From: Byers, Harris <Harris.Byers@stantec.com>
Sent: Friday, December 1, 2023 3:35 PM
To: Adam Tegen; Beggs, Tauren R - DNR; Kaitlin Piazza
Subject: Characterization of Soil at an Agricultural Parcel Along Viebahn Street for Use as Fill in the Phase 2 Redevelopment Area of the River Point District
Attachments: Soil Quality at the Viehbahn Street Property.pdf

Team:

The attached letter summarizes the characterization of soil at an agricultural parcel for use as fill in the Phase 2 Redevelopment Area of the River Point District.

Tauren – a copy was uploaded through the portal for your records. Can we keep this with the 02-36-585491 (LGU) BRRTs case number until the material is placed in its final location and we know which new BRRTS case number to associate the material with.

Sincerely,

Harris Byers, Ph.D.
Sr. Brownfields Project Manager
Contaminant Hydrogeologist / Urban Geochemist

Direct: 414 581-6476
Harris.Byers@stantec.com

Stantec
12080 Corporate Parkway Suite 200
Mequon WI 53092-2649

Stantec Consulting Services Inc.
12080 Corporate Parkway, Suite 200
Mequon WI 53092-2661

December 1, 2023

Project/File: 193709899

Attention: Mr. Adam Tegen
Community Development Director
900 Quay Street
Manitowoc, WI 54220

Reference: Characterization of Soil at an Agricultural Parcel Along Viebahn Street for Use as Fill in the Phase 2 Redevelopment Area of the River Point District Manitowoc, Wisconsin

Dear Mr. Tegen,

On behalf of the City of Manitowoc (the "City"), Stantec Consulting Services Inc. (Stantec) prepared this letter report summarizing the characterization of soil at an agricultural parcel located along Viebahn Street (herein the "Property") prior to importing the material to the River Point District located in Manitowoc, Wisconsin for use in constructing the vegetated engineered barrier in the Phase 2 Redevelopment Area. The locations of the Property (shaded green), the River Point District (shaded yellow), and the Phase 2 Redevelopment Area (outlined black) relative to regional topography are illustrated on **Figure 1.** The location of the Property is illustrated on a 2020 orthophotograph on **Figure 2**.

There are no Bureau for Remediation and Redevelopment Tracking System (BRRTS) activity numbers for the Property (**Figure 2**). The BRRTS activity numbers for the River Point District are:

- 02-36-585491 River Point District - LGU (Environmental Repair Program; ERP)
- 07-36-583000 Railroad Property (Former)

Background

As described in the Stantec (2023a) Site Investigation Report and the (2023b) Analysis of Brownfield Cleanup Alternatives, proposed development in the Phase 2 Redevelopment Area includes construction of townhomes, commercial businesses, rights of ways, and greenspace and paved trails along the Manitowoc River. To accommodate these desired future uses, direct contact and groundwater migration concerns associated with residual soil/fill impacts will be mitigated through construction of engineered surface barriers (caps). Hardscape features of the engineered surface barriers are likely to include building slabs, roadways, sidewalks, and paved trails. Softscape features of the engineered surface barriers are likely to include an 18-inch soil cap consisting of thirteen (13) inches of clean imported granular or clay fill covered with five (5) inches of imported topsoil and vegetation, unless an alternative design is approved.

The City is constructing a stormwater swale (shaded light blue on **Figure 3**) and stormwater pond (shaded dark blue on **Figure 3**) at the Property, which is expected to generate several thousand cubic yards of excess material. Cut material could be suitable for use in constructing the vegetated engineered barrier(s) in the Phase 2 Redevelopment Area. However, as the River Point District is undergoing investigation under the Chapter NR 700 rule series of the Wisconsin Administrative Code (WAC), and at the recommendation of the Wisconsin Department of Natural Resources (WDNR) Project Manager, sampling of representative soil from the Property prior to placement of cut soils on the River Point District property was warranted.

