Street, and 700 and 710 Navahoe parcels are *facility,* as defined by 1994 P.A. 451, Part 201, as amended. *According to Section 20101(1)(s) of Part 201 of NREPA (1994 P.A. 451, as amended), facility means any area, place, or property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located.*

Since GLWA purchased 12415 Freud Street parcel on July 1, 2021, and 693 Navahoe Street parcel on September 1, 2021, these two parcels are not eligible for BEA since the report preparation timeline of 45 days has already been surpassed.

Benzene, ethylbenzene, isopropyl benzene, 1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, xylenes, and naphthalene were detected above EGLE's Nonresidential VIAP Screening Levels. The exceedance of the VIAP Screening Levels is

indicative of potential vapor intrusion or indoor air quality risk. As such, further evaluation comprised of soil gas sampling and analysis will be required if the future development plans for enclosed structures at the affected parcels.

GLWA intends to purchase the property. Accordingly, this new owner is eligible to submit a Baseline Environmental Assessment (BEA) report to EGLE, provided this report is prepared within 45 days of acquiring the parcels that are determined to be *facility*. The BEA provides certain statutory protection to the new (non-liable) owners and operators of the *facility* against cleanup liability for pre-existing subsurface contamination under Michigan law.

Under Section 20107a of Part 201, a person who owns or operates property/parcel that he/she has knowledge is a *facility* has the following due care obligations:

1. Prevent exacerbation of the existing contamination.

2. Prevent unacceptable human exposure and mitigate fire and explosion hazards to allow for the intended use of the facility in a manner that protects the public health and safety.

3. Take reasonable precautions against the reasonably foreseeable acts or omissions of a third party.

4. Provide reasonable cooperation, assistance, and access to the persons that are authorized to conduct response activities at the property.

5. Comply with any land use or resource use restrictions established or relied on in connection with the response activities.

6. Not impede the effectiveness or integrity of any land use or resource use restriction.

A Plan for Due Care Compliance meeting the above obligations is recommended once the future development plans for the parcels that are determined to be *facility* are formalized.

9.0 LIMITATIONS

The evaluations and conclusions presented in this report have been made to assist the user of this study in making a reasonable assessment of risk with respect to subsurface contamination at the property from the RECs identified during the Phase I ESA. Considering the limited scope of the present investigation, data collection and testing, our findings should not be construed as absolute certainties, but rather as probabilities based on our professional judgment. NTH cannot offer any form of warranty or guarantee with respect to the type and extent of hazardous substances on the property, other than those identified and discussed in this report.

This report is for the use and benefit of and may be relied upon by Great Lakes Water Authority, Arcadis of Michigan LLC, and any of their respective affiliates, successors, and assigns, in connection with a commercial real estate transaction involving the subject property, and in accordance with the terms and conditions in place between NTH and Arcadis for this project.

This report presents NTH's opinion of the property as of the report's publication date, based on the results of this study and on the information provided during the course of the study. The results of this study may not be relied upon by parties other than those identified above without the prior knowledge and written consent of NTH.

Any authorized third party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report, and with the acknowledgment that actual site conditions may change with time, and that hidden conditions may exist at the property that were not discovered within the authorized scope of the assessment.

Any use by or distribution of this report to any unauthorized third parties, without the express written consent of NTH is at the sole risk and expense of such third party. In the absence of a written agreement with NTH granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against NTH or its officers, employees, vendors, affiliates successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold NTH and its respective officers, employees, vendors, affiliates, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses including attorneys' fees and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

APPENDIX A

Boring Location Plan;

Log of Geoprobe Borings;

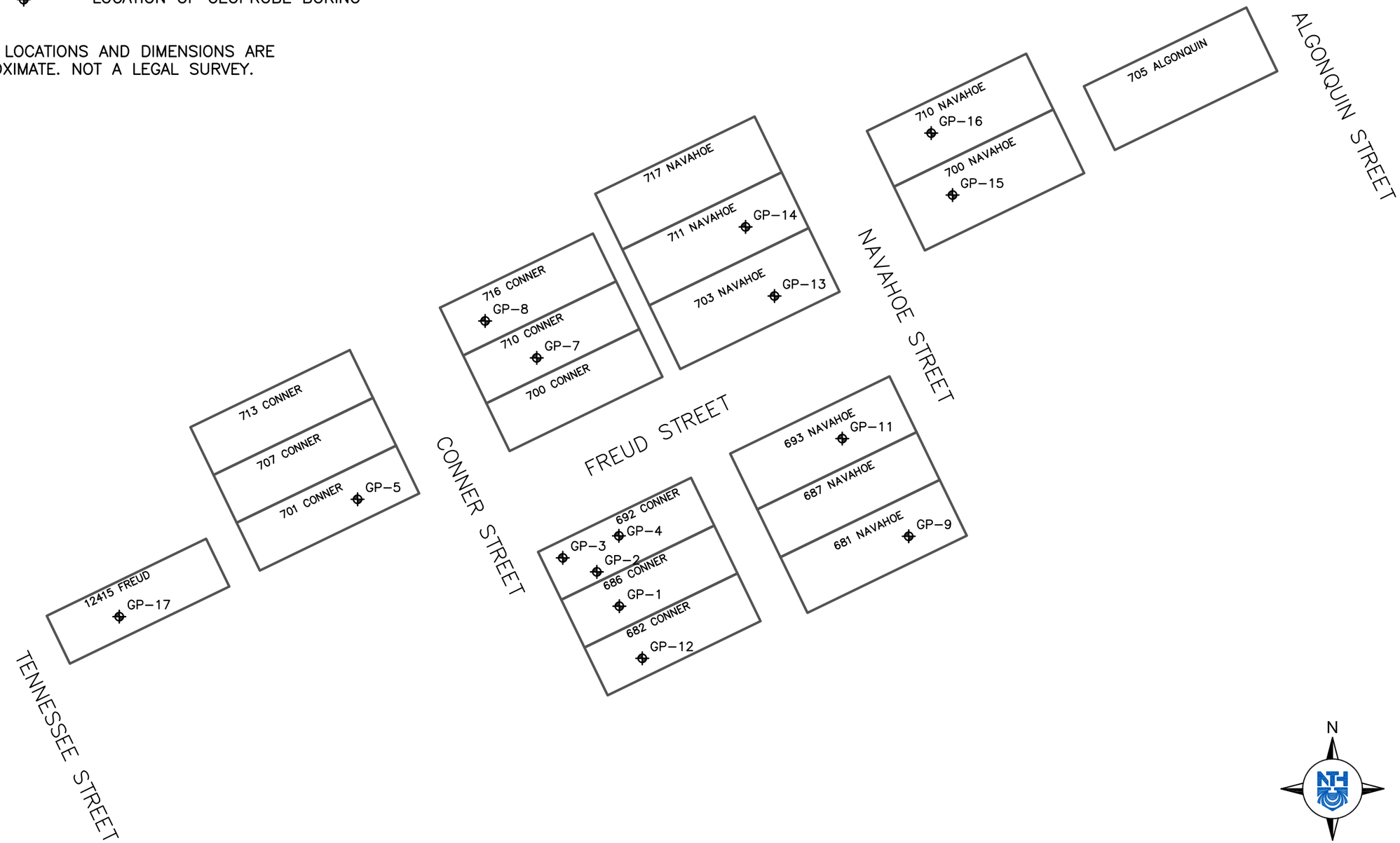
Analytical Summary Table

LEGEND

LIMITS OF STUDY

GP–1 LOCATION OF GEOPROBE BORING

NOTE: LOCATIONS AND DIMENSIONS ARE APPROXIMATE. NOT A LEGAL SURVEY.



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0 30' 60'

SCALE

j:\2020\61\200414\reports\env\task 2\200414-blp.dwg Plotted: 12/23/2021 10:54 AM by aprovencher

NTH Consultants, Ltd.
Infrastructure Engineering and Environmental Services

NTH PROJECT No.: 61-200414-02B	CAD FILE NAME: 200414-BLP
DESIGNED BY: ACK	PLOT DATE: 12/23/2021
DRAWN BY: AAP	DRAWING SCALE: 1" = 60'
CHECKED BY: CJA	INCEPTION DATE: 9/7/2021

BORING LOCATION PLAN

GLWA FREUD PUMP STATION ISOLATION SHAFT PARCELS
FREUD, TENNESSEE, CONNER, NAVAHOE, & ALGONQUIN STREETS
DETROIT, MICHIGAN

FIGURE:
2

PROJECT NO: 61-200414	NTH CONSULTANTS, LTD.	SHEET 1 OF 6

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-1	N/A	0.0-0.5	**FILL**: BROWN **SILTY CLAY**		0.0	0.5	-
		0.5-5.0	**FILL**: BROWN AND GRAY **CLAY** WITH PIECES OF BRICK	S-1	0.5	2.0	6.3
					2.0	3.0	4.6
				S-2*	3.0	5.0	7.8
		5.0-10.0	BROWN AND GRAY **SILTY CLAY**		5.0	7.0	4.8
					7.0	8.0	1.1
					8.0	10.0	<1.0
			NO GROUNDWATER ENCOUNTERED				
GP-2	N/A	0.0-3.0	**FILL**: BROWN **SILTY CLAY**		0.0	2.0	4.0
		3.0-6.0	**FILL**: GRAY **SANDY CLAY**	S-1	2.0	4.0	7.6
				S-2*	4.0	6.0	7.7
		6.0-10.0	BROWN AND GRAY **SILTY CLAY**		6.0	8.0	6.8
					8.0	10.0	6.2
			NO GROUNDWATER ENCOUNTERED				
GP-3	N/A	0.0-0.1.0	**FILL:** BROWN **SANDY CLAY**	S-1	0.25	1.5	4.6
		1.0-1.5	**FILL**: BROWN **SAND**				
		1.5-7.0	**FILL**: GRAY **SILTY CLAY** WITH PETROLEUM ODOR		1.5	3.0	3.1
				S-2*	3.0	5.0	413
				S-3*	5.0	7.0	211
		7.0-10.0	BROWN AND GRAY **SILTY CLAY**		7.0	8.0	7.4
					8.0	10.0	7
			NO GROUNDWATER ENCOUNTERED				

NOTES:

- BORINGS BACKFILLED WITH SOIL CUTTINGS & HYDRATED BENTONITE PELLETS AFTER OBTAINING SOIL SAMPLES.
- BORINGS OBSERVED BY A. PROVENCHER OF NTH CONSULTANTS, LTD.
- SOIL CLASSIFICATION BASED SOLELY ON VISUAL OBSERVATION.
- * SAMPLE SUBMITTED FOR ANALYTICAL TESTING.

DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** NOVEMBER 11, 2021 **FIGURE NO: 2**

PROJECT NO: 61-200414	NTH CONSULTANTS, LTD.	SHEET 2 OF 6

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-4	N/A	0.0-2.5	**FILL**: BROWN **CLAY**		0.0	2.0	6.2
					2.0	2.5	8.6
		2.5-4.5	**FILL**: GRAY **SANDY CLAY**	S-1	2.5	4.5	38.1
		4.5-5.0	**FILL**: GRAY **CRUSHED CONCRETE** WITH PIECES OF GLASS AND WOOD		4.5	5.0	-
		5.0-7.0	**FILL**: DARK GRAY **SANDY CLAY** WITH PETROLEUM ODOR	S-2*	5.0	7.0	62.5
		7.0-10.0	BROWN AND GRAY **SILTY CLAY**		7.0	8.0	7.9
					8.0	10.0	<1.0
			NO GROUNDWATER ENCOUNTERED				
GP-5	N/A	0.0-2.0	FILL: BROWN **CLAY**		0.0	0.5	-
				S-1	0.5	2.0	4.1
		2.0-5.5	**FILL**: DARK BROWN **CLAY** WITH PIECES OF BRICK	S-2*	2.0	4.0	12.3
				S-3*	4.0	5.5	14.7
		5.5-10.0	BROWN AND GRAY **SILTY CLAY**		5.5	7.0	9.4
					7.0	9.0	4.0
					9.0	10.0	3.5
			NO GROUNDWATER ENCOUNTERED				
GP-7	N/A	0.0-0.5	**FILL**: BROWN **CLAY** WITH PIECES OF ASPHALT		0.0	0.5	-
		0.5-2.0	**FILL**: BROWN **SAND** WITH PIECES OF BRICK, GLASS, AND WOOD	S-1	0.5	2.0	19.7
		2.0-4.5	**FILL**: BROWN **CLAY** WITH PIECES OF BRICK, GLASS, WOOD AND CONCRETE	S-2*	2.0	4.0	26.4
		4.5-5.5	**FILL**: GRAY **SANDY CLAY** WITH PIECES OF BRICK	S-3*	4.5	5.5	27.1
		5.5-10	BROWN AND GRAY **SILTY CLAY**		5.5	7.0	15.3
					7.0	8.0	12.2
					8.0	10.0	11.1
			NO GROUNDWATER ENCOUNTERED				

NOTES:

- BORINGS BACKFILLED WITH SOIL CUTTINGS & HYDRATED BENTONITE PELLETS AFTER OBTAINING SOIL SAMPLES.
- BORINGS OBSERVED BY A. PROVENCHER OF NTH CONSULTANTS, LTD.
- SOIL CLASSIFICATION BASED SOLELY ON VISUAL OBSERVATION.
- * SAMPLE SUBMITTED FOR ANALYTICAL TESTING.

DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** NOVEMBER 11, 2021 **FIGURE NO: 2**

PROJECT NO: 61-200414	NTH CONSULTANTS, LTD.	SHEET 3 OF 6

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-8	N/A	0.0-2.0	FILL: BROWN **CLAY** WITH PIECES OF BRICK AND CONCRETE		0.0	2.0	6.0
		2.0-4.5	**FILL**: DARK GRAY **CLAY** WITH PIECES OF BRICK		2.0	2.5	12.4
				S-1*	2.5	4.5	12.8
		4.5-6.0	**FILL**: GRAY **CLAY**	S-2	4.5	6.0	19.2
		6.0-10.0	BROWN AND GRAY **SILTY CLAY**		6.0	8.0	6.8
					8.0	10.0	<1.0
			NO GROUNDWATER ENCOUNTERED				
GP-9	N/A	0.0-2.0	**FILL**: BROWN **CLAY** WITH PIECES OF BRICK	S-1	0.25	2.0	2.3
		2.0-2.5	GRAY CRUSHED CONCRETE AND BRICK AT 2.5 FEET		2.0	2.5	-
		2.5-5.5	**FILL**: DARK GRAY **CLAY** WITH PIECES OF BRICK AND PETROLEUM ODOR	S-2*	2.5	3.5	4.4
					3.5	5.5	7.6
		5.5-20.0	BROWN AND GRAY **SILTY CLAY**		5.5	7.0	7.3
					7.0	9.0	4.4
					9.0	11.0	1.3
					11.0	13.0	<1.0
					13.0	15.0	<1.0
					15.0	18.0	<1.0
					18.0	20.0	<1.0
			NO GROUNDWATER ENCOUNTERED				

NOTES:

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- BORINGS OBSERVED BY A. PROVENCHER OF NTH CONSULTANTS, LTD.
- SOIL CLASSIFICATION BASED SOLELY ON VISUAL OBSERVATION.
- * SAMPLE SUBMITTED FOR ANALYTICAL TESTING.

DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** NOVEMBER 11, 2021 **FIGURE NO: 2**

PROJECT NO: 61-200414	NTH CONSULTANTS, LTD.	SHEET 4 OF 6

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-11	N/A	0.0-4.5	**FILL**: BROWN **CLAY**	S-1	0.25	2.0	13.2
					2.0	3.5	12.1
		4.5-5.5	**FILL**: GRAY **SANDY CLAY**	S-2*	3.5	5.5	16.8
		5.5-10.0	BROWN AND GRAY **SILTY CLAY**		5.5	7.0	4.6
					7.0	8.0	<1.0
					8.0	10.0	<1.0
			NO GROUNDWATER ENCOUNTERED				
GP-12	N/A	0.0-1.5	**FILL**: BROWN **CLAY**		0.5	1.5	4.1
		1.5-8.5	**FILL**: GRAY **CLAY** WITH PIECES OF BRICK		1.5	3.0	3.2
				S-1*	3.0	5.0	8.9
					5.0	6.0	4.3
					6.0	7.0	7.3
				S-2*	7.0	8.5	10.1
		8.5-15.0	BROWN AND GRAY **SILTY CLAY**		8.5	10.0	4.3
					10.0	12.0	<1.0
					12.0	13.0	<1.0
					13.0	15.0	<1.0
			NO GROUNDWATER ENCOUNTERED				
GP-13	N/A	0.0-2.5	**FILL**: BROWN **CLAY** WITH PIECES OF LAVA ROCK AND BRICK	S-1	0.5	2.5	9.5
		2.5-3.0	**FILL**: BROWN **SAND AND GRAVEL**		2.5	3.0	-
		3.0-5.0	**FILL**: DARK GRAY **CLAY** WITH PETROLEUM ODOR	S-2*	3.0	5.0	10.2
		5.0-10.0	BROWN AND GRAY **SILTY CLAY**		5.0	7.0	6.3
					7.0	8.0	5.0
					8.0	10.0	5.0
			NO GROUNDWATER ENCOUNTERED				

NOTES:

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- SOIL CLASSIFICATION BASED SOLELY ON VISUAL OBSERVATION.
- * SAMPLE SUBMITTED FOR ANALYTICAL TESTING.

DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** NOVEMBER 11, 2021 **FIGURE NO: 2**

PROJECT NO: 61-200414	NTH CONSULTANTS, LTD.	SHEET 5 OF 6

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-14	N/A	0.0-0.5	**FILL**: BROWN **CLAY** WITH PIECES OF LAVA ROCK		0.0	0.5	-
		0.5-4.0	**FILL**: BROWN **CLAY**	S-1	0.5	2.5	5.7
					2.5	3.5	2.2
		4.0-5.0	**FILL**: GRAY **SANDY CLAY**	S-2*	3.5	5.0	8.3
		5.0-10.0	BROWN AND GRAY **SILTY CLAY**		5.0	7.0	3.3
					7.0	8.0	2.1
					8.0	10.0	3.6
			NO GROUNDWATER ENCOUNTERED				
GP-15	N/A	0.0-3.5	**FILL**: BROWN **CLAY**	S-1*	0.25	2.0	5.6
					2.0	3.0	1.8
		3.5-4.5	**FILL**: GRAY **CLAY**	S-2	3.0	4.5	1.9
		4.5-15.0	BROWN AND GRAY **SILTY CLAY**		4.5	5.0	7.3
					5.0	7.0	4.0
					7.0	8.0	4.5
					8.0	10.0	3.4
					10.0	11.0	<1.0
					11.0	13.0	<1.0
					13.0	15.0	<1.0
			NO GROUNDWATER ENCOUNTERED				

NOTES:

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- BORINGS OBSERVED BY A. PROVENCHER OF NTH CONSULTANTS, LTD.
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- * SAMPLE SUBMITTED FOR ANALYTICAL TESTING.

DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** NOVEMBER 11, 2021 **FIGURE NO: 2**

PROJECT NO: 61-200414	NTH CONSULTANTS, LTD.	SHEET 6 OF 6

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-16	N/A	0.0-2.5	**FILL**: BROWN **CLAY**	S-1*	0.5	2.5	13.5
		2.5-4.0	**FILL**: DARK GRAY **CLAY** WITH PIECES OF BRICK	S-2*	2.5	4.0	4.9
		4.0-10.0	BROWN AND GRAY **SILTY CLAY**		4.0	5.0	5.2
					5.0	7.0	<1.0
					7.0	8.0	<1.0
					8.0	10.0	<1.0
			NO GROUNDWATER ENCOUNTERED				
GP-17	N/A	0.0-0.5	**FILL:** BROWN **CLAY** WITH CRUSHED CONCRETE				
		0.5-4.0	**FILL**: BROWN **CLAY**	S-1	0.5	2.5	14.7
					2.5	4.0	11.1
		4.0-6.0	**FILL**: DARK GRAY **CLAY** WITH PIECES OF BRICK, SLAG, AND PETROLEUM ODOR	S-2*	4.0	6.0	14.9
		6.0-10.0	BROWN AND GRAY **SILTY CLAY**		6.0	8.0	10.0
					8.0	10.0	8.3
			NO GROUNDWATER ENCOUNTERED				

NOTES:

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DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** NOVEMBER 11, 2021 **FIGURE NO: 2**

SUMMARY OF SOIL ANALYSES
Proposed Freud Pump Station Isolation Shaft Project
NTH Project No. 62-200414-02C

Parcel Address	Sample Designation	Sample Depth	Collect Date	Michigan 10 Metals									Volatile Organic Compounds (VOCs)												Polynuclear Aromatics (PNAs)										
				Arsenic	Barium	Cadmium	Chromium, Total	Copper	Lead	Mercury, Total	Selenium	Zinc	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropyl benzene	2-Methylnaphthalene	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
				7440-38-2	7440-39-3	7440-43-9	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7782-49-2	7440-66-6	71-43-2	104-51-8	135-98-8	100-41-4	98-82-8	91-57-6	91-20-3	103-65-1	108-88-3	526-73-8	95-63-6	108-67-8	1330-20-7	56-55-3	50-32-8	205-99-2	191-24-2	218-01-9	206-44-0	193-39-5	91-57-6	91-20-3	85-01-8	129-00-0
686 Conner	GP-1 S-2	(3' - 5')	11/11/21	**8,000**	**130,000**	**330**	**18,000**	**15,000**	**31,000**	<50	**1,200**	**81,000**	<50	<72	<72	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<360	<330	<330	<330
692 Conner	GP-2 S-2	(4' - 6')	11/11/21	**5,600**	**56,000**	**590**	**17,000**	**13,000**	**150,000**	<50	**550**	**160,000**	<50	<77	<77	<50	<250	<390	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<390	<390	<330	<330
692 Conner	GP-3 S-2	(3' - 5')	11/11/21	**2,300**	**23,000**	**140**	**7,300**	**7,000**	**19,000**	<50	**200**	**22,000**	<130	**1,300**	**330**	**2,900**	**700**	**3,200**	**7,700**	**2,300**	<130	**7,100**	**22,000**	**6,100**	**5,700**	<330	<330	<330	<330	<330	<330	<330	**5,000**	**6,900**	<330	<330
692 Conner	GP-3 S-3	(5' - 7')	11/11/21	**5,000**	**47,000**	**190**	**18,000**	**18,000**	**13,000**	<50	**320**	**42,000**	**210**	**3,400**	**910**	**7,500**	**1,700**	**7,100**	**13,000**	**5,800**	<140	**15,000**	**45,000**	**18,000**	**16,000**	<330	<330	<330	<330	<330	<330	<330	**1,700**	**2,000**	<330	<330
692 Conner	GP-4 S-2	(5' - 7')	11/11/21	**3,900**	**41,000**	**910**	**10,000**	**14,000**	**43,000**	<50	**360**	**56,000**	<50	**87**	<69	**110**	<250	**400**	**520**	**330**	**170**	**320**	**1,800**	**580**	**1,400**	<330	<330	<330	<330	<330	<330	<330	**1,500**	**730**	<330	<330
701 Conner	GP-5 S-2	(2' - 4')	11/11/21	**4,500**	**85,000**	**410**	**9,600**	**15,000**	**69,000**	**70**	**450**	**100,000**	<50	<64	<64	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	**720**	**800**	**1,300**	**390**	**820**	**1,400**	**480**	<330	<330	**910**	**1,600**
701 Conner	GP-5 S-3	(4' - 5.5')	11/11/21	**3,000**	**45,000**	**230**	**9,600**	**9,600**	**19,000**	<50	**230**	**47,000**	<50	<72	<72	<50	<250	<330	<360	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<360	<330	<330	<330
710 Conner	GP-7 S-2	(2' - 4')	11/11/21	**3,500**	**57,000**	**220**	**8,800**	**8,800**	**31,000**	<50	**270**	**39,000**	<50	<71	<71	<50	<250	<330	<330	<100	**110**	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330
710 Conner	GP-7 S-3	(4.5' - 5.5')	11/11/21	**4,400**	**31,000**	**91**	**12,000**	**9,100**	**11,000**	<50	**390**	**37,000**	<50	<60	<60	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330
716 Conner	GP-8 S-1	(2.5' - 4.5')	11/11/21	**1,900**	**51,000**	**240**	**13,000**	**10,000**	**6,600**	<50	**260**	**33,000**	<50	<67	<67	<50	<250	<340	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<340	<330	<330
681 Navahoe	GP-9 S-2	(3.5' - 5.5')	11/11/21	**3,100**	**49,000**	**190**	**13,000**	**13,000**	**11,000**	<50	**340**	**34,000**	<50	<68	<68	<50	<250	<330	<340	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<340	<330	<330
693 Navahoe	GP-11 S-2	(3.5' - 5.5')	11/11/21	**13,000**	**29,000**	**170**	**9,300**	**9,900**	**7,300**	**63**	**300**	**27,000**	<50	<67	<67	<50	<250	<330	<330	<100	**230**	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330
682 Conner	GP-12 S-1	(3' - 5')	11/11/21	**7,500**	**69,000**	**240**	**16,000**	**17,000**	**43,000**	**88**	**340**	**75,000**	<50	<75	<75	<50	<250	<380	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<380	<380	<330	<330
682 Conner	GP-12 S-2	(7' - 8.5')	11/11/21	**7,600**	**77,000**	**270**	**18,000**	**21,000**	**52,000**	**72**	**410**	**84,000**	<50	<80	<80	<50	<250	<400	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<400	<330	<330	<330
703 Navahoe	GP-13 S-2	(3' - 5')	11/11/21	**2,700**	**32,000**	**150**	**9,500**	**9,000**	**5,200**	<50	**220**	**26,000**	<50	<71	<71	<50	<250	<330	<330	<100	**99**	<100	<100	<100	**260**	<330	<330	<330	<330	<330	<330	<330	<330	<350	<330	<330
711 Navahoe	GP-14 S-2	(3.5' - 5')	11/11/21	**1,700**	**35,000**	**100**	**11,000**	**5,600**	**4,900**	<50	**210**	**27,000**	<50	<65	<65	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330
700 Navahoe	GP-15 S-1	(0.25' - 2')	11/11/21	**5,500**	**68,000**	**310**	**18,000**	**19,000**	**26,000**	**74**	**500**	**65,000**	<50	<72	<72	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330
710 Navahoe	GP-16 S-1	(0.5' - 2.5')	11/11/21	**11,000**	**120,000**	**500**	**26,000**	**23,000**	**15,000**	<50	**420**	**92,000**	<50	<74	<74	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<370	<330	<330
710 Navahoe	GP-16 S-2	(2.5' - 4')	11/11/21	**3,900**	**26,000**	**99**	**9,000**	**7,400**	**4,700**	<50	**260**	**23,000**	<50	<55	<55	<50	<250	<330	<330	<100	<50	<100	<100	<100	<150	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330
12415 Freud	GP-17 S-2	(4' - 6')	11/11/21	**5,200**	**150,000**	**990**	**14,000**	**19,000**	**450,000**	**75**	**420**	**270,000**	<50	<68	<68	<50	<250	<330	<330	<100	**90**	<100	<100	<100	<150	**340**	<330	**450**	<330	**340**	**620**	<330	<340	<340	**370**	**570**
			SWDB	5,800	75,000	1,200	18,000	32,000	21,000	130	410	47,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
			DWP	4,600	1.3E+06	6,000	30,000	5.8E+06	7.0E+05	1,700	4,000	2.4E+06	100	1,600	1,600	1,500	91,000	57,000	35,000	1,600	16,000	NA	2,100	1,800	5,600	NLL	NLL	NLL	NLL	NLL	7.3E+05	NLL	57,000	35,000	56,000	4.8E+05
			GSIP	4,600	4.4E+05(G)	3,000 (G,X)	3,300	75,000 (G)	2.5E+6(G,X)	50 (M); 1.2	400	1.7E+5(G)	4,000 (X)	ID	ID	360	3,200	4,200	730	ID	5,400	NA	570	1,100	980	NLL	NLL	NLL	NLL	NLL	5,500	NLL	4,200	730	2,100	ID
PART 201			SVIIC	NLV	NLV	NLV	NLV	NLV	NLV	48,000	NLV	NLV	1,600	ID	ID	87,000	4.0E+05	2.7E+06	2.5E+05	ID	3.3E+05	NA	4.3E+06	2.6E+06	6.3E+06	NLV	NLV	ID	NLV	ID	1.0E+09	NLV	2.7E+06	2.5E+05	2.8E+06	1.0E+09
RESIDENTIAL SOIL CLEANUP CRITERIA			VSIC	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	13,000	ID	ID	7.2E+05	1.7E+06	1.5E+06	3.0E+05	ID	2.8E+06	NA	2.1E+07	1.6E+07	4.6E+07	NLV	NLV	ID	NLV	ID	7.4E+08	NLV	1.5E+06	3.0E+05	1.6E+05	6.5E+08
			VSIC 5M	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	34,000	ID	ID	1.0E+06	1.7E+06	1.5E+06	3.0E+05	ID	5.1E+06	NA	5.0E+08	3.8E+08	6.1E+07	NLV	NLV	ID	NLV	ID	7.4E+08	NLV	1.5E+06	3.0E+05	1.6E+05	6.5E+08
			VSIC 2M	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	79,000	ID	ID	2.2E+06	2.8E+06	1.5E+06	3.0E+05	ID	1.2E+07	NA	5.0E+08	3.8E+08	1.3E+08	NLV	NLV	ID	NLV	ID	7.4E+08	NLV	1.5E+06	3.0E+05	1.6E+05	6.5E+08
			PSIC	7.2E+05	3.3E+08	1.7E+06	2.6E+05	1.3E+08	1.0E+08	2.0E+07	1.3E+08	ID	3.8E+08	2.0E+09	4.0E+08	1.0E+10	5.8E+09	6.7E+08	2.0E+08	1.3E+09	2.7E+10	NA	8.2E+10	8.2E+10	2.9E+11	ID	1.5E+06	ID	8.0E+08	ID	9.3E+09	ID	6.7E+08	2.0E+08	6.7E+06	6.7E+09
			DC	7,600	3.7E+07	5.5E+05	2.5E+06	2.0E+07	4.0E+05	1.6E+05	2.6E+06	1.7E+08	1.8E+05	2.5E+06	2.5E+06	2.2E+07	2.5E+07	8.1E+06	1.6E+07	2.5E+06	5.0E+07	NA	3.2E+07	3.2E+07	4.1E+08	20,000	2,000	20,000	2.5E+06	2.0E+06	4.6E+07	20,000	8.1E+06	1.6E+07	1.6E+06	2.9E+07
			SSCSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0E+05	1.0E+07	1.0E+07	1.4E+05	3.9E+05	NA	NA	1.0E+07	2.5E+05	NA	1.1E+05	94,000	1.5E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY (VIAP) SCREENING LEVELS				NA	NA	NA	NA	NA	NA	390	NA	NA	47(M)	9,800	66,000(C)	340	110(M)	30,000	1,900	21,000	64,000	4,800(JT)	2,600(JT)	1,800(JT)	5,000(J)	1.1E+07	NA	NA	NA	NA	NA	NA	30,000	1,900	29,000	4.4E+08

NOTES:

[1] PART 201 CRITERIA EFFECTIVE DATE: JUNE 25, 2018
[2] SAMPLES COLLECTED BY NTH CONSULTANTS PERSONNEL AND ANALYZED BY FIBERTEC ENVIRONMENTAL SERVICES OF HOLT, MICHIGAN.
[3] ALL VALUES PRESENTED AS µG/KG - MICROGRAMS PER KILOGRAM (≈ PARTS PER BILLION).
[4] ID - INADEQUATE DATA TO DEVELOP CRITERION
[5] NLV - CHEMICAL IS NOT LIKELY TO VOLATILIZE UNDER MOST CONDITIONS
[6] NA - NOT APPLICABLE
[7] ND - NOT DETECTED ABOVE LABORATORY REPORTED METHOD DETECTION LIMITS
[8] SWDB - STATE-WIDE DEFAULT BACKGROUND
[9] DWP - RESIDENTIAL DRINKING WATER PROTECTION CRITERIA
[10] GSIP - GROUNDWATER / SURFACE WATER INTERFACE PROTECTION CRITERIA.
[11] SVIIC - SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA.
[12] VSIC - VOLATILE SOIL INHALATION CRITERIA (AMBIENT AIR; INFINITE SOURCE).
[13] VSIC 5M - FINITE VSIC FOR 5 METER SOURCE THICKNESS
[14] VSIC 2M - FINITE VSIC FOR 2 METER SOURCE THICKNESS
[15] PSIC - PARTICULATE SOIL INHALATION CRITERIA
[16] DC - DIRECT CONTACT CRITERIA
[17] SSCSL - SOIL SATURATION CONCENTRATION SCREENING LEVELS
[18] G - AQUATIC TOXICITY IS PROPORTIONAL TO WATER HARDNESS AND/OR pH OF THE RECEIVING SURFACE WATER; THESE GSI VALUES HAVE BEEN CALCULATED BASED ON DEFAULT WATER HARDNESS OF 150 PPM AS A REASONABLE ESTIMATE FOR MOST SURFACE WATER BODIES IN MICHIGAN.
[19] X - THE GSI CRITERION LISTED MAY NOT BE PROTECTIVE FOR SURFACE WATER THAT IS USED AS A DRINKING WATER SOURCE. FOR SOIL THAT MAY LEACH AND RESULT IN A IN CLOSE GROUNDWATER DISCHARGE TO THE GREAT LAKES AND THEIR CONNECTING WATERS OR DISCHARGE IN CLOSE PROXIMITY TO A WATER SUPPLY INTAKE IN INLAND SURFACE WATERS, THE GENERIC GSI CRITERION WOULD BE THE RESIDENTIAL DWP LISTED IN THE TABLE.
[20] - REPORTED CONCENTRATION EXCEEDS ONE OR MORE APPLICABLE PART 201 CRITERIA
[21] - REPORTED CONCENTRATION EXCEEDS VAPOR INTRUSION SCREENING LEVELS

APPENDIX B

Laboratory Data

Fibertec
environmental
services

Tuesday, November 23, 2021

Fibertec Project Number:	A05200
Project Identification:	Freud Parcels (62-200414) /62-200414
Submittal Date:	11/12/2021

Mr. Cliff Andrews
NTH Consultants, Ltd. - Northville
41780 Six Mile Road, Suite 200
Northville, MI 48168-3459

Dear Mr. Andrews,

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

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

Sincerely,

By Jacob Sutherlund at 10:25 AM, Nov 23, 2021

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-1 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-1 S-2 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**20**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-002** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-1 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**8000**		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
2. Barium	**130000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
3. Cadmium	**330**		µg/kg	50	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
4. Chromium	**18000**		µg/kg	500	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
5. Copper	**15000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
6. Lead	**31000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
7. Selenium	**1200**		µg/kg	200	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
8. Silver	U		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
9. Zinc	**81000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA

Mercury by CVAAS **Aliquot ID: A05200-002** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-1 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-1 S-2 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-1 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-1 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
17. Chloroform	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
45. Styrene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-1 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-1 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 11:16	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-1 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-1 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-1 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:06	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-2 S-2 (4-6)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:50**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-004** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-2 S-2 (4-6)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**21**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-004** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-2 S-2 (4-6)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**5600**		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	2. Barium	**56000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	3. Cadmium	**590**		µg/kg	50	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	4. Chromium	**17000**		µg/kg	500	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	5. Copper	**13000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	6. Lead	**150000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	7. Selenium	**550**		µg/kg	200	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	8. Silver	U		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	9. Zinc	**160000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA

Mercury by CVAAS **Aliquot ID: A05200-004** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-2 S-2 (4-6)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-2 S-2 (4-6)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-2 S-2 (4-6)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:50**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-2 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
17. Chloroform	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	390	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	390	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	390	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
45. Styrene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-2 S-2 (4-6)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:50**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-2 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	77	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 12:58	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-2 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-2 S-2 (4-6)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:50**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-2 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U	F+	µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 11:39	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-006** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-3 S-2 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**15**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-006** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-3 S-2 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**2300**		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	2. Barium	**23000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	3. Cadmium	**140**		µg/kg	50	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	4. Chromium	**7300**		µg/kg	500	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	5. Copper	**7000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	6. Lead	**19000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	7. Selenium	**200**		µg/kg	200	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	8. Silver	U		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
	9. Zinc	**22000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA

Mercury by CVAAS **Aliquot ID: A05200-006** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-3 S-2 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A05200-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: GP-3 S-2 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Aroclor-1016	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
	2. Aroclor-1221	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
	3. Aroclor-1232	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
	4. Aroclor-1242	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
	5. Aroclor-1248	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
	6. Aroclor-1254	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
	7. Aroclor-1260	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
‡	8. Aroclor-1262	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES
‡	9. Aroclor-1268	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:24	SF21K17A	JES

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-3 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	2600	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
3. Benzene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
7. Bromoform	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	1300	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
10. n-Butylbenzene	**1300**	E1	µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
11. sec-Butylbenzene	**330**	E1	µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
17. Chloroform	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	1300	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
35. Ethylbenzene	**2900**		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2600	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-3 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	**700**		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	**3200**		µg/kg	330	4.0	11/17/21	VP21K17A	11/17/21 16:13	VP21K17A	JMF
42. MTBE	U		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
43. Naphthalene	**7700**		µg/kg	1300	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
44. n-Propylbenzene	**2300**		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
45. Styrene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
49. Toluene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	520	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	**7100**		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	**22000**		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	**6100**		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
60. m&p-Xylene	**5700**		µg/kg	260	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	130	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF
‡ 62. Xylenes	**5700**		µg/kg	390	4.0	11/16/21	VJ21K16A	11/16/21 13:24	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-3 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-2 (3-5)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:15**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-3 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
14. 2-Methylnaphthalene (SIM)	**5000**		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
15. Naphthalene (SIM)	**6900**		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:04	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-3 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:20**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-007** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-3 S-3 (5-7)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**16**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-007** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-3 S-3 (5-7)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**5000**		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
2. Barium	**47000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
3. Cadmium	**190**		µg/kg	50	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
4. Chromium	**18000**		µg/kg	500	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
5. Copper	**18000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
6. Lead	**13000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
7. Selenium	**320**		µg/kg	200	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
8. Silver	U		µg/kg	100	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA
9. Zinc	**42000**		µg/kg	1000	1000	11/17/21	PT21K17B	11/17/21	T421K17B	CJA

Mercury by CVAAS **Aliquot ID: A05200-007** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-3 S-3 (5-7)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A05200-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: GP-3 S-3 (5-7)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
2. Aroclor-1221	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
3. Aroclor-1232	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
4. Aroclor-1242	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
5. Aroclor-1248	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
6. Aroclor-1254	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
7. Aroclor-1260	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 17:35	SF21K17A	JES

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-3 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:20**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-3 S-3 (5-7)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	2800	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
3. Benzene	**210**		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
7. Bromoform	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	1400	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
10. n-Butylbenzene	**3400**	E1	µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
11. sec-Butylbenzene	**910**	E1	µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
17. Chloroform	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	1400	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
35. Ethylbenzene	**7500**		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2800	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-3 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:20**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-007A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-3 S-3 (5-7)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	**1700**		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	**7100**		µg/kg	330	4.0	11/17/21	VP21K17A	11/17/21 16:40	VP21K17A	JMF
42. MTBE	U		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
43. Naphthalene	**13000**		µg/kg	1400	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
44. n-Propylbenzene	**5800**		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
45. Styrene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
49. Toluene	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	570	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	**15000**		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	**45000**		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	**18000**		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
60. m&p-Xylene	**15000**		µg/kg	280	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
61. o-Xylene	**280**		µg/kg	140	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF
‡ 62. Xylenes	**16000**		µg/kg	420	4.0	11/16/21	VJ21K16A	11/16/21 13:49	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-3 S-3 (5-7)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-3 S-3 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:20**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-3 S-3 (5-7)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
14. 2-Methylnaphthalene (SIM)	**1700**		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
15. Naphthalene (SIM)	**2000**		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:00	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-4 S-2 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-009** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-4 S-2 (5-7)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**15**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-009** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-4 S-2 (5-7)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**3900**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	2. Barium	**41000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	3. Cadmium	**910**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	4. Chromium	**10000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	5. Copper	**14000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	6. Lead	**43000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	7. Selenium	**360**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	9. Zinc	**56000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-009** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-4 S-2 (5-7)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A05200-009** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: GP-4 S-2 (5-7)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Aroclor-1016	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
	2. Aroclor-1221	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
	3. Aroclor-1232	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
	4. Aroclor-1242	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
	5. Aroclor-1248	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
	6. Aroclor-1254	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
	7. Aroclor-1260	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
‡	8. Aroclor-1262	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES
‡	9. Aroclor-1268	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:09	SF21K17A	JES