Reference: Characterization of Soil at an Agricultural Parcel Along Viebahn Street for Use as Fill in the Phase 2 Redevelopment Area of the River Point District Manitowoc, Wisconsin

Property History

As illustrated on historic plat maps provided in **Figure 4**, the Property was undeveloped in 1835. The Property was platted by 1878 and is identified as the "Wild Fernwood Farm" by 1893. As illustrated on the plat maps from 1893 and 1921 and confirmed in the orthophotograph taken in 1946 (**Figure 5**), an apparent residential building and an apparent large barn were formerly located at the Site near the intersection of Viebahn St and Hecker Road. Historic orthophotographs (1951, 1973, 1981, 1987, 1992, 2000, 2005, 2008, 2010, 2013, 2015, 2017, 2018, 2020; *historicaerials.com* and 1985, 1992, 2000, 2005, 2006, 2008, 2010, 2011, 2015, 2018, 2021, 2022, and 2023; *earth.google.com*) confirm the Property remained in row-crop agricultural use through the 20th Century and well into the 21st Century. As noted during the soil sampling work completed by Stantec in November 2023, the Property remained in agricultural production through the 2023 growing season.

As noted above, no release are known to exist at the Property. However, multiple known contaminant sources exist within ½-mile of the Property (**Figure 2**).

Soil Sampling Methods

On November 1, 2023, Horizon Construction and Exploration (Horizon) under the supervision of Stantec personnel, advanced eight soil borings (SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7, SB-8) along the proposed stormwater swale and stormwater pond (**Figure 3**). Horizon advanced the soil borings using direct-push sampling methods with a track-mounted Geoprobe® rig. Probe drilling rods and soil sampling equipment were cleaned upon arriving to the Site and were cleaned between use in each borehole with an Alconox® wash and water rinse between soil borings.

Soil borings extended to varying depths that generally corresponded with the probable cut depths. Soil samples were visually and physically examined by Stantec field geologists and observations made of the general lithology (percentages of gravel, sand, silt, and clay), visible layering, evidence of non-native fill/anthropogenic materials, indications of chemical or other staining, odors, and other distinctive features.

Samples of soil were collected from representative soil units and submitted to Eurofins Environment Testing North Central, LLC (Chicago, Illinois) under chain-of-custody procedures for analysis of Resource Conservation and Recovery Act (RCRA) metals (Methods 6010/7471), polycyclic aromatic hydrocarbons (PAHs; Method 9270), and VOCs (Method 8260). The laboratory report is provided in Attachment A, and detected constituents are compared to ch. NR 720 WAC health-based residual contaminant levels (RCLs) and background threshold values (BTVs) on **Table 1**.

General soil lithology is summarized on **Table 2.** A registered land surveyor confirmed the elevation of the ground surface at each soil boring, and soil horizons likely to be cut from the Property based on the proposed grading plan of the stormwater swale and pond and imported to the River Point District are shaded orange on **Table 2**.

Sample Results

Soil Lithology

Soils consisted of topsoil underlain by clay near the western portion of the field (SB-1 through SB-3) with an increase in sand/gravel at depth on the eastern portion of the field (SB-4 through SB-8; **Table 2**). Soils targeted for importing to the River Point District (highlighted orange on **Table 2**) did not have an apparent odor. Saturated soil conditions indicative of shallow groundwater were encountered at depths ranging between 670 and 692 feet above mean sea level (3 and 10 feet below ground surface). This apparent wide variation in saturated soil conditions is likely due to drain tile unevenly draining the field.

Reference: **Characterization of Soil at an Agricultural Parcel Along Viebahn Street for Use as Fill in the Phase 2 Redevelopment Area of the River Point District Manitowoc, Wisconsin**

Soil Laboratory Analytical Results

The soil laboratory analytical report and chain-of-custody form are presented in **Attachment A**. Soil laboratory results are summarized in **Table 1**. In summary, the concentrations of all detected constituents are less than applicable non-industrial direct contact RCLs. Additional discussion of the sample results is provided below.

VOCs (see Table 1*)* – Bromomethane, Chloroform, and Chloromethane were reportedly detected in seven soil samples (plus the trip blank) at concentrations greater than applicable soil to groundwater RCLs; however, these reported values are all qualified with a "J" flag indicating the concentrations are estimated. These constituents are common laboratory artifacts, and given that the constituents are also detected in the trip blank, these results are considered bias high and are not retained as constituents of concern. The reported concentrations of ethylbenzene and xylene in soil are all less than the most conservative applicable RCLs.