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-4 S-2 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-009A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-4 S-2 (5-7)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	10. n-Butylbenzene	**87**	E1	µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	11. sec-Butylbenzene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	12. tert-Butylbenzene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	17. Chloroform	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	26. Dichlorodifluoromethane	U		µg/kg	350	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	27. 1,1-Dichloroethane	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	28. 1,2-Dichloroethane	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	32. 1,2-Dichloropropane	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	33. cis-1,3-Dichloropropene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	34. trans-1,3-Dichloropropene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	35. Ethylbenzene	**110**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
	37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-4 S-2 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-009A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-4 S-2 (5-7)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	**400**		µg/kg	350	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
43. Naphthalene	**520**		µg/kg	350	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
44. n-Propylbenzene	**330**		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
45. Styrene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
49. Toluene	**170**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	69	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	**320**		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	**1800**		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	**580**		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
60. m&p-Xylene	**1100**		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
61. o-Xylene	**310**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF
‡ 62. Xylenes	**1400**		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 14:15	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-009** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-4 S-2 (5-7)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-4 S-2 (5-7)**	Chain of Custody:	**201421**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-009** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-4 S-2 (5-7)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U	F-	µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
14. 2-Methylnaphthalene (SIM)	**1500**		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
15. Naphthalene (SIM)	**730**		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	20	11/17/21	PS21K17E	11/17/21 19:41	S621K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-011** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-5 S-2 (2-4)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**14**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-011** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-5 S-2 (2-4)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**4500**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	2. Barium	**85000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	3. Cadmium	**410**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	4. Chromium	**9600**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	5. Copper	**15000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	6. Lead	**69000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	7. Selenium	**450**		µg/kg	200	500	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	9. Zinc	**100000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-011** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-5 S-2 (2-4)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	**70**		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-011A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-5 S-2 (2-4)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-011A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-5 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
17. Chloroform	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	320	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
45. Styrene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-011A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-5 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	64	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 14:41	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-011** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-5 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	**720**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	**800**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	**1300**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	**390**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
9. Chrysene (SIM)	**820**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
11. Fluoranthene (SIM)	**1400**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	**480**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:25**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-011** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-5 S-2 (2-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	**910**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS
17. Pyrene (SIM)	**1600**		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 04:04	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-3 (4-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:30**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-012** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-5 S-3 (4-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**17**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-012** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-5 S-3 (4-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**3000**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**45000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**230**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**9600**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**9600**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**19000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**230**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**47000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-012** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-5 S-3 (4-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-012A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-5 S-3 (4-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-3 (4-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-012A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-5 S-3 (4-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
17. Chloroform	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
45. Styrene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-3 (4-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-012A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-5 S-3 (4-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 15:07	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-012** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-5 S-3 (4-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-5 S-3 (4-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:30**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-012** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-5 S-3 (4-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:32	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:45**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-014** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**15**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-014** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**3500**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**57000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**220**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**8800**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**8800**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**31000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**270**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**39000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-014** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-014A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:45**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-014A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
17. Chloroform	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
45. Styrene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:45**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-014A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
49. Toluene	**110**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 15:33	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-014** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-2 (2-4)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:45**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-014** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-7 S-2 (2-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/18/21 03:37	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-3 (4.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:50**

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

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

Water (Moisture) Content Dried at 105 ± 5°C — **Aliquot ID: A05200-015** — **Matrix: Soil/Solid**
Method: ASTM D2216-10 — **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**10**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS — **Aliquot ID: A05200-015** — **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A — **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**4400**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**31000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**91**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**12000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**9100**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**11000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**390**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**37000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS — **Aliquot ID: A05200-015** — **Matrix: Soil/Solid**
Method: EPA 7471B — **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 — **Aliquot ID: A05200-015A** — **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D — **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	120	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
7. Bromoform	U		µg/kg	120	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-3 (4.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:50**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-015A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
17. Chloroform	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	120	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	300	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	120	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
45. Styrene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-3 (4.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:50**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-015A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	60	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	120	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 15:58	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-015** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-7 S-3 (4.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-7 S-3 (4.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:50**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-015** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-7 S-3 (4.5-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 12:59	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-8 S-1 (2.5-4.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

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

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

Water (Moisture) Content Dried at 105 ± 5°C — **Aliquot ID:** **A05200-016** — **Matrix: Soil/Solid**
Method: ASTM D2216-10 — **Description:** **GP-8 S-1 (2.5-4.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**16**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS — **Aliquot ID:** **A05200-016** — **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A — **Description:** **GP-8 S-1 (2.5-4.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**1900**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	2. Barium	**51000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	3. Cadmium	**240**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	4. Chromium	**13000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	5. Copper	**10000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	6. Lead	**6600**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	7. Selenium	**260**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	9. Zinc	**33000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS — **Aliquot ID:** **A05200-016** — **Matrix: Soil/Solid**
Method: EPA 7471B — **Description:** **GP-8 S-1 (2.5-4.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 — **Aliquot ID:** **A05200-016A** — **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D — **Description:** **GP-8 S-1 (2.5-4.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-8 S-1 (2.5-4.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-016A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-8 S-1 (2.5-4.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
17. Chloroform	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
45. Styrene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-8 S-1 (2.5-4.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-016A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-8 S-1 (2.5-4.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 16:24	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-016** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-8 S-1 (2.5-4.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
3. Anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
9. Chrysene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
12. Fluorene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-8 S-1 (2.5-4.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**12:00**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-016** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-8 S-1 (2.5-4.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS
17. Pyrene (SIM)	U		µg/kg	330	1.0	11/16/21	PS21K16G	11/17/21 13:25	SN21K17A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-9 S-2 (3.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:35**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-019** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-9 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**17**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-019** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-9 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**3100**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	2. Barium	**49000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	3. Cadmium	**190**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	4. Chromium	**13000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	5. Copper	**13000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	6. Lead	**11000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	7. Selenium	**340**		µg/kg	200	500	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	9. Zinc	**34000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-019** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-9 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A05200-019** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: GP-9 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Aroclor-1016	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
	2. Aroclor-1221	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
	3. Aroclor-1232	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
	4. Aroclor-1242	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
	5. Aroclor-1248	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
	6. Aroclor-1254	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
	7. Aroclor-1260	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
‡	8. Aroclor-1262	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES
‡	9. Aroclor-1268	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:21	SF21K17A	JES

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-9 S-2 (3.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:35**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-019A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-9 S-2 (3.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
10. n-Butylbenzene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
17. Chloroform	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-9 S-2 (3.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:35**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-019A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-9 S-2 (3.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
45. Styrene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 16:50	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-019** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-9 S-2 (3.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-9 S-2 (3.5-5.5)**	Chain of Custody:	**201422**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:35**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-019** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-9 S-2 (3.5-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 12:27	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-11 S-2 (3.5-5.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:05**

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

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

Water (Moisture) Content Dried at 105 ± 5°C — **Aliquot ID: A05200-021** — **Matrix: Soil/Solid**
Method: ASTM D2216-10 — **Description: GP-11 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**16**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS — **Aliquot ID: A05200-021** — **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A — **Description: GP-11 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**13000**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	2. Barium	**29000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	3. Cadmium	**170**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	4. Chromium	**9300**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	5. Copper	**9900**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	6. Lead	**7300**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	7. Selenium	**300**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	9. Zinc	**27000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS — **Aliquot ID: A05200-021** — **Matrix: Soil/Solid**
Method: EPA 7471B — **Description: GP-11 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	**63**		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 — **Aliquot ID: A05200-021A** — **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D — **Description: GP-11 S-2 (3.5-5.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-11 S-2 (3.5-5.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-021A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-11 S-2 (3.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
17. Chloroform	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
45. Styrene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-11 S-2 (3.5-5.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-021A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-11 S-2 (3.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
49. Toluene	**230**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	67	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:15	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-021** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-11 S-2 (3.5-5.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-11 S-2 (3.5-5.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:05**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-021** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-11 S-2 (3.5-5.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:33	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-1 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:25**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-022** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-12 S-1 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**21**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-022** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-12 S-1 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Arsenic	**7500**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	2. Barium	**69000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	3. Cadmium	**240**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	4. Chromium	**16000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	5. Copper	**17000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	6. Lead	**43000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	7. Selenium	**340**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
	9. Zinc	**75000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-022** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-12 S-1 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Mercury	**88**		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-022A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-12 S-1 (3-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-1 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:25**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-022A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-12 S-1 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
17. Chloroform	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	380	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	380	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	380	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
45. Styrene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-1 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:25**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-022A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-12 S-1 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	75	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 17:41	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-022** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-12 S-1 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-1 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:25**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-022** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-12 S-1 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:26	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-2 (7-8.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-023** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-12 S-2 (7-8.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**22**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-023** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-12 S-2 (7-8.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**7600**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**77000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**270**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**18000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**21000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**52000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**410**		µg/kg	200	500	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**84000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-023** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-12 S-2 (7-8.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**72**		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-023A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-12 S-2 (7-8.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	160	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
7. Bromoform	U		µg/kg	160	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-2 (7-8.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-023A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-12 S-2 (7-8.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
17. Chloroform	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	160	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	400	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	160	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	400	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	400	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
45. Styrene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-2 (7-8.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-023A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-12 S-2 (7-8.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	80	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	160	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 18:07	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-023** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-12 S-2 (7-8.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-12 S-2 (7-8.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:30**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-023** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-12 S-2 (7-8.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:00	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-13 S-2 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:55**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-025** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-13 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**18**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-025** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-13 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**2700**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**32000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**150**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**9500**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**9000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**5200**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**220**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**26000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-025** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-13 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A05200-025** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: GP-13 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
2. Aroclor-1221	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
3. Aroclor-1232	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
4. Aroclor-1242	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
5. Aroclor-1248	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
6. Aroclor-1254	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
7. Aroclor-1260	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	11/17/21	PS21K17E	11/17/21 18:32	SF21K17A	JES

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-13 S-2 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:55**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-025A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-13 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
10. n-Butylbenzene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
17. Chloroform	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	350	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-13 S-2 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:55**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-025A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-13 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	350	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	350	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
45. Styrene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
49. Toluene	**99**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	71	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
60. m&p-Xylene	**150**		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
61. o-Xylene	**110**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF
‡ 62. Xylenes	**260**		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 18:33	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-025** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-13 S-2 (3-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-13 S-2 (3-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**13:55**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-025** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-13 S-2 (3-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17E	11/18/21 11:32	S621K18A	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-14 S-2 (3.5-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:15**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-027** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-14 S-2 (3.5-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**13**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-027** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-14 S-2 (3.5-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**1700**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**35000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**100**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**11000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**5600**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**4900**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**210**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**27000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-027** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-14 S-2 (3.5-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-027A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-14 S-2 (3.5-5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-14 S-2 (3.5-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:15**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-027A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-14 S-2 (3.5-5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
17. Chloroform	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	330	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
45. Styrene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-14 S-2 (3.5-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:15**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-027A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-14 S-2 (3.5-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	65	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	130	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 18:59	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-027** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-14 S-2 (3.5-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-14 S-2 (3.5-5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:15**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-027** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-14 S-2 (3.5-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 21:53	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-15 S-1 (.25-2)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:45**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-028** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-028** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5500**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**68000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**310**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**18000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**19000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**26000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**500**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**65000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-028** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**74**		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-028A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-15 S-1 (.25-2)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:45**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-028A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
17. Chloroform	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	360	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
45. Styrene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-15 S-1 (.25-2)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:45**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-028A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	72	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:25	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-028** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-15 S-1 (.25-2)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:45**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-028** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-15 S-1 (.25-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:19	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-1 (.5-2.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-030** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-16 S-1 (.5-2.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**21**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-030** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-16 S-1 (.5-2.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**11000**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**120000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**500**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**26000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**23000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**15000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**420**		µg/kg	200	500	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**92000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-030** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-16 S-1 (.5-2.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-030A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-16 S-1 (.5-2.5)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
‡	2. Acrylonitrile	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	7. Bromoform	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
	9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-1 (.5-2.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-030A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-16 S-1 (.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
17. Chloroform	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	370	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	370	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	370	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
45. Styrene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-1 (.5-2.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-030A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-16 S-1 (.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
49. Toluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	74	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 19:51	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-030** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-16 S-1 (.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-1 (.5-2.5)**	Chain of Custody:	**201423**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:25**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-030** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-16 S-1 (.5-2.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 22:46	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-2 (2.5-4)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:30**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-031** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-16 S-2 (2.5-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**18**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-031** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-16 S-2 (2.5-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**3900**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**26000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**99**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**9000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**7400**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**4700**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**260**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**23000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-031** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-16 S-2 (2.5-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-031A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-16 S-2 (2.5-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
‡ 2. Acrylonitrile	U		µg/kg	110	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
3. Benzene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
4. Bromobenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
5. Bromochloromethane	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
6. Bromodichloromethane	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
7. Bromoform	U		µg/kg	110	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
8. Bromomethane	U		µg/kg	200	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
9. 2-Butanone	U		µg/kg	750	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-2 (2.5-4)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-031A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-16 S-2 (2.5-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
11. sec-Butylbenzene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
12. tert-Butylbenzene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
13. Carbon Disulfide	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
15. Chlorobenzene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
16. Chloroethane	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
17. Chloroform	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
18. Chloromethane	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
21. Dibromochloromethane	U		µg/kg	110	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
22. Dibromomethane	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
26. Dichlorodifluoromethane	U		µg/kg	280	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
27. 1,1-Dichloroethane	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
28. 1,2-Dichloroethane	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
32. 1,2-Dichloropropane	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
33. cis-1,3-Dichloropropene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
34. trans-1,3-Dichloropropene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
35. Ethylbenzene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
37. 2-Hexanone	U		µg/kg	2500	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
38. Isopropylbenzene	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
40. Methylene Chloride	U		µg/kg	110	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
42. MTBE	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
43. Naphthalene	U		µg/kg	330	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
44. n-Propylbenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
45. Styrene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-2 (2.5-4)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-031A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-16 S-2 (2.5-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
48. Tetrachloroethene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
49. Toluene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
51. 1,1,1-Trichloroethane	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
53. Trichloroethene	U		µg/kg	55	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
55. 1,2,3-Trichloropropane	U		µg/kg	110	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
59. Vinyl Chloride	U		µg/kg	40	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
60. m&p-Xylene	U		µg/kg	100	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
61. o-Xylene	U		µg/kg	50	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB
‡ 62. Xylenes	U		µg/kg	150	1.0	11/17/21	VJ21K17A	11/17/21 13:33	VJ21K17A	ANB

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-031** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-16 S-2 (2.5-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-16 S-2 (2.5-4)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**14:30**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-031** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-16 S-2 (2.5-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 20:07	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-17 S-2 (4-6)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:05**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A05200-033** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-17 S-2 (4-6)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	11/15/21	MC211115	11/16/21	MC211115	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A05200-033** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-17 S-2 (4-6)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**5200**		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
2. Barium	**150000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
3. Cadmium	**990**		µg/kg	50	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
4. Chromium	**14000**		µg/kg	500	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
5. Copper	**19000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
6. Lead	**450000**		µg/kg	1000	5000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
7. Selenium	**420**		µg/kg	200	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
8. Silver	U		µg/kg	100	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA
9. Zinc	**270000**		µg/kg	1000	1000	11/18/21	PT21K18A	11/18/21	T421K18A	CJA

Mercury by CVAAS **Aliquot ID: A05200-033** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-17 S-2 (4-6)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**75**		µg/kg	50	10	11/15/21	PM21K15C	11/15/21	M721K15A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-033A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-17 S-2 (4-6)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
‡ 2. Acrylonitrile	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
3. Benzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
4. Bromobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
5. Bromochloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
6. Bromodichloromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
7. Bromoform	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
8. Bromomethane	U	V+	µg/kg	200	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
9. 2-Butanone	U		µg/kg	750	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-17 S-2 (4-6)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-033A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-17 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
11. sec-Butylbenzene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
12. tert-Butylbenzene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
13. Carbon Disulfide	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
14. Carbon Tetrachloride	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
15. Chlorobenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
16. Chloroethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
17. Chloroform	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
18. Chloromethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
19. 2-Chlorotoluene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
21. Dibromochloromethane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
22. Dibromomethane	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
26. Dichlorodifluoromethane	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
27. 1,1-Dichloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
28. 1,2-Dichloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
32. 1,2-Dichloropropane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
33. cis-1,3-Dichloropropene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
34. trans-1,3-Dichloropropene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
35. Ethylbenzene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
36. Ethylene Dibromide	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
38. Isopropylbenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
40. Methylene Chloride	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
42. MTBE	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
43. Naphthalene	U		µg/kg	340	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
44. n-Propylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
45. Styrene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-17 S-2 (4-6)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A05200-033A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-17 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
48. Tetrachloroethene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
49. Toluene	**90**		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
51. 1,1,1-Trichloroethane	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
53. Trichloroethene	U		µg/kg	68	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
54. Trichlorofluoromethane	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
55. 1,2,3-Trichloropropane	U		µg/kg	140	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
59. Vinyl Chloride	U		µg/kg	40	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
60. m&p-Xylene	U		µg/kg	100	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
61. o-Xylene	U		µg/kg	50	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF
‡ 62. Xylenes	U		µg/kg	150	1.0	11/16/21	VJ21K16A	11/16/21 20:16	VJ21K16A	JMF

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-033** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-17 S-2 (4-6)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
4. Benzo(a)anthracene (SIM)	**340**		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
6. Benzo(b)fluoranthene (SIM)	**450**		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
9. Chrysene (SIM)	**340**		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
11. Fluoranthene (SIM)	**620**		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-17 S-2 (4-6)**	Chain of Custody:	**201424**
Client Project Name:	**Freud Parcels (62-200414)**	Sample No:		Collect Date:	**11/11/21**
Client Project No:	**62-200414**	Sample Matrix:	**Soil/Solid**	Collect Time:	**11:05**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A05200-033** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-17 S-2 (4-6)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	**370**		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS
17. Pyrene (SIM)	**570**		µg/kg	330	10	11/17/21	PS21K17F	11/17/21 23:12	SN21K17B	ALS

Definitions/ Qualifiers:

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

Exception Summary:

E1 : The reported value is estimated due to the presence of interference.
F- : Recovery from the spiked aliquot exceeds the lower control limit (matrix spike or matrix spike duplicate).
F+ : Recovery from the spiked aliquot exceeds the upper control limit (matrix spike or matrix spike duplicate).
V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Revised COC

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 201421
PAGE 1 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-2004114 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	MI 10 Metals	PCBs	HOLD SAMPLE	Remarks:
11/11/21	10:00		GP-1 S-1 ~~(2-4)~~ (.5-2)	S	2						
	10:05		GP-1 S-2 ~~(4-6)~~ (3-5) RL 11/12/21	S	2	/	/	/			
	9:45		GP-2 S-1 (2-4)	S	2						
	9:50		GP-2 S-2 (4-6)	S	2	/	/	/			
	9:10		GP-3 S-1 (.25-1.5)	S	2						
	9:15		GP-3 S-2 (3-5)	S	2	/	/	/	/		PID reading = 413 ppm
	9:20		GP-3 S-3 (5-7)	S	2	/	/	/	/		PID reading = 211 ppm
	9:30		GP-4 S-1 (2.5-4.5)	S	2						
	9:35		GP-4 S-2 (5-7)	S	2	/	/	/	/		PID reading = 62.5 ppm
	11:20		GP-5 S-1 (.5-2)	S	2						