As such, VOCs do not appear to limit the potential to reuse this material for constructing the vegetated engineered barriers in the Phase 2 Redevelopment Area at the River Point District

Heavy Metals (see Table 1) – The concentrations of arsenic, barium, cadmium, and lead in soil were all less than applicable BTVs indicating the detected metals, though potentially present at concentrations greater than one or more health-based soil quality standards, are likely indicative of background concentrations.

Selenium was reportedly detected in six soil samples at concentrations greater than the soil to groundwater RCL; however, these reported values are clarified with a "J" flag indicating the concentrations are estimated. Further, these reported values are also clarified with a "B" indicating selenium was detected in the laboratory blank. Therefore, the reported selenium concentrations in the six soil samples are considered bias high.

As such, heavy metals do not appear to limit the potential to reuse this material for constructing the vegetated engineered barriers in the Phase 2 Redevelopment Area at the River Point District

PAHs (see Table 1) – The concentrations of all detected PAHs in topsoil samples were less than the most conservative health-based soil quality standards. As such, PAHs do not appear to limit the potential to reuse this material for construction of the vegetated engineered barrier in the Phase 2 Redevelopment Area at the River Point District

Recommendation

Given that the detected constituents in apparent native/reworked native soils sampled from the Property were less than applicable soil quality standards, excavated material generated from the Property appears appropriate for use in constructing the vegetated engineered barrier in the Phase 2 Redevelopment Area at the River Point District.

If anthropogenic fills and/or soils with apparent impacts (e.g. unusual odor or colors) are encountered at the Property, they will not be imported to the River Point District.

Stantec recommends submitting this letter to WDNR for concurrence with our conclusions prior to placement of excavation spoil from the Property to construct the vegetated engineered barrier in the Phase 2 Redevelopment Area at the River Point District.

Reference: **Characterization of Soil at an Agricultural Parcel Along Viebahn Street for Use as Fill in the Phase 2 Redevelopment Area of the River Point District Manitowoc, Wisconsin**

Sincerely,

STANTEC CONSULTING SERVICES INC.

Madeline Edwards
Contaminant Hydrogeologist
(262) 336-4747
Madeline.edwards@stantec.com

Harris L. Byers, Ph.D.
Sr. Brownfield Project Manager
(414) 581-6476
harris.byers@stantec.com

Stu Gross, P.G.
Sr. Project Manager
(262) 643-9159
stu.gross@stantec.com

Enclosures:
Figures
Tables
Attachment A – Laboratory Report

References:
Stantec, 2023, Site Investigation Report, River Point District Phase 2 Redevelopment Area; Manitowoc, Wisconsin, June 2, 2023.

Stantec, 2023, Analysis of Brownfield Cleanup Alternatives, Phase 2 Redevelopment Area, River Point District; Manitowoc, Wisconsin, July 18, 2023.

Limitations:
The conclusions in this report are Stantec's professional opinion, as of the time of the report, and concerning the scope described in the report. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. This report relates solely to the specific project for which Stantec was retained and the stated purpose for which the report was prepared. This report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from the City and the CDA and third parties in the preparation of this report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This report is intended solely for use by the City and the CDA in accordance with Stantec's contract with the City and the CDA. While this report may be provided to applicable authorities having jurisdiction and others for whom the City and the CDA is responsible, Stantec does not warrant the services to any third party. This report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