PARAMETERS

Matrix Code

S	Soil	GW	Ground Water
A	Air	SW	Surface Water
O	Oil	WW	Waste Water
P	Wipe	X	Other: Specify

Deliverables

- Level 2
- Level 3
- Level 4
- X EDD

Comments: *Client emailed sample picks 11-12-21 @ 8:14 -Sserafini and confirmed sample desc via email

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21	Received By:
Relinquished By:	Date/ Time	Received By:
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

Please see back for terms and conditions

Fibertec environmental services

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1914 Holloway Drive
Holt, MI 48842
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Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
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Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 201421
PAGE 1 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-209414 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	MI 10 Metals	PCBs	HOLD SAMPLE	Remarks
11/11/21	10:00		GP-1 S-1 (2-4)	S	2						
	10:05		GP-1 S-2 (4-6)	S	2						
	9:45		GP-2 S-1 (2-4)	S	2						
	9:50		GP-2 S-2 (4-6)	S	2						
	9:10		GP-3 S-1 (.25-1.5)	S	2						
	9:15		GP-3 S-2 (3-5)	S	2						PID reading = 413 ppm
	9:20		GP-3 S-3 (5-7)	S	2						PID reading = 211 ppm
	9:30		GP-4 S-1 (2.5-4.5)	S	2						
	9:35		GP-4 S-2 (5-7)	S	2						PID reading = 62.5ppm
	11:20		GP-5 S-1 (.5-2)	S	2						

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; X EDD

Received By Lab
NOV 12 2021
Initials: CI

Comments:

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21 15:15	Received By: fes
Relinquished By: fes cooler	Date/ Time 11/11/21 16:50	Received By: 11-12-21 0815
Relinquished By:	Date/ Time 11-12-21 0940	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

Received On Ice

Please see back for terms and conditions

Revised COC

Fibertec environmental services

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Geoprobe
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Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 201422
PAGE 2 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-200414 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	MI 10 Metals	PCB's	HOLD SAMPLE
11/11/21	11:25		GP-5 S-2 (2-4)	S	2	/	/	/		
	11:30		GP-5 S-3 (4-5.5)	S	2	/	/	/		
	11:40		GP-7 S-1 (.5-2)	S	2					
	11:45		GP-7 S-2 (2-4)	S	2	/	/	/		
	11:50		GP-7 S-3 (4.5-5.5)	S	2	/	/	/		
	12:00		GP-8 S-1 (2.5-4.5)	S	2	/	/	/		
	12:05		GP-8 S-2 (4.5-6)	S	2					
	1:30		GP-9 S-1 (.25-2)	S	2					
	1:35		GP-9 S-2 (3.5-5.5)	S	2	/	/	/	/	
	1:00		GP-11 S-1 (.25-2)	S	2					

PARAMETERS

Matrix Code

S	Soil	GW	Ground Water
A	Air	SW	Surface Water
O	Oil	WW	Waste Water
P	Wipe	X	Other: Specify

Deliverables

	Level 2
	Level 3
	Level 4
X	EDD

Remarks:

Comments:

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21	Received By:
Relinquished By:	Date/ Time	Received By:
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

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Chain of Custody # 201422
PAGE 2 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-200414 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	MI 10 Metals	PCBs	HOLD SAMPLE
11/11/21	11:25		GP-5 S-2 (2-4)	S	2					
	11:30		GP-5 S-3 (4-5.5)	S	2					
	11:40		GP-7 S-1 (.5-2)	S	2					
	11:45		GP-7 S-2 (2-4)	S	2					
	11:50		GP-7 S-3 (4.5-5.5)	S	2					
	12:00		GP-8 S-1 (2.5-4.5)	S	2					
	12:05		GP-8 S-2 (4.5-6)	S	2					
	1:30		GP-9 S-1 (.25-2)	S	2					
	1:35		GP-9 S-2 (3.5-5.5)	S	2					
	1:00		GP-11 S-1 (.25-2)	S	2					

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; X EDD

Remarks:

Received By Lab
NOV 12 2021
Initials: CT

Comments:

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21 15:15	Received By: FES
Relinquished By: FOR cooler	Date/ Time 11/11/21 16:50	Received By: 11-12-21 0815
Relinquished By:	Date/ Time 11-12-21 0940	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

Received On Ice

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Fibertec environmental services

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Chain of Custody # 201423
PAGE 2 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-200414 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOC's	PAHs	MI 10 Metals	PCB's	HOLD SAMPLE
11/11/21	1:05		GP-11 S-2 (3.5-5.5)	S	2	/	/	/		
	10:25		GP-12 S-1 (3-5)	S	2	/	/	/		
	10:30		GP-12 S-2 (7-8.5)	S	2	/	/	/		
	1:50		GP-13 S-1 (.5-2.5)	S	2					
	1:55		GP-13 S-2 (3-5)	S	2	/	/	/	/	
	2:10		GP-14 S-1 (.5-2.5)	S	2					
	2:15		GP-14 S-2 (3.5-5)	S	2	/	/	/		
	2:45		GP-15 S-1 (.25-2)	S	2	/	/	/		
	2:50		GP-15 S-2 (3-4.5)	S	2					
	2:25		GP-16 S-1 (.5-2.5)	S	2	/	/	/		

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; X EDD

Remarks:

Comments:

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21 1:15	Received By: 1:15
Relinquished By:	Date/ Time	Received By:
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

__X__5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

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Fibertec environmental services

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Geoprobe
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Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 201423
PAGE 3 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-200414 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	MI 10 Metals	PCBs	HOLD SAMPLE
11/11/2	1:05		GP-11 S-2 (3.5-5.5)	S	2					
	10:25		GP-12 S-1 (3-5)	S	2					
	10:30		GP-12 S-2 (7-8.5)	S	2					
	1:50		GP-13 S-1 (.5-2.5)	S	2					
	1:55		GP-13 S-2 (3-5)	S	2					
	2:10		GP-14 S-1 (.5-2.5)	S	2					
	2:15		GP-14 S-2 (3.5-5)	S	2					
	2:45		GP-15 S-1 (.25-2)	S	2					
	2:50		GP-15 S-2 (3-4.5)	S	2					
	2:25		GP-16 S-1 (.5-2.5)	S	2					

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; X EDD

Remarks:

Received By Lab
NOV 12 2021
Initials: CT

Comments:

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21	15:15	Received By: FES
Relinquished By: FES cooler	Date/ Time 11/11/21	16:50	Received By: 11-12-21 0815
Relinquished By:	Date/ Time 11-12-21	0940	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

Received On Ice

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Fibertec environmental services

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Chain of Custody # 201424
PAGE 1 of 1

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-200414 Field Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PAHs	MI 10 Metals	PCBs	HOLD SAMPLE
11/11/21	2:30		GP-16 S-2 (2.5-4)	S	2	/	/	/		
	11:00		GP-17 S-1 (.5-2.5)	S	2					
	11:05		GP-17 S-2 (4-6)	S	2	/	/	/		

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; X EDD

Remarks:

Comments:

Sampled/Relinquished By: Alexandria Brewster	Date/ Time 11/11/21 1:15	Received By:
Relinquished By:	Date/Time	Received By:
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C

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Fibertec environmental services

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Brighton, MI 48116
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Fax: 810 220 3311

Chain of Custody # 201424
PAGE 4 of 4

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 62-200414 Freud Parcels
Email distribution list: candrews@nthconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	MI 10 Metals	PCBs	HOLD SAMPLE
11/11/21	2:30		GP-16 S-2 (2.5-4)	S	2					
	11:00		GP-17 S-1 (.5-2.5)	S	2					
	11:05		GP-17 S-2 (4-6)	S	2					

PARAMETERS

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; X EDD

Remarks:

Received By Lab
NOV 12 2021
Initials: CT

Comments:

Sampled/Relinquished By: Alexandria Provencher	Date/ Time 11/11/21 15:15	Received By: FES 11-12-21 0815
Relinquished By: FES cooler	Date/ Time 11/11/21 16:50	Received By:
Relinquished By:	Date/ Time 11-12-21 0940	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A05200

Temperature upon receipt at Lab: 4.4°C Received On Ice

Please see back for terms and conditions

PM21K15C: Method Blank (MB)

EPA 7471B

Run Time: PM21K15C.MB 11/15/2021 13:43 [M721K15A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Mercury	U		50

PM21K15C: Laboratory Control Sample (LCS)

EPA 7471B

Run Time: PM21K15C.LCS: 11/15/2021 13:44 [M721K15A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	µg/kg	µg/kg	%	%	
Mercury	200	190	95	85-115	

PS21K16G: Method Blank (MB) — EPA 8270E

Run Time: PS21K16G.MB 11/17/2021 09:53 [SN21K17A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acenaphthene (SIM)	U		330
Acenaphthylene (SIM)	U		330
Anthracene (SIM)	U		330
Benzo(a)anthracene (SIM)	U		330
Benzo(a)pyrene (SIM)	U		330
Benzo(b)fluoranthene (SIM)	U		330
Benzo(ghi)perylene (SIM)	U		330
Benzo(k)fluoranthene (SIM)	U		330
Chrysene (SIM)	U		330
Dibenzo(a,h)anthracene (SIM)	U		330
Fluoranthene (SIM)	U		330
Fluorene (SIM)	U		330
Indeno(1,2,3-cd)pyrene (SIM)	U		330
2-Methylnaphthalene (SIM)	U		330
Naphthalene (SIM)	U		330
Phenanthrene (SIM)	U		330
Pyrene (SIM)	U		330
2-Fluorobiphenyl(S)	*62*		*49-115*
1-Fluoronaphthalene(S)	*58*		*46-114*
4-Terphenyl-d14(S)	*80*		*48-117*

PS21K16G: Laboratory Control Sample (LCS)

EPA 8270E

Run Time: PS21K16G.LCS: 11/17/2021 10:19 [SN21K17A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	µg/kg	µg/kg	%	%	
Acenaphthene (SIM)	5330	3700	69	35-93	
Acenaphthylene (SIM)	5330	3710	70	33-100	
Anthracene (SIM)	5330	4090	77	43-91	
Benzo(a)anthracene (SIM)	5330	4700	88	47-102	
Benzo(a)pyrene (SIM)	5330	5040	94	45-117	
Benzo(b)fluoranthene (SIM)	5330	5440	102	48-121	
Benzo(ghi)perylene (SIM)	5330	4220	79	48-111	
Benzo(k)fluoranthene (SIM)	5330	5150	96	52-117	
Chrysene (SIM)	5330	4830	91	51-108	
Dibenzo(a,h)anthracene (SIM)	5330	4570	86	51-113	
Fluoranthene (SIM)	5330	4250	80	50-101	
Fluorene (SIM)	5330	4160	78	40-97	
Indeno(1,2,3-cd)pyrene (SIM)	5330	4790	90	54-122	
2-Methylnaphthalene (SIM)	5330	3240	61	30-95	
Naphthalene (SIM)	5330	3220	60	27-87	
Phenanthrene (SIM)	5330	4210	79	41-92	
Pyrene (SIM)	5330	4570	86	46-109	
2-Fluorobiphenyl(S)			*67*	*49-115*	
1-Fluoronaphthalene(S)			*59*	*46-114*	
4-Terphenyl-d14(S)			*83*	*48-117*	

PS21K17E: Method Blank (MB) — EPA 8082A

Run Time: PS21K17E.MB 11/17/2021 17:02 [SF21K17A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Aroclor-1016	U		100
Aroclor-1260	U		100
Decachlorobiphenyl-PCB(S)	*84*		*40-143*
2,4,5,6-Tetrachloro-m-xylene-PCB(S)	*67*		*42-133*

PS21K17E: Method Blank (MB) — EPA 8270E

Run Time: PS21K17E.MB 11/17/2021 17:50 [S621K17B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acenaphthene (SIM)	U		330
Acenaphthylene (SIM)	U		330
Anthracene (SIM)	U		330
Benzo(a)anthracene (SIM)	U		330
Benzo(a)pyrene (SIM)	U		330
Benzo(b)fluoranthene (SIM)	U		330
Benzo(ghi)perylene (SIM)	U		330
Benzo(k)fluoranthene (SIM)	U		330
Chrysene (SIM)	U		330
Dibenzo(a,h)anthracene (SIM)	U		330
Fluoranthene (SIM)	U		330
Fluorene (SIM)	U		330
Indeno(1,2,3-cd)pyrene (SIM)	U		330
2-Methylnaphthalene (SIM)	U		330
Naphthalene (SIM)	U		330
Phenanthrene (SIM)	U		330
Pyrene (SIM)	U		330
2-Fluorobiphenyl(S)	*68*		*49-115*
1-Fluoronaphthalene(S)	*68*		*46-114*
4-Terphenyl-d14(S)	*75*		*48-117*

PS21K17E: Laboratory Control Sample (LCS) — EPA 8082A

Run Time: PS21K17E.LCS: 11/17/2021 17:13 [SF21K17A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aroclor-1016	667	466	70	60-120	
Aroclor-1260	667	464	70	60-120	
Decachlorobiphenyl-PCB(S)			*73*	*40-143*	
2,4,5,6-Tetrachloro-m-xylene-PCB(S)			*53*	*42-133*	

PS21K17E: Laboratory Control Sample (LCS) — EPA 8270E

Run Time: PS21K17E.LCS: 11/17/2021 18:18 [S621K17B]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene (SIM)	5330	3790	71	35-93	
Acenaphthylene (SIM)	5330	4040	76	33-100	
Anthracene (SIM)	5330	3860	72	43-91	
Benzo(a)anthracene (SIM)	5330	4440	83	47-102	
Benzo(a)pyrene (SIM)	5330	5080	95	45-117	
Benzo(b)fluoranthene (SIM)	5330	5450	102	48-121	
Benzo(ghi)perylene (SIM)	5330	4270	80	48-111	
Benzo(k)fluoranthene (SIM)	5330	5270	99	52-117	
Chrysene (SIM)	5330	4320	81	51-108	
Dibenzo(a,h)anthracene (SIM)	5330	4390	82	51-113	
Fluoranthene (SIM)	5330	4340	81	50-101	
Fluorene (SIM)	5330	4230	79	40-97	
Indeno(1,2,3-cd)pyrene (SIM)	5330	5070	95	54-122	
2-Methylnaphthalene (SIM)	5330	3760	71	30-95	
Naphthalene (SIM)	5330	3740	70	27-87	
Phenanthrene (SIM)	5330	4040	76	41-92	
Pyrene (SIM)	5330	4440	83	46-109	
2-Fluorobiphenyl(S)			*69*	*49-115*	
1-Fluoronaphthalene(S)			*68*	*46-114*	
4-Terphenyl-d14(S)			*68*	*48-117*	

PS21K17F: Method Blank (MB)

EPA 8270E

Run Time: PS21K17F.MB 11/17/2021 18:21 [SN21K17B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acenaphthene (SIM)	U		330
Acenaphthylene (SIM)	U		330
Anthracene (SIM)	U		330
Benzo(a)anthracene (SIM)	U		330
Benzo(a)pyrene (SIM)	U		330
Benzo(b)fluoranthene (SIM)	U		330
Benzo(ghi)perylene (SIM)	U		330
Benzo(k)fluoranthene (SIM)	U		330
Chrysene (SIM)	U		330
Dibenzo(a,h)anthracene (SIM)	U		330
Fluoranthene (SIM)	U		330
Fluorene (SIM)	U		330
Indeno(1,2,3-cd)pyrene (SIM)	U		330
2-Methylnaphthalene (SIM)	U		330
Naphthalene (SIM)	U		330
Phenanthrene (SIM)	U		330
Pyrene (SIM)	U		330
2-Fluorobiphenyl(S)	*76*		*49-115*
1-Fluoronaphthalene(S)	*75*		*46-114*
4-Terphenyl-d14(S)	*82*		*48-117*

PS21K17F: Laboratory Control Sample (LCS) — EPA 8270E

Run Time: PS21K17F.LCS: 11/17/2021 18:47 [SN21K17B]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	µg/kg	µg/kg	%	%	
Acenaphthene (SIM)	5330	4050	76	35-93	
Acenaphthylene (SIM)	5330	4010	75	33-100	
Anthracene (SIM)	5330	4280	80	43-91	
Benzo(a)anthracene (SIM)	5330	4390	82	47-102	
Benzo(a)pyrene (SIM)	5330	4860	91	45-117	
Benzo(b)fluoranthene (SIM)	5330	5410	102	48-121	
Benzo(ghi)perylene (SIM)	5330	4930	92	48-111	
Benzo(k)fluoranthene (SIM)	5330	4710	88	52-117	
Chrysene (SIM)	5330	4680	88	51-108	
Dibenzo(a,h)anthracene (SIM)	5330	5000	94	51-113	
Fluoranthene (SIM)	5330	4550	85	50-101	
Fluorene (SIM)	5330	4460	84	40-97	
Indeno(1,2,3-cd)pyrene (SIM)	5330	4810	90	54-122	
2-Methylnaphthalene (SIM)	5330	3490	65	30-95	
Naphthalene (SIM)	5330	3680	69	27-87	
Phenanthrene (SIM)	5330	4500	84	41-92	
Pyrene (SIM)	5330	4790	90	46-109	
2-Fluorobiphenyl(S)			*70*	*49-115*	
1-Fluoronaphthalene(S)			*63*	*46-114*	
4-Terphenyl-d14(S)			*80*	*48-117*	

PT21K17B: Method Blank (MB) — EPA 6020A

Run Time: PT21K17B.MB 11/17/2021 12:42 [T421K17B]

Analyte	MB Result µg/kg	MB Qualifier	MB RDL µg/kg
Arsenic	U		100
Barium	U		1000
Cadmium	U		50
Chromium	U		500
Copper	U		1000
Lead	U		1000
Selenium	U		200
Silver	U		100
Zinc	U		1000

PT21K17B: Laboratory Control Sample (LCS) — EPA 6020A

Run Time: PT21K17B.LCS: 11/17/2021 12:44 [T421K17B]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10000	10300	103	85-115	
Barium	50000	52000	104	85-115	
Cadmium	10000	10300	103	85-115	
Chromium	20000	20500	103	85-115	
Copper	20000	20700	103	85-115	
Lead	20000	20600	103	85-115	
Selenium	10000	10200	102	85-115	
Silver	10000	10700	107	85-115	
Zinc	50000	50700	101	85-115	

PT21K18A: Method Blank (MB)

EPA 6020A

Run Time: PT21K18A.MB 11/18/2021 11:47 [T421K18A]

Analyte	MB Result µg/kg	MB Qualifier	MB RDL µg/kg
Arsenic	U		100
Barium	U		1000
Cadmium	U		50
Chromium	U		500
Copper	U		1000
Lead	U		1000
Selenium	221	*	200
Selenium	U		200
Silver	U		100
Zinc	U		1000

PT21K18A: Laboratory Control Sample (LCS)

EPA 6020A

Run Time: PT21K18A.LCS: 11/18/2021 11:48 [T421K18A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10000	10300	103	85-115	
Barium	50000	53100	106	85-115	
Cadmium	10000	10200	102	85-115	
Chromium	20000	20500	102	85-115	
Copper	20000	21200	106	85-115	
Lead	20000	20200	101	85-115	
Selenium	10000	9770	98	85-115	
Silver	10000	10700	107	85-115	
Zinc	50000	51900	104	85-115	

VJ21K16A: Method Blank (MB)