FIGURES

Figure No.
1

Title
Viebahn Street Parcel and
the River Point District

Client/Project
Viebahn Street Property
Manitowoc, Wisconsin

0 1,050 2,100
Feet

N

Legend

- Target Parcel
- Phase II Redevelopment Area
- River Point District

Notes

1. Coordinate System: NAD 1983 HARN WISCRS Manitowoc County Feet

Stantec

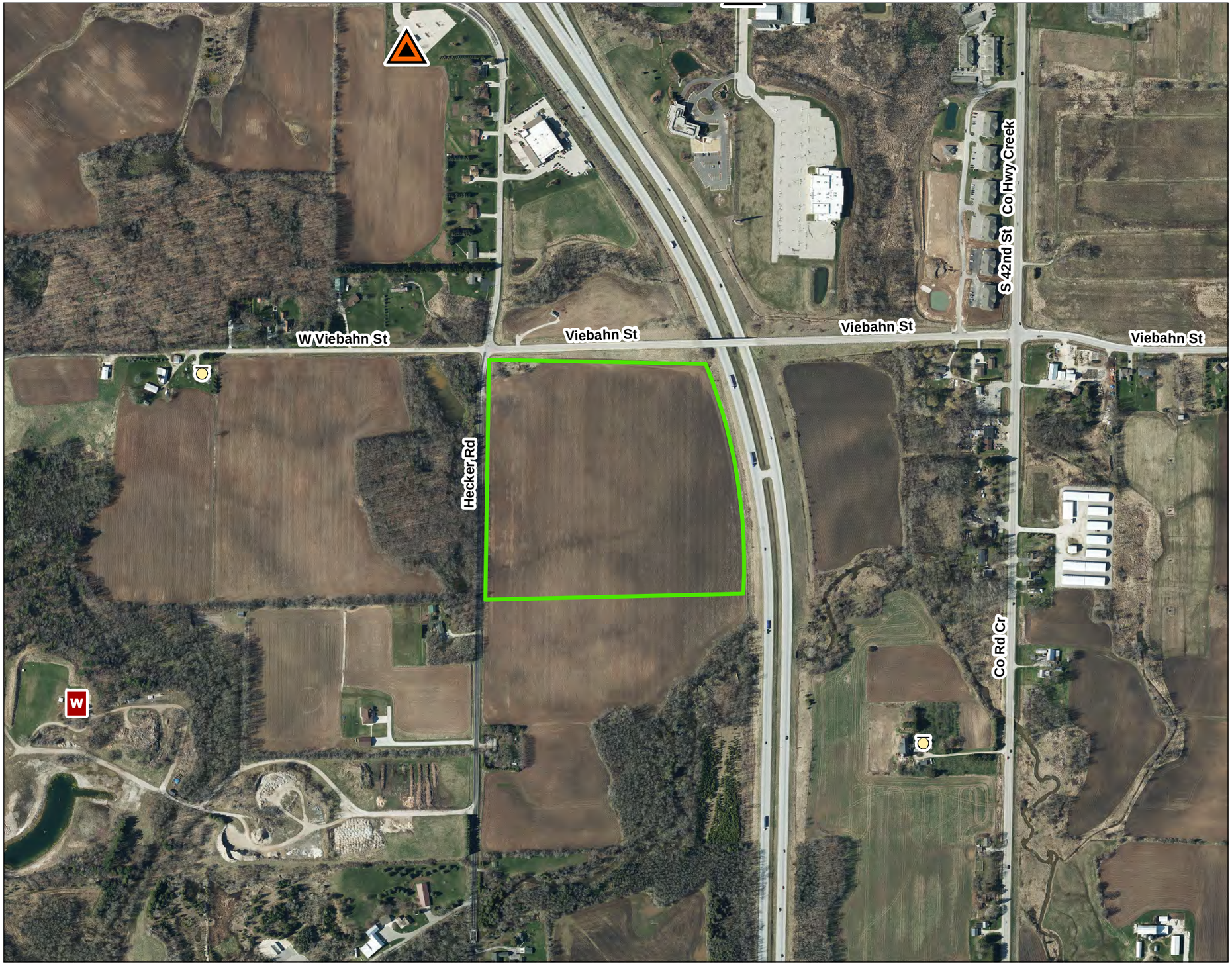


Figure No.
2

Title

Target Property and GIS Brownfield Database Records

Client/Project

Viebahn Street Property
Manitowoc, Wisconsin

0 375 750
Feet

N

Legend

- Target Parcel
- Wisconsin Tank Registry (2)
- WDNR BRRTS Database of Sites (1)
- USEPA Facility Registration System (4)

Notes

1. Coordinate System: NAD 1983 HARN WISCRS Manitowoc County Feet
2. Proposed reuse features digitized from Sheet 15 by RASmith (2023).
3. Geotech borings per lat/long and depth to water listed in Tetratech (2023). Groundwater elevation estimated based on ground contours illustrated on Sheet 15 by RASmith (2023).