EPA 8260D

Run Time: VJ21K16A.MB 11/16/2021 10:49 [VJ21K16A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acetone	U		1000
Acrylonitrile	U		100
Benzene	U		50
Bromobenzene	U		100
Bromochloromethane	U		100
Bromodichloromethane	U		100
Bromoform	U		100
Bromomethane	U		200
2-Butanone	U		750
n-Butylbenzene	U		50
sec-Butylbenzene	U		50
tert-Butylbenzene	U		50
Carbon Disulfide	U		250
Carbon Tetrachloride	U		50
Chlorobenzene	U		50
Chloroethane	U		250
Chloroform	U		50
Chloromethane	U		250
2-Chlorotoluene	U		50
1,2-Dibromo-3-chloropropane (SIM)	U		250
Dibromochloromethane	U		100
Dibromomethane	U		250
1,2-Dichlorobenzene	U		100
1,3-Dichlorobenzene	U		100
1,4-Dichlorobenzene	U		100
Dichlorodifluoromethane	U		250
1,1-Dichloroethane	U		50
1,2-Dichloroethane	U		50
1,1-Dichloroethene	U		50
cis-1,2-Dichloroethene	U		50
trans-1,2-Dichloroethene	U		50
1,2-Dichloropropane	U		50
cis-1,3-Dichloropropene	U		50

VJ21K16A: Method Blank (MB)

EPA 8260D

Run Time: VJ21K16A.MB 11/16/2021 10:49 [VJ21K16A]

Analyte	MB Result µg/kg	MB Qualifier	MB RDL µg/kg
trans-1,3-Dichloropropene	U		50
Ethylbenzene	U		50
Ethylene Dibromide	U		50
2-Hexanone	U		2500
Isopropylbenzene	U		250
4-Methyl-2-pentanone	U		2500
Methylene Chloride	U		100
2-Methylnaphthalene	U		330
MTBE	U		250
Naphthalene	U		330
n-Propylbenzene	U		100
Styrene	U		50
1,1,1,2-Tetrachloroethane	U		100
1,1,2,2-Tetrachloroethane	U		50
Tetrachloroethene	U		50
Toluene	U		50
1,2,4-Trichlorobenzene	U		250
1,1,1-Trichloroethane	U		50
1,1,2-Trichloroethane	U		50
Trichloroethene	U		50
Trichlorofluoromethane	U		100
1,2,3-Trichloropropane	U		100
1,2,3-Trimethylbenzene	U		100
1,2,4-Trimethylbenzene	U		100
1,3,5-Trimethylbenzene	U		100
Vinyl Chloride	U		40
m&p-Xylene	U		100
o-Xylene	U		50
4-Bromofluorobenzene(S)	*98*		*76-127*
Dibromofluoromethane(S)	*99*		*76-126*
1,2-Dichloroethane-d4(S)	*103*		*75-120*
Toluene-d8(S)	*102*		*80-120*

VJ21K16A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VJ21K16A.LCS: 11/16/2021 09:32 [VJ21K16A] VJ21K16A.LCSD: 11/16/2021 09:57 [VJ21K16A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	LCSD Spike Amount	LCSD Result	LCSD Rec.	LCSD Qualifier	RPD	RPD Limits	RPD Qualifier
	µg/kg	µg/kg	%	%		µg/kg	µg/kg	%		%	%	
Acetone	2500	2410	96	50-149		2500	2290	92		4	20	
Acrylonitrile	2500	2580	103	70-130		2500	2600	104		1	20	
Benzene	2500	2360	94	75-125		2500	2300	92		2	20	
Bromobenzene	2500	2360	94	70-120		2500	2420	97		3	20	
Bromochloromethane	2500	2210	88	70-125		2500	2180	87		1	20	
Bromodichloromethane	2500	2250	90	70-130		2500	2230	89		1	20	
Bromoform	2500	2410	97	70-130		2500	2340	94		3	20	
Bromomethane	2500	3130	125	66-134		2500	3070	123		2	20	
2-Butanone	2500	2730	109	67-131		2500	2580	103		6	20	
n-Butylbenzene	2500	2920	117	70-130		2500	2880	115		2	20	
sec-Butylbenzene	2500	2850	114	70-130		2500	2800	112		2	20	
tert-Butylbenzene	2500	2870	115	70-130		2500	2810	112		3	20	
Carbon Disulfide	2500	1980	79	70-130		2500	1910	76		4	20	
Carbon Tetrachloride	2500	2290	91	70-130		2500	2230	89		2	20	
Chlorobenzene	2500	2410	96	75-125		2500	2320	93		3	20	
Chloroethane	2500	2510	100	70-141		2500	2440	98		2	20	
Chloroform	2500	2080	83	80-120		2500	2050	82		1	20	
Chloromethane	2500	2590	104	63-130		2500	2530	101		3	20	
2-Chlorotoluene	2500	2510	101	70-130		2500	2450	98		3	20	
1,2-Dibromo-3-chloropropane (SIM)	2500	2450	98	70-130		2500	2430	97		1	20	
Dibromochloromethane	2500	2220	89	70-130		2500	2220	89		0	20	
Dibromomethane	2500	2410	96	70-130		2500	2380	95		1	20	
1,2-Dichlorobenzene	2500	2560	102	75-120		2500	2550	102		0	20	
1,3-Dichlorobenzene	2500	2580	103	70-125		2500	2520	101		2	20	
1,4-Dichlorobenzene	2500	2410	96	70-125		2500	2380	95		1	20	
Dichlorodifluoromethane	2500	2200	88	65-135		2500	2120	85		3	20	
1,1-Dichloroethane	2500	2220	89	75-125		2500	2180	87		2	20	
1,2-Dichloroethane	2500	2140	86	70-130		2500	2120	85		1	20	
1,1-Dichloroethene	2500	1960	79	75-120		2500	1920	77		3	20	
cis-1,2-Dichloroethene	2500	2340	93	70-125		2500	2300	92		1	20	
trans-1,2-Dichloroethene	2500	2250	90	70-130		2500	2100	84		7	20	
1,2-Dichloropropane	2500	2420	97	80-120		2500	2420	97		0	20	
cis-1,3-Dichloropropene	2500	2510	100	70-125		2500	2470	99		1	20	

VJ21K16A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA 8260D

Run Time: VJ21K16A.LCS: 11/16/2021 09:32 [VJ21K16A] VJ21K16A.LCSD: 11/16/2021 09:57 [VJ21K16A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier	LCSD Spike Amount µg/kg	LCSD Result µg/kg	LCSD Rec. %	LCSD Qualifier	RPD %	RPD Limits %	RPD Qualifier
trans-1,3-Dichloropropene	2500	2590	104	70-125		2500	2580	103		1	20	
Ethylbenzene	2500	2590	104	80-120		2500	2480	99		5	20	
Ethylene Dibromide	2500	2460	98	70-125		2500	2390	96		2	20	
2-Hexanone	2500	3060	122	70-130		2500	2910	116		5	20	
Isopropylbenzene	2500	2850	114	75-130		2500	2760	110		4	20	
4-Methyl-2-pentanone	2500	2680	107	70-130		2500	2550	102		5	20	
Methylene Chloride	2500	2160	86	70-130		2500	2060	82		5	20	
2-Methylnaphthalene	2500	2490	100	61-136		2500	2500	100		0	20	
MTBE	2500	2490	100	70-130		2500	2410	96		4	20	
Naphthalene	2500	2800	112	70-125		2500	2810	113		1	20	
n-Propylbenzene	2500	2700	108	70-130		2500	2650	106		2	20	
Styrene	2500	2600	104	75-125		2500	2510	101		3	20	
1,1,1,2-Tetrachloroethane	2500	2400	96	75-125		2500	2380	95		1	20	
1,1,2,2-Tetrachloroethane	2500	2370	95	70-130		2500	2390	96		1	20	
Tetrachloroethene	2500	2580	103	70-130		2500	2440	98		5	20	
Toluene	2500	2410	96	80-120		2500	2340	94		2	20	
1,2,4-Trichlorobenzene	2500	2750	110	70-130		2500	2780	111		1	20	
1,1,1-Trichloroethane	2500	2270	91	70-130		2500	2160	86		6	20	
1,1,2-Trichloroethane	2500	2360	95	70-125		2500	2350	94		1	20	
Trichloroethene	2500	2460	98	75-125		2500	2360	94		4	20	
Trichlorofluoromethane	2500	2840	114	50-150		2500	2730	109		4	20	
1,2,3-Trichloropropane	2500	2110	84	70-130		2500	2160	86		2	20	
1,2,3-Trimethylbenzene	2500	2560	103	70-130		2500	2530	101		2	20	
1,2,4-Trimethylbenzene	2500	2840	114	70-130		2500	2800	112		2	20	
1,3,5-Trimethylbenzene	2500	2770	111	70-130		2500	2720	109		2	20	
Vinyl Chloride	2500	2560	102	69-120		2500	2480	99		3	20	
m&p-Xylene	5000	5250	105	80-125		5000	5080	102		3	20	
o-Xylene	2500	2740	110	75-125		2500	2640	105		5	20	
4-Bromofluorobenzene(S)			*99*	*76-127*				*99*				
Dibromofluoromethane(S)			*92*	*76-126*				*94*				
1,2-Dichloroethane-d4(S)			*94*	*75-120*				*95*				
Toluene-d8(S)			*98*	*80-120*				*98*				

VP21K17A: Method Blank (MB) — EPA 8260D

Run Time: VP21K17A.MB 11/17/2021 11:23 [VP21K17A]

Analyte	MB Result µg/kg	MB Qualifier	MB RDL µg/kg
2-Methylnaphthalene	U		330
4-Bromofluorobenzene(S)	*99*		*76-127*
Dibromofluoromethane(S)	*96*		*76-126*
1,2-Dichloroethane-d4(S)	*87*		*75-120*
Toluene-d8(S)	*100*		*80-120*

VP21K17A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) — EPA 8260D

Run Time: VP21K17A.LCS: 11/17/2021 09:41 [VP21K17A] VP21K17A.LCSD: 11/17/2021 10:08 [VP21K17A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier	LCSD Spike Amount µg/kg	LCSD Result µg/kg	LCSD Rec. %	LCSD Qualifier	RPD %	RPD Limits %	RPD Qualifier
2-Methylnaphthalene	2500	2580	103	61-136		2500	2510	101		2	20	
4-Bromofluorobenzene(S)			*100*	*76-127*				*99*				
Dibromofluoromethane(S)			*95*	*76-126*				*95*				
1,2-Dichloroethane-d4(S)			*87*	*75-120*				*86*				
Toluene-d8(S)			*98*	*80-120*				*100*				

VP21K18A: Method Blank (MB)

EPA 8260D

Run Time: VP21K18A.MB 11/18/2021 11:44 [VP21K18A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acetone	U		1000
Acrylonitrile	U		100
Benzene	U		50
Bromobenzene	U		100
Bromochloromethane	U		100
Bromodichloromethane	U		100
Bromoform	U		100
Bromomethane	U		200
2-Butanone	U		750
n-Butylbenzene	U		50
sec-Butylbenzene	U		50
tert-Butylbenzene	U		50
Carbon Disulfide	U		250
Carbon Tetrachloride	U		50
Chlorobenzene	U		50
Chloroethane	U		250
Chloroform	U		50
Chloromethane	U		250
2-Chlorotoluene	U		50
1,2-Dibromo-3-chloropropane (SIM)	U		250
Dibromochloromethane	U		100
Dibromomethane	U		250
1,2-Dichlorobenzene	U		100
1,3-Dichlorobenzene	U		100
1,4-Dichlorobenzene	U		100
Dichlorodifluoromethane	U		250
1,1-Dichloroethane	U		50
1,2-Dichloroethane	U		50
1,1-Dichloroethene	U		50
cis-1,2-Dichloroethene	U		50
trans-1,2-Dichloroethene	U		50
1,2-Dichloropropane	U		50
cis-1,3-Dichloropropene	U		50

VP21K18A: Method Blank (MB) — EPA 8260D

Run Time: VP21K18A.MB 11/18/2021 11:44 [VP21K18A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
trans-1,3-Dichloropropene	U		50
Ethylbenzene	U		50
Ethylene Dibromide	U		50
2-Hexanone	U		2500
Isopropylbenzene	U		250
4-Methyl-2-pentanone	U		2500
Methylene Chloride	U		100
2-Methylnaphthalene	U		330
MTBE	U		250
Naphthalene	U		330
n-Propylbenzene	U		100
Styrene	U		50
1,1,1,2-Tetrachloroethane	U		100
1,1,2,2-Tetrachloroethane	U		50
Tetrachloroethene	U		50
Toluene	U		50
1,2,4-Trichlorobenzene	U		250
1,1,1-Trichloroethane	U		50
1,1,2-Trichloroethane	U		50
Trichloroethene	U		50
Trichlorofluoromethane	U		100
1,2,3-Trichloropropane	U		100
1,2,3-Trimethylbenzene	U		100
1,2,4-Trimethylbenzene	U		100
1,3,5-Trimethylbenzene	U		100
Vinyl Chloride	U		40
m&p-Xylene	U		100
o-Xylene	U		50
4-Bromofluorobenzene(S)	*102*		*76-127*
Dibromofluoromethane(S)	*106*		*76-126*
1,2-Dichloroethane-d4(S)	*101*		*75-120*
Toluene-d8(S)	*101*		*80-120*

VP21K18A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) — EPA 8260D

Run Time: VP21K18A.LCS: 11/18/2021 10:25 [VP21K18A] VP21K18A.LCSD: 11/18/2021 10:51 [VP21K18A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	LCSD Spike Amount	LCSD Result	LCSD Rec.	LCSD Qualifier	RPD	RPD Limits	RPD Qualifier
	µg/kg	µg/kg	%	%		µg/kg	µg/kg	%		%	%	
Acetone	2500	3030	121	50-149		2500	2810	113		7	20	
Acrylonitrile	2500	2690	108	70-130		2500	2750	110		2	20	
Benzene	2500	2490	99	75-125		2500	2430	97		2	20	
Bromobenzene	2500	2630	105	70-120		2500	2360	95		10	20	
Bromochloromethane	2500	2640	106	70-125		2500	2650	106		0	20	
Bromodichloromethane	2500	2450	98	70-130		2500	2420	97		1	20	
Bromoform	2500	2370	95	70-130		2500	2370	95		0	20	
Bromomethane	2500	2360	94	66-134		2500	2580	103		9	20	
2-Butanone	2500	2680	107	67-131		2500	2560	102		5	20	
n-Butylbenzene	2500	2850	114	70-130		2500	2730	109		4	20	
sec-Butylbenzene	2500	2760	110	70-130		2500	2700	108		2	20	
tert-Butylbenzene	2500	2730	109	70-130		2500	2640	106		3	20	
Carbon Disulfide	2500	2360	94	70-130		2500	2260	90		4	20	
Carbon Tetrachloride	2500	2350	94	70-130		2500	2230	89		5	20	
Chlorobenzene	2500	2440	98	75-125		2500	2360	94		4	20	
Chloroethane	2500	2250	90	70-141		2500	2180	87		3	20	
Chloroform	2500	2440	98	80-120		2500	2390	96		2	20	
Chloromethane	2500	2730	109	63-130		2500	2640	106		3	20	
2-Chlorotoluene	2500	2640	106	70-130		2500	2620	105		1	20	
1,2-Dibromo-3-chloropropane (SIM)	2500	2430	97	70-130		2500	2500	100		3	20	
Dibromochloromethane	2500	2310	92	70-130		2500	2280	91		1	20	
Dibromomethane	2500	2130	85	70-130		2500	2120	85		0	20	
1,2-Dichlorobenzene	2500	2430	97	75-120		2500	2450	98		1	20	
1,3-Dichlorobenzene	2500	2490	99	70-125		2500	2420	97		2	20	
1,4-Dichlorobenzene	2500	2370	95	70-125		2500	2360	94		1	20	
Dichlorodifluoromethane	2500	2600	104	65-135		2500	2510	100		4	20	
1,1-Dichloroethane	2500	2670	107	75-125		2500	2590	103		4	20	
1,2-Dichloroethane	2500	2290	92	70-130		2500	2280	91		1	20	
1,1-Dichloroethene	2500	2360	95	75-120		2500	2230	89		7	20	
cis-1,2-Dichloroethene	2500	2590	103	70-125		2500	2530	101		2	20	
trans-1,2-Dichloroethene	2500	2470	99	70-130		2500	2390	95		4	20	
1,2-Dichloropropane	2500	2670	107	80-120		2500	2620	105		2	20	
cis-1,3-Dichloropropene	2500	2430	97	70-125		2500	2420	97		0	20	

VP21K18A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) — EPA 8260D

Run Time: VP21K18A.LCS: 11/18/2021 10:25 [VP21K18A] VP21K18A.LCSD: 11/18/2021 10:51 [VP21K18A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	LCSD Spike Amount	LCSD Result	LCSD Rec.	LCSD Qualifier	RPD	RPD Limits	RPD Qualifier
	µg/kg	µg/kg	%	%		µg/kg	µg/kg	%		%	%	
trans-1,3-Dichloropropene	2500	2600	104	70-125		2500	2610	104		0	20	
Ethylbenzene	2500	2600	104	80-120		2500	2480	99		5	20	
Ethylene Dibromide	2500	2450	98	70-125		2500	2400	96		2	20	
2-Hexanone	2500	2820	113	70-130		2500	2700	108		5	20	
Isopropylbenzene	2500	2650	106	75-130		2500	2560	102		4	20	
4-Methyl-2-pentanone	2500	2850	114	70-130		2500	2920	117		3	20	
Methylene Chloride	2500	2410	96	70-130		2500	2390	96		0	20	
2-Methylnaphthalene	2500	2620	105	61-136		2500	2650	106		1	20	
MTBE	2500	2650	106	70-130		2500	2660	106		0	20	
Naphthalene	2500	2640	106	70-125		2500	2640	105		1	20	
n-Propylbenzene	2500	2680	107	70-130		2500	2630	105		2	20	
Styrene	2500	2360	95	75-125		2500	2330	93		2	20	
1,1,1,2-Tetrachloroethane	2500	2440	97	75-125		2500	2380	95		2	20	
1,1,2,2-Tetrachloroethane	2500	2660	106	70-130		2500	2600	104		2	20	
Tetrachloroethene	2500	2340	93	70-130		2500	2240	90		3	20	
Toluene	2500	2490	100	80-120		2500	2450	98		2	20	
1,2,4-Trichlorobenzene	2500	2410	96	70-130		2500	2330	93		3	20	
1,1,1-Trichloroethane	2500	2630	105	70-130		2500	2490	99		6	20	
1,1,2-Trichloroethane	2500	2480	99	70-125		2500	2450	98		1	20	
Trichloroethene	2500	2380	95	75-125		2500	2310	92		3	20	
Trichlorofluoromethane	2500	2360	95	50-150		2500	2260	90		5	20	
1,2,3-Trichloropropane	2500	2540	101	70-130		2500	2550	102		1	20	
1,2,3-Trimethylbenzene	2500	2590	104	70-130		2500	2560	102		2	20	
1,2,4-Trimethylbenzene	2500	2660	106	70-130		2500	2620	105		1	20	
1,3,5-Trimethylbenzene	2500	2740	110	70-130		2500	2670	107		3	20	
Vinyl Chloride	2500	2570	103	69-120		2500	2440	98		5	20	
m&p-Xylene	5000	5070	101	80-125		5000	4880	98		3	20	
o-Xylene	2500	2620	105	75-125		2500	2520	101		4	20	
4-Bromofluorobenzene(S)			*104*	*76-127*				*103*				
Dibromofluoromethane(S)			*105*	*76-126*				*103*				
1,2-Dichloroethane-d4(S)			*98*	*75-120*				*97*				
Toluene-d8(S)			*101*	*80-120*				*101*				

Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).
***:** Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Jacob Sutherlund at 12:34 PM, Nov 23, 2021

REPORT

Phase II Environmental Site Assessment

Proposed Freud Pump Station Isolation Shaft Project

GLWA CS-120, Arcadis Project No. 30047523

Detroit, Michigan

Arcadis of Michigan, LLC
607 Shelby Street, Suite 400
Detroit, MI 48226

January 21, 2022

NTH Project No. 61-200414-02C

NTH Consultants, Ltd.
41780 Six Mile Road, Suite 200
Northville, MI 48168

NTH Consultants, Ltd.

Infrastructure Engineering
and Environmental Services

41780 Six Mile Road, Suite 200
Northville, MI 48168
248.553.6300
248.324.5179 Fax

Jeff Swartz, P.E.
Arcadis of Michigan, LLC
607 Shelby Street, Suite 400
Detroit, Michigan 48226

January 21, 2022
NTH Project No. 61-200414-02C

RE: Report on Phase II Environmental Site Assessment
Proposed Freud Pump Station Isolation Shaft Project
GLWA CS-120, Arcadis Project No. 30047523
707 Conner and 687 Navahoe Streets
Detroit, Michigan

Dear Mr. Swartz:

NTH Consultants, Ltd. (NTH) is pleased to submit this report on Phase II Environmental Site Assessment (ESA) for the above referenced project. This study was performed in accordance with the scope of services outlined in our proposal (NTH Proposal No. 61-200414-DD) dated September 23, 2021.

We appreciate the opportunity to assist you with this project. Should you have any questions or require additional information, please call us at 248-662-2741.

Sincerely,

NTH Consultants, Ltd.

DocuSigned by:
CC62C3695D554CC...

Cliff J. Andrews
Principal Professional

DocuSigned by:
Charles J Roarty Jr
1B505E3681BF483...

Charles J. Roarty, Jr. P.E.
Senior Vice President

CJA/CJR/mam

Attachments

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

This report presents the results of a Phase II Environmental Site Assessment (ESA) for the Proposed Freud Pump Station Isolation Shaft project in Detroit, Michigan. Great Lakes Water Authority (GLWA) intends to purchase the following parcels:

Street Address	Parcel Information
707 Conner Street	The parcel is approximately 2,940 square feet in size and is vacant land.
687 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.

NTH conducted a Phase I ESA for 32 parcels associated with this project and the results were provided in a report dated September 17, 2021.

The Phase II ESA was conducted to evaluate Phase I ESA-identified recognized environmental conditions (RECs) at 707 Conner and 687 Navahoe Street parcels. This study included drilling soil borings and collection and analysis of soil samples.

The results of soil analysis identified Trichloroethylene (volatile organic compound), Phenanthrene (polynuclear aromatic compound), and heavy metals above Michigan Department of Environment, Great Lakes, and Energy (EGLE) – Part 201 generic residential cleanup criteria and screening levels (GRCC). Thus, based upon these results, both parcels are *facility,* as defined by 1994 P.A. 451, Part 201, as amended.

Mercury and Trichloroethylene were detected above EGLE's Nonresidential Volatilization to Indoor Pathway (VIAP) Screening Levels.

This summary should not be reviewed separately from the remainder of the report, and is not a substitute for a thorough review of the entire report.

2.0 INTRODUCTION

NTH Consultants, Ltd. (NTH) was retained by Arcadis of Michigan, LLC (Arcadis) on behalf of Great Lakes Water Authority (GLWA) to conduct a Phase II Environmental Site Assessment (ESA) for the Freud Pump Station Isolation Shaft (FPSIS) project in Detroit, Michigan.

NTH conducted a Phase I ESA for the 32 parcels that are part of FPSIS project, and the results of that study were presented in a report dated September 17, 2021. NTH issued a Report on Phase II Environmental Site Assessment for 13 of the 19 parcels to be acquired by GLWA on December 23, 2021. This Phase II ESA focusses on the following two parcels that are collectively referenced as property in this report:

Street Address	Parcel Information
707 Conner Street	The parcel is approximately 2,940 square feet in size and is vacant land.
687 Navahoe Street	The parcel is approximately 3,500 square feet in size and is vacant land.

NTH's Phase I ESA identified the following evidence of recognized environmental conditions (RECs) at the property:

- The property formerly contained residential structures. It is unknown if all the former structures had basements. The environmental nature and origin of the fill soils used during demolition activity specifically to backfill the basement excavations are unknown.

The objective of this Phase II ESA is to evaluate the RECs identified at the property to the extent possible and where access was feasible.

3.0 SCOPE OF SERVICES

The scope of services for the Phase II ESA comprised of the following key tasks:

- Soil borings were drilled to evaluate the RECs, and to facilitate the collection of soil samples for analyses.
- Soil samples were screened in the field for the presence of total volatile organic compounds (VOCs) using a portable photoionization detector (PID).
- Representative soil samples were submitted to NTH's subcontracted laboratory for analyses.
- Information gathered during the Phase II ESA was evaluated and this report was prepared.

4.0 FIELD INVESTIGATION

Two geoprobe borings, designated as GP-6 and GP-10 were drilled on January 7, 2022, by Fibertec Environmental Services (FES), NTH's subcontractor. The borings were observed by Andrew Kelly of NTH and were advanced to approximate depths of 15 feet. The rationale for the locating the borings is presented in the following table:

Boring No.	Parcel	Rationale
6	707 Conner Street	Evaluate backfill soil used during demolition of former residential dwelling.
10	687 Navahoe Street	Evaluate backfill soil used during demolition of former residential dwelling.

The approximate locations of the borings are depicted on the Boring Location Plan in Appendix A.

The geoprobe drilling technique involves mechanically driving or pushing a 2-inch outside diameter stainless steel sampling tool, with a disposable clear acetate liner, to a desired sampling depth. This technique does not generate soil cuttings because the geoprobe rods push soils away from the rods as the tool string advances through the hole. The geoprobe equipment/tools were steam-cleaned prior to use and between each successive boring location to minimize the possibility of cross-contamination. Upon completion of drilling activities and after collecting samples, the boreholes were backfilled with excavated soil and hydrated bentonite chips.

Soil samples retrieved from the borings were screened in the field with RAE Systems MiniRae™ PID. The PID is capable of detecting total volatile organic compounds (VOCs) to a detection level of one part per million (ppm). The PID was calibrated prior to taking field measurements. The field PID measurements on the soil samples are shown on the boring logs in Appendix A. As indicated, PID readings ranged from less than the detection limit of the instrument to about 1.9 ppm. Petroleum odors were noted in a soil sample S-2 collected from GP-6.

5.0 SUBSURFACE DATA

Subsurface conditions observed in each boring are presented on the Log of Geoprobe Borings in Appendix A. The stratification shown on the boring logs represents the approximate boundary between soil types; the actual transition may be more gradual. In addition, the soil layers are described based on field classification of observed soil samples; accordingly, the soil layer descriptions are considered generalized.

The subsurface conditions at the boring locations were comprised of up to 5 feet of sandy and clayey fill soil mixed with pieces of brick, glass, and wood (typical urban fill). The fill soil is underlain by native clayey soils to the explored depths. No groundwater was encountered in the borings.

6.0 ANALYTICAL TESTING

Soil samples for analysis were selected based on the results of the field screening including visual and olfactory observations, and PID measurements. The samples were placed in laboratory-supplied containers and stored in an ice-chilled cooler. The samples were released to FES' laboratory in accordance with NTH's chain-of-custody procedures.

The analytical parameters included VOCs, polynuclear aromatic compounds (PNAs), and the Michigan 10 metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc). The soil samples submitted for VOC analysis were prepared in the field using Michigan-modified methanol preservation (EPA Method 5035). Laboratory data for the soil samples are included in Appendix B.

7.0 EVALUATION OF ANALYTICAL DATA

The soil analytical data were compared to the EGLE-established GRCC, dated December 30, 2013, and updated June 25, 2018, pursuant to 1994 P.A. 451, Part 201, as amended. Specifically, the results were compared to the Part 201 residential direct contact (DC) criteria, drinking water protection (DWP) criteria, groundwater/surface water interface protection (GSIP) criteria, soil volatilization to indoor air criteria (SVIIC), infinite source soil volatilization to ambient air criteria (VSIC), particulate soil inhalation criteria (PSIC), soil saturation concentration screening levels (SSCSL).

The results of heavy metals analysis were also compared to the statewide default background (SWDB) concentrations as established by EGLE. The results of metals analysis were only compared to GRCC if the concentration of that metal was above the SWDB.

The soil data were also compared to the EGLE's Nonresidential Volatilization to Indoor Pathway (VIAP) Screening Levels, dated September 4, 2020. The sample information and soil analytical data along with Part 201 GRCC are summarized in a table in Appendix A.

7.1 Volatile Organic Compounds (VOCs)

VOCs in the soil samples were either not detected above laboratory method detection limits (MDLs) or where detected, the reported levels were below Part 201 GRCC, except for the following:

Contaminant	Boring / Sample Location	GRCC Exceeded
Trichloroethylene	GP-10 / S-1	DWP

Trichloroethylene was also detected above EGLE's Nonresidential VIAP Screening Level.

7.2 Polynuclear Aromatics (PNAs)

The analyzed PNAs in the soil samples were either not detected above MDLs or where detected, the reported levels were below Part 201 GRCC, except for the following:

Contaminant	Boring / Sample Location	GRCC Exceeded
Phenanthrene	GP-6 / S-2	GSIP

No PNAs were detected above EGLE's Nonresidential VIAP Screening Levels.

7.3 Heavy Metals

The following heavy metals were detected in the soil samples above Part 201 GRCC:

Metal	Boring / Sample Location	GRCC Exceeded
Arsenic	GP-6 / S-1, S-2 and GP-10 / S-1	DWP, GSIP, and DC
Barium	GP-10 / S-2	GSIP
	GP-10 / S-1	DWP and GSIP
Cadmium	GP-10 / S-1	DWP and GSIP
Chromium	GP-6 / S-1	GSIP
	GP-10 / S-1	DWP, GSIP, and PSIC
Copper	GP-6 / S-1	GSIP
Lead	GP-10 / S-2	DC
	GP-10 / S-1	DWP and DC
Mercury	GP-6 / S-2	GSIP
	GP-10 / S-1	DWP and GSIP
Selenium	GP-6 / S-1, S-2 and GP-10 / S-1, S-2	GSIP
Silver	GP-10 / S-1	DWP and GSIP
Zinc	GP-6 / S-2 and GP-10 / S-2	GSIP

Mercury was detected above EGLE's Nonresidential VIAP Screening Levels.

8.0 CONCLUSIONS

NTH's Phase II ESA at the property comprised drilling of two soil borings, and collection and analysis of soil samples to evaluate the RECs identified during the Phase I ESA. The following analytical parameters were identified above Part 201 GRCC in the soil samples:

Parcel	Boring Location	Contaminant	CAS Nos.	Part 201 GRCC Exceeded
707 Conner Street	GP-6	Arsenic	7440-38-2	DWP, GSIP, and DC
		Chromium	7440-47-3	GSIP
		Copper	7440-50-8	GSIP
		Mercury	7439-97-6	GSIP
		Selenium	7782-49-2	GSIP
		Zinc	7440-66-6	GSIP
		Phenanthrene	85-01-8	GSIP
687 Navahoe Street	GP-10	Arsenic	7440-38-2	DWP, GSIP, and DC
		Barium	7440-39-3	DWP and GSIP
		Cadmium	7440-43-9	DWP and GSIP
		Chromium	7440-47-3	DWP, GSIP, and PSIC
		Lead	7439-92-1	DWP and DC
		Mercury	7439-97-6	DWP and GSIP
		Selenium	7782-49-2	GSIP
		Silver	7440-22-4	DWP and GSIP
		Zinc	7440-66-6	GSIP
		Trichloroethylene	79-01-6	DWP

Based on the above data, the property is a *facility,* as defined by 1994 P.A. 451, Part 201, as amended. *According to Section 20101(1)(s) of Part 201 of NREPA (1994 P.A. 451, as amended), facility means any area, place, or property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located.*

Mercury and Trichloroethylene were detected above EGLE's Nonresidential Volatilization to Indoor Pathway (VIAP) Screening Levels. The exceedance of the VIAP Screening Levels is indicative of potential vapor intrusion in enclosed structures or indoor air quality risk. As such, further evaluation comprised of soil gas sampling and analysis will be required if the future development plans for enclosed structures at the property.

GLWA intends to purchase the property. Accordingly, as a new owner, GLWA is eligible to submit a Baseline Environmental Assessment (BEA) report to EGLE, provided this report is prepared within 45 days of acquiring the property. The BEA provides certain statutory protection to the new (non-liable) owners and operators of the *facility* against cleanup liability for pre-existing subsurface contamination.

Under Section 20107a of Part 201, the new owner/operator of the *facility* has the following due care obligations:

1. Prevent exacerbation of the existing contamination.

2. Prevent unacceptable human exposure and mitigate fire and explosion hazards to allow for the intended use of the facility in a manner that protects the public health and safety.

3. Take reasonable precautions against the reasonably foreseeable acts or omissions of a third party.

4. Provide reasonable cooperation, assistance, and access to the persons that are authorized to conduct response activities at the property.

5. Comply with any land use or resource use restrictions established or relied on in connection with the response activities.

6. Not impede the effectiveness or integrity of any land use or resource use restriction.

A Plan for Due Care Compliance meeting the above obligations is recommended once the future development plans for the property are formalized.

9.0 LIMITATIONS

The evaluations and conclusions presented in this report have been made to assist the user of this study in making a reasonable assessment of risk with respect to subsurface contamination at the property from the RECs identified during the Phase I ESA. Considering the limited scope of the present investigation, data collection and testing, our findings should not be construed as absolute certainties, but rather as probabilities based on our professional judgment. NTH cannot offer any form of warranty or guarantee with respect to the type and extent of hazardous substances on the property, other than those identified and discussed in this report.

This report is for the use and benefit of and may be relied upon by Great Lakes Water Authority, Arcadis of Michigan LLC, and any of their respective affiliates, successors, and assigns, in connection with a commercial real estate transaction involving the subject property, and in accordance with the terms and conditions in place between NTH and Arcadis for this project.

This report presents NTH's opinion of the property as of the report's publication date, based on the results of this study and on the information provided during the course of the study. The results of this study may not be relied upon by parties other than those identified above without the prior knowledge and written consent of NTH.

Any authorized third party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report, and with the acknowledgment that actual site conditions may change with time, and that hidden conditions may exist at the property that were not discovered within the authorized scope of the assessment.

Any use by or distribution of this report to any unauthorized third parties, without the express written consent of NTH is at the sole risk and expense of such third party. In the absence of a written agreement with NTH granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against NTH or its officers, employees, vendors, affiliates successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold NTH and its respective officers, employees, vendors, affiliates, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses including attorneys' fees and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

APPENDIX A

Boring Location Plan;

Log of Geoprobe Borings;

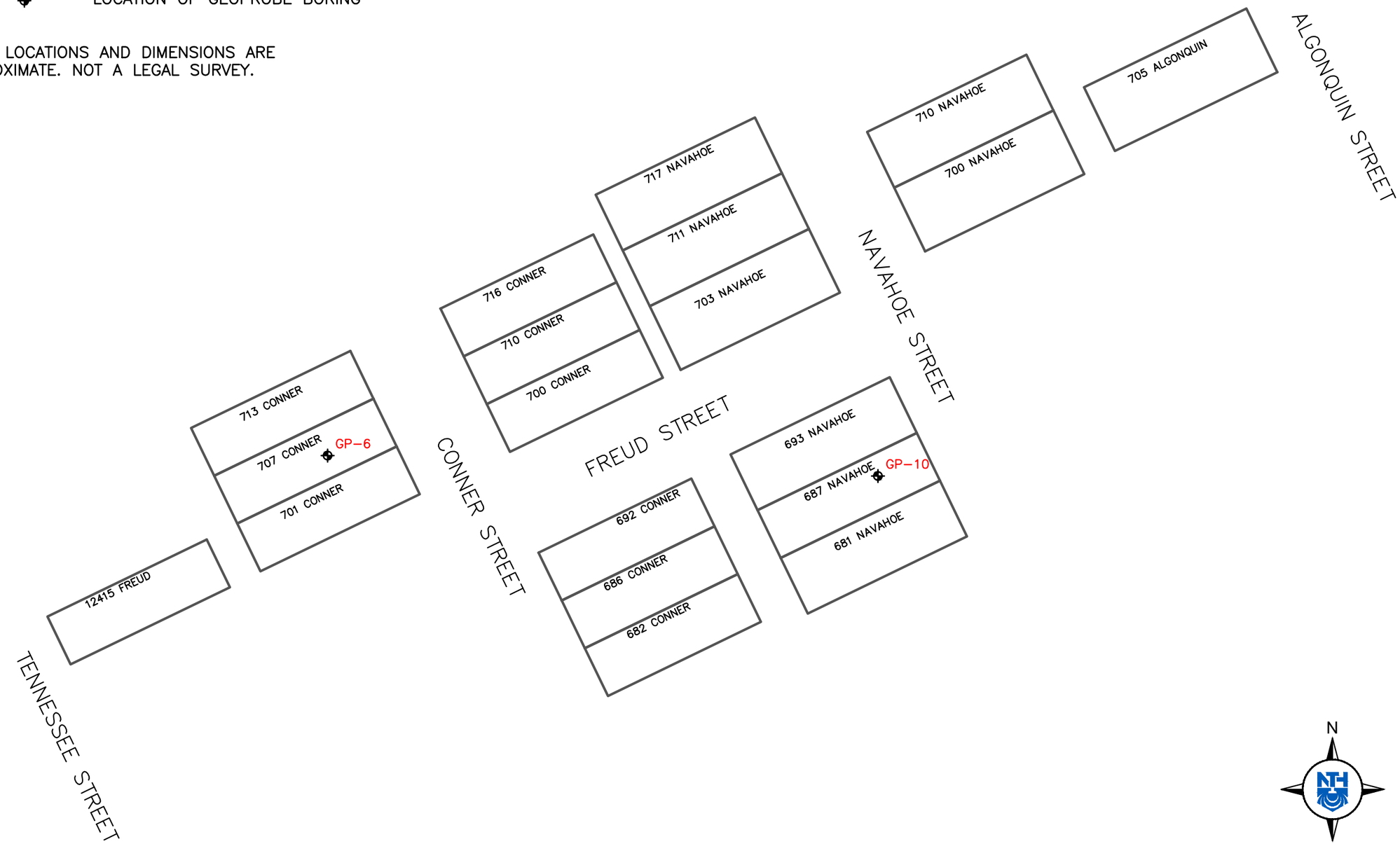
Analytical Summary Table

LEGEND

LIMITS OF STUDY

GP-1 LOCATION OF GEOPROBE BORING

NOTE: LOCATIONS AND DIMENSIONS ARE APPROXIMATE. NOT A LEGAL SURVEY.



N

0 30' 60'

SCALE

NTH Consultants, Ltd.

Infrastructure Engineering and Environmental Services

NTH PROJECT No.: 61-200414-02C	CAD FILE NAME: 200414-BLP(2)
DESIGNED BY: ACK	PLOT DATE: 1/18/2022
DRAWN BY: ACK	DRAWING SCALE: 1" = 60'
CHECKED BY: CJA	INCEPTION DATE: 1/7/2022

BORING LOCATION PLAN

GLWA FREUD PUMP STATION ISOLATION SHAFT
707 CONNER AND 687 NAVAHOE PARCELS
DETROIT, MICHIGAN

FIGURE: 1

PROJECT NO: 61-200414-02C	NTH CONSULTANTS, LTD.	SHEET 1 OF 1

LOG OF GEOPROBE BORINGS

GP NO.	GROUND SURFACE ELEV.	DEPTH (FT)	SOIL DESCRIPTION	DISCRETE SAMPLE INFO.			
				SAMPLE NO.	DEPTH (FT) FROM	DEPTH (FT) TO	PID READING (PPM)
GP-6	N/A	0.0-2.5	**FILL:** BROWN **LOAMY SAND** WITH GRAVEL, AND PIECES OF GLASS AND BRICK		0.0	1.0	<1
					1.0	1.5	<1
				S-1*	1.5	2.5	<1
		2.5-4.0	**FILL:** DARK BROWN **CLAY**		2.5	3.5	<1
					3.5	4.0	<1
		4.0-5.0	**FILL:** BLACK STAINED **LOAM** WITH PIECES OF BRICK AND WOOD (PETROLEUM ODOR)	S-2*	4.0	5.0	1.9
		5.0-11.0	BROWN AND GRAY **CLAY**		5.0	6.0	<1
					6.0	8.0	<1
					8.0	10.0	<1
		11.0-15.0	BROWN **CLAY**		10.0	12.0	<1
					12.0	14.0	<1
					14.0	15.0	<1
			NO GROUNDWATER ENCOUNTERED				
GP-10	N/A	0.0-1.5	**FILL:** DARK BROWN **SAND** WITH GRAVEL, AND PIECES OF GLASS		0.0	1.0	<1
				S-1*	1.0	2.0	<1
		1.5-4.0	**FILL:** DARK BROWN **SANDY CLAY LOAM** WITH PIECES OF BRICK		2.0	3.0	<1
				S-2*	3.0	4.0	<1
		4.0-9.0	BROWN AND GRAY **CLAY**		4.0	5.0	<1
					5.0	6.0	<1
					6.0	8.0	<1
		9.0-13.0	GRAY **CLAY**		8.0	10.0	<1
					10.0	12.0	<1
		13.0-15.0	BROWN **CLAY**		12.0	14.0	<1
					14.0	15.0	<1
			NO GROUNDWATER ENCOUNTERED				

NOTES:

- BORINGS BACKFILLED WITH SOIL CUTTINGS & HYDRATED BENTONITE PELLETS AFTER OBTAINING SOIL AND/OR WATER SAMPLES.
- BORINGS OBSERVED BY A. KELLY OF NTH CONSULTANTS, LTD.
- SOIL CLASSIFICATION BASED SOLELY ON VISUAL OBSERVATION.
- * SAMPLE SUBMITTED FOR ANALYTICAL TESTING.

DRILLED BY: FIBERTEC ENVIRONMENTAL SERVICES **DATE:** JANUARY 7, 2022 **FIGURE NO: 2**

Table 1: SUMMARY OF CHEMICAL ANALYSES
707 Conner Street and 687 Navahoe Street Parcels
NTH Project No. 61-200414-02C

Sample Designation	Sample Depth	Sample Date	Michigan 10 Metals										VOCs				PNAs										
			Arsenic	Barium	Cadmium	Chromium, Total	Copper	Lead	Mercury, Total	Selenium	Silver	Zinc	Ethylbenzene	Toluene	Trichloroethylene	Xylenes	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene
			7440-38-2	7440-39-3	7440-43-9	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7782-49-2	7440-22-4	7440-66-6	100-41-4	108-88-3	79-01-6	1330-20-7	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	218-01-9	206-44-0	193-39-5	85-01-8	129-00-0
GP-6 S-1	(1.5' - 2.5')	01/07/22	**7,800**	**98,000**	**1,200**	**20,000**	**82,000**	**110,000**	**110**	**620**	**130**	**140,000**	<50	<50	<50	<150	<330	**750**	**680**	**1,100**	**530**	**400**	**730**	**1,400**	**530**	**690**	**1,400**
GP-6 S-2	(4' - 5')	01/07/22	**9,600**	**110,000**	**790**	**16,000**	**45,000**	**310,000**	**240**	**860**	**160**	**230,000**	<50	<50	<50	<150	**430**	**1,300**	**1,300**	**1,800**	**890**	**640**	**1,400**	**2,600**	**870**	**2,200**	**2,800**
GP-10 S-1	(1' - 2')	01/07/22	**12,000**	**2,200,000**	**75,000**	**270,000**	<1,000	**1,800,000**	**3,300**	**1,400**	**8,000**	<1,000	**70**	**86**	**360**	**290**	<330	**560**	**510**	**980**	**480**	<330	**630**	**820**	**470**	**530**	**850**
GP-10 S-2	(3' - 4')	01/07/22	**4,100**	**470,000**	**850**	**11,000**	**28,000**	**580,000**	**120**	**1,000**	<100	**540,000**	<50	<50	<50	<150	<330	<330	<330	<330	**360**	<330	<330	<330	<330	<330	<330
PART 201 GENERIC RESIDENTIAL CLEANUP CRITERIA (GRCC)		SWDB	5,800	75,000	1,200	18,000	32,000	21,000	130	410	1,000	47,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		DWP	4,600	1.3E+06	6,000	30,000	5.8E+06	7.0E+05	1,700	4,000	4,500	2.4E+06	1,500	16,000	100	5,600	41,000	NLL	NLL	NLL	NLL	NLL	NLL	7.3E+05	NLL	56,000	4.8E+05
		GSIP	4,600	4.4E+05(G)	3,000(G,X)	3,300	75,000(G)	2.5E+06(G,X)	50 (M); 1.2	400	100 (M); 27	1.7E+05(G	360	5,400	4,000 (X)	980	ID	NLL	NLL	NLL	NLL	NLL	NLL	5,500	NLL	2,100	ID
		SVIIC	NLV	NLV	NLV	NLV	NLV	NLV	48,000	NLV	NLV	NLV	87,000	3.3E+05	1,000	6.3E+06	1.0E+09	NLV	NLV	ID	NLV	NLV	ID	1.0E+09	NLV	2.8E+06	1.0E+09
		VSIC	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	7.2E+05	2.8E+06	11,000	4.6E+07	1.4E+09	NLV	NLV	ID	NLV	NLV	ID	7.4E+08	NLV	1.6E+05	6.5E+08
		VSIC 5M	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	1.0E+06	5.1E+06	25,000	6.1E+07	1.4E+09	NLV	NLV	ID	NLV	NLV	ID	7.4E+08	NLV	1.6E+05	6.5E+08
		VSIC 2M	NLV	NLV	NLV	NLV	NLV	NLV	52,000	NLV	NLV	NLV	2.2E+06	1.2E+07	57,000	1.3E+08	1.4E+09	NLV	NLV	ID	NLV	NLV	ID	7.4E+08	NLV	1.6E+05	6.5E+08
		PSIC	7.2E+05	3.3E+08	1.7E+06	2.6E+05	1.3E+08	1.0E+08	2.0E+07	1.3E+08	6.7E+06	ID	1.0E+10	2.7E+10	1.3E+08	2.9E+11	6.7E+10	ID	1.5E+06	ID	8.0E+08	ID	ID	9.3E+09	ID	6.7E+06	6.7E+09
		DC	7,600	3.7E+07	5.5E+05	2.5E+06	2.0E+07	4.0E+05	1.6E+05	2.6E+06	2.5E+06	1.7E+08	2.2E+07	5.0E+07	1.1E+05	4.1E+08	2.3E+08	20,000	2,000	20,000	2.5E+06	2.0E+05	2.0E+06	4.6E+07	20,000	1.6E+06	2.9E+07
		SSCSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4E+05	2.5E+05	5.0E+05	1.5E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY (VIAP) SCREENING LEVELS			NA	NA	NA	NA	NA	NA	390	NA	NA	NA	340	64,000	4	5,000(J)	2.2E+08	1.1E+07	NA	NA	NA	NA	NA	NA	NA	29,000	4.4E+08

NOTES:

[1] PART 201 CRITERIA EFFECTIVE DATE: JUNE 25, 2018
[2] SAMPLES COLLECTED BY NTH CONSULTANTS PERSONNEL AND ANALYZED BY FIBERTEC ENVIRONMENTAL SERVICES OF HOLT, MICHIGAN.
[3] ALL VALUES PRESENTED AS µG/KG - MICROGRAMS PER KILOGRAM (≈ PARTS PER BILLION).
[4] ID - INADEQUATE DATA TO DEVELOP CRITERION
[5] NLV - CHEMICAL IS NOT LIKELY TO VOLATILIZE UNDER MOST CONDITIONS
[6] NA - NOT APPLICABLE
[7] ND - NOT DETECTED ABOVE LABORATORY REPORTED METHOD DETECTION LIMITS
[8] SWDB - STATE-WIDE DEFAULT BACKGROUND
[9] DWP - RESIDENTIAL DRINKING WATER PROTECTION CRITERIA
[10] GSIP - GROUNDWATER / SURFACE WATER INTERFACE PROTECTION CRITERIA.
[11] SVIIC - SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA.
[12] VSIC - VOLATILE SOIL INHALATION CRITERIA (AMBIENT AIR; INFINITE SOURCE).
[13] VSIC 5M - FINITE VSIC FOR 5 METER SOURCE THICKNESS
[14] VSIC 2M - FINITE VSIC FOR 2 METER SOURCE THICKNESS
[15] PSIC - PARTICULATE SOIL INHALATION CRITERIA
[16] DC - DIRECT CONTACT CRITERIA
[17] SSCSL - SOIL SATURATION CONCENTRATION SCREENING LEVELS
[18] G - AQUATIC TOXICITY IS PROPORTIONAL TO WATER HARDNESS AND/OR pH OF THE RECEIVING SURFACE WATER; THESE GSI VALUES HAVE BEEN CALCULATED BASED ON DEFAULT WATER HARDNESS OF 150 PPM AS A REASONABLE ESTIMATE FOR MOST SURFACE WATER BODIES IN MICHIGAN.
[19] X - THE GSI CRITERION LISTED MAY NOT BE PROTECTIVE FOR SURFACE WATER THAT IS USED AS A DRINKING WATER SOURCE. FOR SOIL THAT MAY LEACH AND RESULT IN A IN CLOSE GROUNDWATER DISCHARGE TO THE GREAT LAKES AND THEIR CONNECTING WATERS OR DISCHARGE IN CLOSE PROXIMITY TO A WATER SUPPLY INTAKE IN INLAND SURFACE WATERS, THE GENERIC GSI CRITERION WOULD BE THE RESIDENTIAL DWP LISTED IN THE TABLE.
[20] - REPORTED CONCENTRATION EXCEEDS ONE OR MORE APPLICABLE PART 201 CRITERIA
[21] - REPORTED CONCENTRATION EXCEEDS VAPOR INTRUSION SCREENING LEVELS

APPENDIX B

Laboratory Data

Fibertec
environmental
services

Friday, January 14, 2022

Fibertec Project Number:	A06294
Project Identification:	61-200414-02C /61-200414-02C
Submittal Date:	01/10/2022

Mr. Cliff Andrews
NTH Consultants, Ltd. - Northville
41780 Six Mile Road
Suite 200
Northville, MI 48168-3459

Dear Mr. Andrews,

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

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

Sincerely,

By Jacob Sutherlund at 1:43 PM, Jan 14, 2022

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-1 (1-2)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:30**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A06294-001** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-10 S-1 (1-2)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**20**		%	1	1.0	01/10/22	MC220110	01/11/22	MC220110	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A06294-001** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-10 S-1 (1-2)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**12000**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
2. Barium	**2200000**		µg/kg	10000	20000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
3. Cadmium	**75000**		µg/kg	50	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
4. Chromium	**270000**		µg/kg	4000	20000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
5. Copper	U		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
6. Lead	**1800000**		µg/kg	4000	20000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
7. Selenium	**1400**		µg/kg	200	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
8. Silver	**8000**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
9. Zinc	U		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA

Mercury by CVAAS **Aliquot ID: A06294-001** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-10 S-1 (1-2)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**3300**		µg/kg	92	40	01/13/22	PM22A12A	01/13/22	M722A13A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-10 S-1 (1-2)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
‡ 2. Acrylonitrile	U		µg/kg	150	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
3. Benzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
4. Bromobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
5. Bromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
6. Bromodichloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
7. Bromoform	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
8. Bromomethane	U		µg/kg	200	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
9. 2-Butanone	U		µg/kg	750	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-1 (1-2)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-10 S-1 (1-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
13. Carbon Disulfide	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 14:36	VP22A11A	ART
14. Carbon Tetrachloride	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
15. Chlorobenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
16. Chloroethane	U		µg/kg	380	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
17. Chloroform	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
18. Chloromethane	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 14:36	VP22A11A	ART
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
21. Dibromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
22. Dibromomethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
28. 1,2-Dichloroethane	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
32. 1,2-Dichloropropane	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
33. cis-1,3-Dichloropropene	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
35. Ethylbenzene	**70**		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
37. 2-Hexanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
38. Isopropylbenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
40. Methylene Chloride	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
42. MTBE	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
43. Naphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
44. n-Propylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
45. Styrene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-1 (1-2)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:30**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-001A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-10 S-1 (1-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
48. Tetrachloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
49. Toluene	**86**		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
52. 1,1,2-Trichloroethane	U		µg/kg	76	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
53. Trichloroethene	**360**		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
59. Vinyl Chloride	U		µg/kg	40	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
60. m&p-Xylene	**200**		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
61. o-Xylene	**89**		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART
‡ 62. Xylenes	**290**		µg/kg	150	1.0	01/10/22	VP22A10A	01/10/22 14:02	VP22A10A	ART

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-10 S-1 (1-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
4. Benzo(a)anthracene (SIM)	**560**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
5. Benzo(a)pyrene (SIM)	**510**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
6. Benzo(b)fluoranthene (SIM)	**980**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
7. Benzo(ghi)perylene (SIM)	**480**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
9. Chrysene (SIM)	**630**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
11. Fluoranthene (SIM)	**820**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	**470**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-1 (1-2)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:30**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-001** **Matrix: Soil/Solid**

Method: EPA 3546/EPA 8270E **Description: GP-10 S-1 (1-2)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	**530**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS
17. Pyrene (SIM)	**850**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 14:18	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-2 (3-4)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A06294-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-10 S-2 (3-4)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Percent Moisture (Water Content)	**26**		%	1	1.0	01/10/22	MC220110	01/11/22	MC220110	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A06294-002** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-10 S-2 (3-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Arsenic	**4100**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
2. Barium	**470000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
3. Cadmium	**850**		µg/kg	50	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
4. Chromium	**11000**		µg/kg	500	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
5. Copper	**28000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
6. Lead	**580000**		µg/kg	1000	5000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
7. Selenium	**1000**		µg/kg	200	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
8. Silver	U		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
9. Zinc	**540000**		µg/kg	2500	5000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA

Mercury by CVAAS **Aliquot ID: A06294-002** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-10 S-2 (3-4)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**120**		µg/kg	50	10	01/12/22	PM22A12A	01/13/22	M722A13A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-10 S-2 (3-4)**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
‡	2. Acrylonitrile	U		µg/kg	170	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	3. Benzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	4. Bromobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	5. Bromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	6. Bromodichloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	7. Bromoform	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	8. Bromomethane	U		µg/kg	200	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
	9. 2-Butanone	U		µg/kg	750	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-2 (3-4)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-10 S-2 (3-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
13. Carbon Disulfide	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 15:03	VP22A11A	ART
14. Carbon Tetrachloride	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
15. Chlorobenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
16. Chloroethane	U		µg/kg	430	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
17. Chloroform	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
18. Chloromethane	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 15:03	VP22A11A	ART
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
21. Dibromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
22. Dibromomethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
28. 1,2-Dichloroethane	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
32. 1,2-Dichloropropane	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
33. cis-1,3-Dichloropropene	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
35. Ethylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
37. 2-Hexanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
38. Isopropylbenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
40. Methylene Chloride	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
42. MTBE	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
43. Naphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
44. n-Propylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
45. Styrene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-2 (3-4)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-10 S-2 (3-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
48. Tetrachloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
49. Toluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
52. 1,1,2-Trichloroethane	U		µg/kg	85	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
53. Trichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
59. Vinyl Chloride	U		µg/kg	43	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
60. m&p-Xylene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
61. o-Xylene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART
‡ 62. Xylenes	U		µg/kg	150	1.0	01/10/22	VP22A10A	01/10/22 14:28	VP22A10A	ART

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-10 S-2 (3-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
7. Benzo(ghi)perylene (SIM)	**360**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
9. Chrysene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
11. Fluoranthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-10 S-2 (3-4)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:35**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-002** **Matrix: Soil/Solid**

Method: EPA 3546/EPA 8270E **Description: GP-10 S-2 (3-4)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS
17. Pyrene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:08	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-1 (1.5-2.5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A06294-003** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**14**		%	1	1.0	01/10/22	MC220110	01/11/22	MC220110	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A06294-003** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**7800**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
2. Barium	**98000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
3. Cadmium	**1200**		µg/kg	50	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
4. Chromium	**20000**		µg/kg	500	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
5. Copper	**82000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
6. Lead	**110000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
7. Selenium	**620**		µg/kg	200	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
8. Silver	**130**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
9. Zinc	**140000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA

Mercury by CVAAS **Aliquot ID: A06294-003** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**110**		µg/kg	50	10	01/12/22	PM22A12A	01/13/22	M722A13A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
‡ 2. Acrylonitrile	U		µg/kg	130	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
3. Benzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
4. Bromobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
5. Bromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
6. Bromodichloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
7. Bromoform	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
8. Bromomethane	U		µg/kg	200	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
9. 2-Butanone	U		µg/kg	750	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-1 (1.5-2.5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
13. Carbon Disulfide	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 15:30	VP22A11A	ART
14. Carbon Tetrachloride	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
15. Chlorobenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
16. Chloroethane	U		µg/kg	320	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
17. Chloroform	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
18. Chloromethane	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 15:30	VP22A11A	ART
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
21. Dibromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
22. Dibromomethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
28. 1,2-Dichloroethane	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
32. 1,2-Dichloropropane	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
33. cis-1,3-Dichloropropene	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
35. Ethylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
37. 2-Hexanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
38. Isopropylbenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
40. Methylene Chloride	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
42. MTBE	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
43. Naphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
44. n-Propylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
45. Styrene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-1 (1.5-2.5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-003A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
48. Tetrachloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
49. Toluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
52. 1,1,2-Trichloroethane	U		µg/kg	65	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
53. Trichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
59. Vinyl Chloride	U		µg/kg	40	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
60. m&p-Xylene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
61. o-Xylene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART
‡ 62. Xylenes	U		µg/kg	150	1.0	01/10/22	VP22A10A	01/10/22 14:55	VP22A10A	ART

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-6 S-1 (1.5-2.5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
3. Anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
4. Benzo(a)anthracene (SIM)	**750**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
5. Benzo(a)pyrene (SIM)	**680**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
6. Benzo(b)fluoranthene (SIM)	**1100**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
7. Benzo(ghi)perylene (SIM)	**530**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
8. Benzo(k)fluoranthene (SIM)	**400**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
9. Chrysene (SIM)	**730**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
11. Fluoranthene (SIM)	**1400**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	**530**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-1 (1.5-2.5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-1**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:00**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-003** **Matrix: Soil/Solid**

Method: EPA 3546/EPA 8270E **Description: GP-6 S-1 (1.5-2.5)**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
16. Phenanthrene (SIM)	**690**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS
17. Pyrene (SIM)	**1400**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 16:36	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-2 (4-5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: A06294-004** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**14**		%	1	1.0	01/10/22	MC220110	01/11/22	MC220110	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: A06294-004** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**9600**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
2. Barium	**110000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
3. Cadmium	**790**		µg/kg	50	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
4. Chromium	**16000**		µg/kg	500	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
5. Copper	**45000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
6. Lead	**310000**		µg/kg	1000	2000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
7. Selenium	**860**		µg/kg	200	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
8. Silver	**160**		µg/kg	100	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA
9. Zinc	**230000**		µg/kg	1000	1000	01/13/22	PT22A13A	01/13/22	T422A13A	CJA

Mercury by CVAAS **Aliquot ID: A06294-004** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**240**		µg/kg	50	10	01/12/22	PM22A12A	01/13/22	M722A13A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: A06294-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8082A **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
2. Aroclor-1221	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
3. Aroclor-1232	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
4. Aroclor-1242	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
5. Aroclor-1248	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
6. Aroclor-1254	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
7. Aroclor-1260	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
‡ 8. Aroclor-1262	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES
‡ 9. Aroclor-1268	U		µg/kg	100	5.0	01/11/22	PS22A11F	01/12/22 13:10	SF22A12A	JES

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-2 (4-5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
‡ 2. Acrylonitrile	U		µg/kg	130	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
3. Benzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
4. Bromobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
5. Bromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
6. Bromodichloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
7. Bromoform	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
8. Bromomethane	U		µg/kg	200	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
9. 2-Butanone	U		µg/kg	750	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
10. n-Butylbenzene	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
13. Carbon Disulfide	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 15:56	VP22A11A	ART
14. Carbon Tetrachloride	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
15. Chlorobenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
16. Chloroethane	U		µg/kg	340	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
17. Chloroform	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
18. Chloromethane	U		µg/kg	250	1.0	01/11/22	VP22A11A	01/11/22 15:56	VP22A11A	ART
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
21. Dibromochloromethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
22. Dibromomethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
28. 1,2-Dichloroethane	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
32. 1,2-Dichloropropane	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
33. cis-1,3-Dichloropropene	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
35. Ethylbenzene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
37. 2-Hexanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-2 (4-5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: A06294-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
39. 4-Methyl-2-pentanone	U		µg/kg	2500	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
40. Methylene Chloride	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
42. MTBE	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
43. Naphthalene	U		µg/kg	330	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
44. n-Propylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
45. Styrene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
48. Tetrachloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
49. Toluene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
52. 1,1,2-Trichloroethane	U		µg/kg	67	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
53. Trichloroethene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
59. Vinyl Chloride	U		µg/kg	40	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
60. m&p-Xylene	U		µg/kg	100	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
61. o-Xylene	U		µg/kg	50	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART
‡ 62. Xylenes	U		µg/kg	150	1.0	01/10/22	VP22A10A	01/10/22 15:22	VP22A10A	ART

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
3. Anthracene (SIM)	**430**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
4. Benzo(a)anthracene (SIM)	**1300**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
5. Benzo(a)pyrene (SIM)	**1300**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
6. Benzo(b)fluoranthene (SIM)	**1800**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS

Client Identification:	**NTH Consultants, Ltd. - Northville**	Sample Description:	**GP-6 S-2 (4-5)**	Chain of Custody:	**204402**
Client Project Name:	**61-200414-02C**	Sample No:	**S-2**	Collect Date:	**01/07/22**
Client Project No:	**61-200414-02C**	Sample Matrix:	**Soil/Solid**	Collect Time:	**10:05**

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

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

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: A06294-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: GP-6 S-2 (4-5)**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
7. Benzo(ghi)perylene (SIM)	**890**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
8. Benzo(k)fluoranthene (SIM)	**640**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
9. Chrysene (SIM)	**1400**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
11. Fluoranthene (SIM)	**2600**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
12. Fluorene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
13. Indeno(1,2,3-cd)pyrene (SIM)	**870**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
15. Naphthalene (SIM)	U		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
16. Phenanthrene (SIM)	**2200**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS
17. Pyrene (SIM)	**2800**		µg/kg	330	10	01/12/22	PS22A11F	01/13/22 17:19	S622A13B	ALS

Definitions/ Qualifiers:

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

Exception Summary:

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

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
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Geoprobe

11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Revised COC

Chain of Custody # 204402
PAGE 1 of 1

Client Name: NTH Consultants
Contact Person: Cliff Andrews
Project Name/ Number: 61-200414-02C
Email distribution list: CAndrews@NTHconsultants.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	1&1 10 Metals	PCBs	HOLD SAMPLE
1/7/22	9:30	S-1	GP-10 S-1 (1-2)	S	2	X	X	X		
	9:35	S-2	GP-10 S-2 (3-4)	S	2	X	X	X		
	10:00	S-1	GP-6 S-1 (1.5-2.5)	S	2	X	X	X		
↓	10:05	S-2	GP-6 S-2 (4-5)	S	2	X	X	X	X	

PARAMETERS

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Remarks:

Comments: Samples not received until 1/10/22 @ 8:57am RL

	Date/ Time	Received By:
Sampled/Relinquished By:	1/7/22 10:15	
Relinquished By:	Date/ Time	Received By:
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A06294

Temperature upon receipt at Lab: 1.1°C

Please see back for terms and conditions

Fibertec environmental services

Analytical Laboratory

1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Geoprobe

11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # 204402

PAGE 1 of 1

Client Name: NTH Consultants

Contact Person: Clint Andrews

Project Name/ Number: 61-200414-02C

Email distribution list: CAndrews@NTHConsultants.com

Quote#

Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PARAMETERS: VOCs	PNAs	MI 10 Metals	PCBs	HOLD SAMPLE	Remarks:
1/7/22	9:30	S-1	GP-10 S-1 (1-2)	S	2						
	9:35	S-2	GP-10 S-2 (3-4)	S	2						
	10:00	S-1	GP-6 S-1 (1.5-2.5)	S	2						
	10:05	S-2	GP-6 S-2 (4-5)	S	3						

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Received By Lab
JAN 07 2022
Initials: SS

Comments:

	Date/ Time	Received By:
Sampled/Relinquished By:	1/7/22 10:15	
Relinquished By:	1/7/22	Received By: 1/7/22 2:00
Relinquished By:	1/7/22 15:08	Received By Laboratory: SS

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number: A06294

Temperature upon receipt at Lab: 1.1°C

Received On Ice

Please see back for terms and conditions

PM22A12A: Method Blank (MB) — EPA 7471B

Run Time: PM22A12A.MB 01/13/2022 12:41 [M722A13A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Mercury	U		50

PM22A12A: Laboratory Control Sample (LCS) — EPA 7471B

Run Time: PM22A12A.LCS: 01/13/2022 12:42 [M722A13A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	µg/kg	µg/kg	%	%	
Mercury	200	199	100	85-115	

PS22A11F: Method Blank (MB) — EPA 8082A

Run Time: PS22A11F.MB 01/12/2022 12:25 [SF22A12A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Aroclor-1016	U		100
Aroclor-1260	U		100
Decachlorobiphenyl-PCB(S)	*93*		*40-143*
2,4,5,6-Tetrachloro-m-xylene-PCB(S)	*83*		*42-133*

PS22A11F: Method Blank (MB) — EPA 8270E

Run Time: PS22A11F.MB 01/13/2022 11:04 [S622A13B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acenaphthene (SIM)	U		330
Acenaphthylene (SIM)	U		330
Anthracene (SIM)	U		330
Benzo(a)anthracene (SIM)	U		330
Benzo(a)pyrene (SIM)	U		330
Benzo(b)fluoranthene (SIM)	U		330
Benzo(ghi)perylene (SIM)	U		330
Benzo(k)fluoranthene (SIM)	U		330
Chrysene (SIM)	U		330
Dibenzo(a,h)anthracene (SIM)	U		330
Fluoranthene (SIM)	U		330
Fluorene (SIM)	U		330
Indeno(1,2,3-cd)pyrene (SIM)	U		330
2-Methylnaphthalene (SIM)	U		330
Naphthalene (SIM)	U		330
Phenanthrene (SIM)	U		330
Pyrene (SIM)	U		330
2-Fluorobiphenyl(S)	*63*		*49-115*
1-Fluoronaphthalene(S)	*63*		*46-114*
4-Terphenyl-d14(S)	*78*		*48-117*

PS22A11F: Laboratory Control Sample (LCS) — EPA 8082A

Run Time: PS22A11F.LCS: 01/12/2022 12:36 [SF22A12A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	µg/kg	µg/kg	%	%	
Aroclor-1016	667	541	81	60-120	
Aroclor-1260	667	479	72	60-120	
Decachlorobiphenyl-PCB(S)			*99*	*40-143*	
2,4,5,6-Tetrachloro-m-xylene-PCB(S)			*70*	*42-133*	

PS22A11F: Laboratory Control Sample (LCS) — EPA 8270E

Run Time: PS22A11F.LCS: 01/13/2022 11:59 [S622A13B]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	µg/kg	µg/kg	%	%	
Acenaphthene (SIM)	5330	3000	56	35-93	
Acenaphthylene (SIM)	5330	3080	58	33-100	
Anthracene (SIM)	5330	2900	54	43-91	
Benzo(a)anthracene (SIM)	5330	3250	61	47-102	
Benzo(a)pyrene (SIM)	5330	3810	72	45-117	
Benzo(b)fluoranthene (SIM)	5330	3910	73	48-121	
Benzo(ghi)perylene (SIM)	5330	3230	61	48-111	
Benzo(k)fluoranthene (SIM)	5330	3780	71	52-117	
Chrysene (SIM)	5330	3410	64	51-108	
Dibenzo(a,h)anthracene (SIM)	5330	3250	61	51-113	
Fluoranthene (SIM)	5330	3040	57	50-101	
Fluorene (SIM)	5330	3210	60	40-97	
Indeno(1,2,3-cd)pyrene (SIM)	5330	3570	67	54-122	
2-Methylnaphthalene (SIM)	5330	3010	56	30-95	
Naphthalene (SIM)	5330	2910	55	27-87	
Phenanthrene (SIM)	5330	3150	59	41-92	
Pyrene (SIM)	5330	3380	63	46-109	
2-Fluorobiphenyl(S)			*57*	*49-115*	
1-Fluoronaphthalene(S)			*56*	*46-114*	
4-Terphenyl-d14(S)			*57*	*48-117*	

PT22A13A: Method Blank (MB) — EPA 6020A

Run Time: PT22A13A.MB 01/13/2022 12:49 [T422A13A]

Analyte	MB Result µg/kg	MB Qualifier	MB RDL µg/kg
Arsenic	U		100
Barium	U		1000
Cadmium	U		50
Chromium	U		500
Copper	U		1000
Lead	U		1000
Selenium	U		200
Silver	U		100
Zinc	U		1000

PT22A13A: Laboratory Control Sample (LCS) — EPA 6020A

Run Time: PT22A13A.LCS: 01/13/2022 12:51 [T422A13A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10000	10100	101	85-115	
Barium	50000	50500	101	85-115	
Cadmium	10000	9870	99	85-115	
Chromium	20000	19400	97	85-115	
Copper	20000	20900	104	85-115	
Lead	20000	19700	99	85-115	
Selenium	10000	9890	99	85-115	
Silver	10000	9780	98	85-115	
Zinc	50000	51600	103	85-115	

VP22A10A: Method Blank (MB)

EPA 8260D

Run Time: VP22A10A.MB 01/10/2022 11:22 [VP22A10A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Acetone	U		1000
Acrylonitrile	U		100
Benzene	U		50
Bromobenzene	U		100
Bromochloromethane	U		100
Bromodichloromethane	U		100
Bromoform	U		100
Bromomethane	U		200
2-Butanone	U		750
n-Butylbenzene	U		50
sec-Butylbenzene	U		50
tert-Butylbenzene	U		50
Carbon Tetrachloride	U		50
Chlorobenzene	U		50
Chloroethane	U		250
Chloroform	U		50
2-Chlorotoluene	U		50
1,2-Dibromo-3-chloropropane (SIM)	U		250
Dibromochloromethane	U		100
Dibromomethane	U		250
1,2-Dichlorobenzene	U		100
1,3-Dichlorobenzene	U		100
1,4-Dichlorobenzene	U		100
Dichlorodifluoromethane	U		250
1,1-Dichloroethane	U		50
1,2-Dichloroethane	U		50
1,1-Dichloroethene	U		50
cis-1,2-Dichloroethene	U		50
trans-1,2-Dichloroethene	U		50
1,2-Dichloropropane	U		50
cis-1,3-Dichloropropene	U		50
trans-1,3-Dichloropropene	U		50
Ethylbenzene	U		50

VP22A10A: Method Blank (MB)

EPA 8260D

Run Time: VP22A10A.MB 01/10/2022 11:22 [VP22A10A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/kg		µg/kg
Ethylene Dibromide	U		50
2-Hexanone	U		2500
Isopropylbenzene	U		250
4-Methyl-2-pentanone	U		2500
Methylene Chloride	U		100
2-Methylnaphthalene	U		330
MTBE	U		250
Naphthalene	U		330
n-Propylbenzene	U		100
Styrene	U		50
1,1,1,2-Tetrachloroethane	U		100
1,1,2,2-Tetrachloroethane	U		50
Tetrachloroethene	U		50
Toluene	U		50
1,2,4-Trichlorobenzene	U		250
1,1,1-Trichloroethane	U		50
1,1,2-Trichloroethane	U		50
Trichloroethene	U		50
Trichlorofluoromethane	U		100
1,2,3-Trichloropropane	U		100
1,2,3-Trimethylbenzene	U		100
1,2,4-Trimethylbenzene	U		100
1,3,5-Trimethylbenzene	U		100
Vinyl Chloride	U		40
m&p-Xylene	U		100
o-Xylene	U		50
4-Bromofluorobenzene(S)	*100*		*76-127*
Dibromofluoromethane(S)	*107*		*76-126*
1,2-Dichloroethane-d4(S)	*119*		*75-120*
Toluene-d8(S)	*103*		*80-120*

VP22A10A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) — EPA 8260D

Run Time: VP22A10A.LCS: 01/10/2022 10:02 [VP22A10A] VP22A10A.LCSD: 01/10/2022 10:29 [VP22A10A]

Analyte	LCS Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	LCSD Spike Amount	LCSD Result	LCSD Rec.	LCSD Qualifier	RPD	RPD Limits	RPD Qualifier
	µg/kg	µg/kg	%	%		µg/kg	µg/kg	%		%	%	
Acetone	2500	3040	122	50-149		2500	2510	100		20	20	
Acrylonitrile	2500	2560	102	70-130		2500	2460	98		4	20	
Benzene	2500	2420	97	75-125		2500	2360	94		3	20	
Bromobenzene	2500	2230	89	70-120		2500	2170	87		2	20	
Bromochloromethane	2500	2240	90	70-125		2500	2140	86		5	20	
Bromodichloromethane	2500	2650	106	70-130		2500	2630	105		1	20	
Bromoform	2500	2850	114	70-130		2500	2850	114		0	20	
Bromomethane	2500	2910	117	66-134		2500	3080	123		5	20	
2-Butanone	2500	2540	102	67-131		2500	2610	104		2	20	
n-Butylbenzene	2500	2740	110	70-130		2500	2670	107		3	20	
sec-Butylbenzene	2500	2720	109	70-130		2500	2640	106		3	20	
tert-Butylbenzene	2500	2710	109	70-130		2500	2680	107		2	20	
Carbon Tetrachloride	2500	2900	116	70-130		2500	2800	112		4	20	
Chlorobenzene	2500	2490	100	75-125		2500	2450	98		2	20	
Chloroethane	2500	2810	113	70-141		2500	2790	112		1	20	
Chloroform	2500	2340	93	80-120		2500	2340	94		1	20	
2-Chlorotoluene	2500	2560	103	70-130		2500	2460	99		4	20	
1,2-Dibromo-3-chloropropane (SIM)	2500	2500	100	70-130		2500	2550	102		2	20	
Dibromochloromethane	2500	2510	100	70-130		2500	2500	100		0	20	
Dibromomethane	2500	2570	103	70-130		2500	2530	101		2	20	
1,2-Dichlorobenzene	2500	2430	97	75-120		2500	2410	96		1	20	
1,3-Dichlorobenzene	2500	2500	100	70-125		2500	2430	97		3	20	
1,4-Dichlorobenzene	2500	2480	99	70-125		2500	2430	97		2	20	
Dichlorodifluoromethane	2500	2430	97	65-135		2500	2420	97		0	20	
1,1-Dichloroethane	2500	2320	93	75-125		2500	2290	92		1	20	
1,2-Dichloroethane	2500	2690	107	70-130		2500	2700	108		1	20	
1,1-Dichloroethene	2500	2450	98	75-120		2500	2030	81		19	20	
cis-1,2-Dichloroethene	2500	2510	100	70-125		2500	2510	100		0	20	
trans-1,2-Dichloroethene	2500	2730	109	70-130		2500	2410	96		13	20	
1,2-Dichloropropane	2500	2530	101	80-120		2500	2520	101		0	20	
cis-1,3-Dichloropropene	2500	2510	100	70-125		2500	2490	100		0	20	
trans-1,3-Dichloropropene	2500	2880	115	70-125		2500	2900	116		1	20	
Ethylbenzene	2500	2680	107	80-120		2500	2620	105		2	20	

VP22A10A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) — EPA 8260D

Run Time: VP22A10A.LCS: 01/10/2022 10:02 [VP22A10A] VP22A10A.LCSD: 01/10/2022 10:29 [VP22A10A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier	LCSD Spike Amount µg/kg	LCSD Result µg/kg	LCSD Rec. %	LCSD Qualifier	RPD %	RPD Limits %	RPD Qualifier
Ethylene Dibromide	2500	2600	104	70-125		2500	2610	104		0	20	
2-Hexanone	2500	2640	106	70-130		2500	2700	108		2	20	
Isopropylbenzene	2500	2870	115	75-130		2500	2780	111		4	20	
4-Methyl-2-pentanone	2500	2640	106	70-130		2500	2820	113		6	20	
Methylene Chloride	2500	2620	105	70-130		2500	2210	89		16	20	
2-Methylnaphthalene	2500	2890	116	61-136		2500	2890	116		0	20	
MTBE	2500	2940	118	70-130		2500	2650	106		11	20	
Naphthalene	2500	2700	108	70-125		2500	2660	106		2	20	
n-Propylbenzene	2500	2570	103	70-130		2500	2460	98		5	20	
Styrene	2500	2540	102	75-125		2500	2470	99		3	20	
1,1,1,2-Tetrachloroethane	2500	2680	107	75-125		2500	2650	106		1	20	
1,1,2,2-Tetrachloroethane	2500	2690	108	70-130		2500	2610	104		4	20	
Tetrachloroethene	2500	2540	101	70-130		2500	2480	99		2	20	
Toluene	2500	2610	104	80-120		2500	2530	101		3	20	
1,2,4-Trichlorobenzene	2500	2600	104	70-130		2500	2570	103		1	20	
1,1,1-Trichloroethane	2500	2740	110	70-130		2500	2750	110		0	20	
1,1,2-Trichloroethane	2500	2520	101	70-125		2500	2460	98		3	20	
Trichloroethene	2500	2440	98	75-125		2500	2320	93		5	20	
Trichlorofluoromethane	2500	3200	128	50-150		2500	2900	116		10	20	
1,2,3-Trichloropropane	2500	2660	106	70-130		2500	2690	107		1	20	
1,2,3-Trimethylbenzene	2500	2640	106	70-130		2500	2570	103		3	20	
1,2,4-Trimethylbenzene	2500	2820	113	70-130		2500	2720	109		4	20	
1,3,5-Trimethylbenzene	2500	2760	110	70-130		2500	2660	106		4	20	
Vinyl Chloride	2500	2390	95	69-120		2500	2460	99		4	20	
m&p-Xylene	5000	5590	112	80-125		5000	5480	110		2	20	
o-Xylene	2500	2830	113	75-125		2500	2760	111		2	20	
4-Bromofluorobenzene(S)			*108*	*76-127*				*106*				
Dibromofluoromethane(S)			*98*	*76-126*				*100*				
1,2-Dichloroethane-d4(S)			*117*	*75-120*				*115*				
Toluene-d8(S)			*101*	*80-120*				*101*				

VP22A11A: Method Blank (MB) — EPA 8260D

Run Time: VP22A11A.MB 01/11/2022 11:03 [VP22A11A]

Analyte	MB Result µg/kg	MB Qualifier	MB RDL µg/kg
Carbon Disulfide	U		250
Chloromethane	U		250
4-Bromofluorobenzene(S)	*98*		*76-127*
Dibromofluoromethane(S)	*102*		*76-126*
1,2-Dichloroethane-d4(S)	*106*		*75-120*
Toluene-d8(S)	*103*		*80-120*

VP22A11A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) — EPA 8260D

Run Time: VP22A11A.LCS: 01/11/2022 09:43 [VP22A11A] VP22A11A.LCSD: 01/11/2022 10:10 [VP22A11A]

Analyte	LCS Spike Amount µg/kg	LCS Result µg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier	LCSD Spike Amount µg/kg	LCSD Result µg/kg	LCSD Rec. %	LCSD Qualifier	RPD %	RPD Limits %	RPD Qualifier
Carbon Disulfide	2500	2050	82	70-130		2500	1910	77		6	20	
Chloromethane	2500	2270	91	63-130		2500	2110	84		8	20	
4-Bromofluorobenzene(S)			*101*	*76-127*				*103*				
Dibromofluoromethane(S)			*96*	*76-126*				*97*				
1,2-Dichloroethane-d4(S)			*101*	*75-120*				*107*				
Toluene-d8(S)			*102*	*80-120*				*101*				

Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).
***:** Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:

By Jacob Sutherlund at 1:49 PM, Jan 14, 2022