Stantec

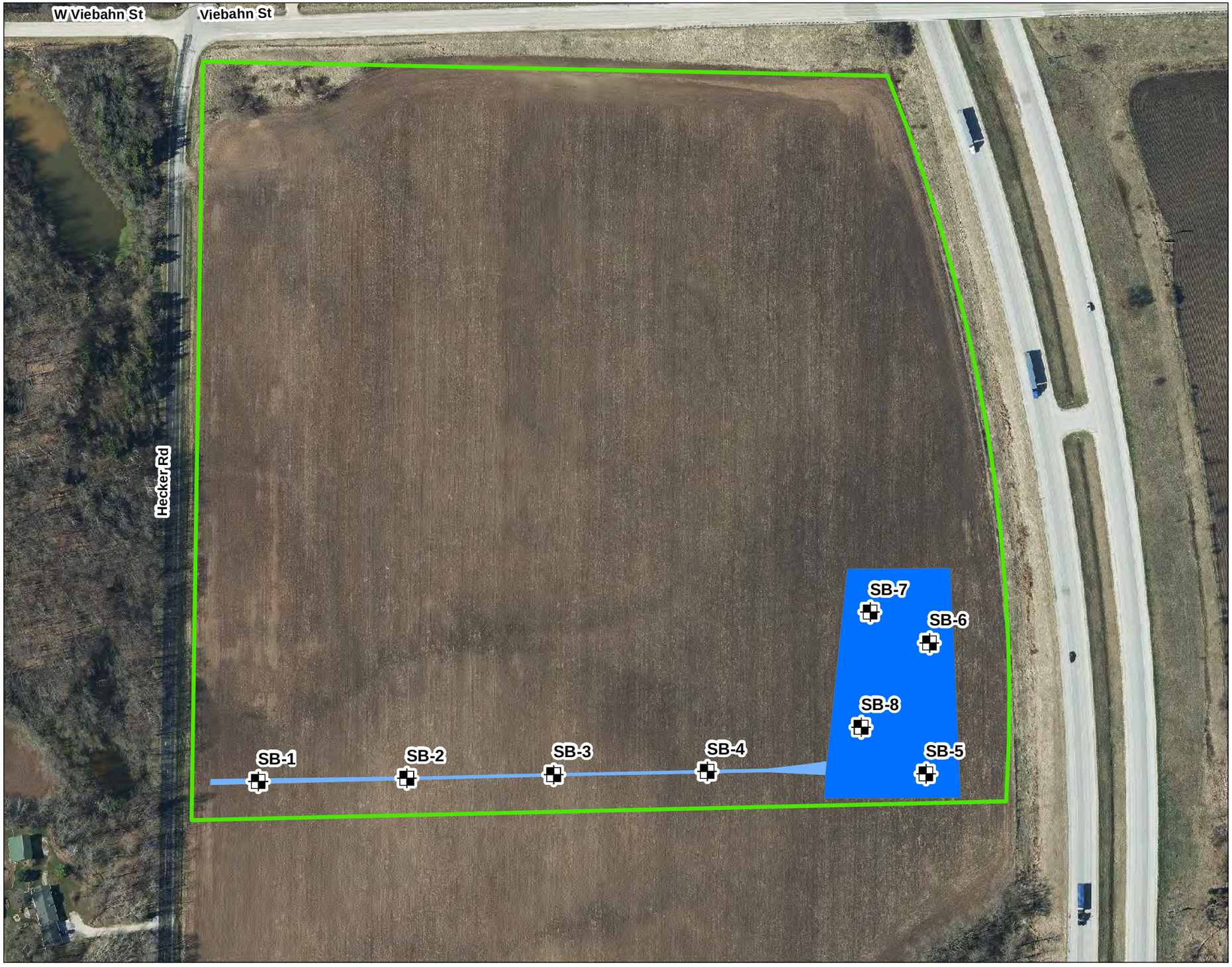


Figure No.
3

Title
Soil Boring Locations

Client/Project
Viebahn Street Property
Manitowoc, Wisconsin

0 120 240 Feet

N

Legend

Target_Parcels

Soil Boring Locations

Soil Boring Locations

Proposed Construction Features

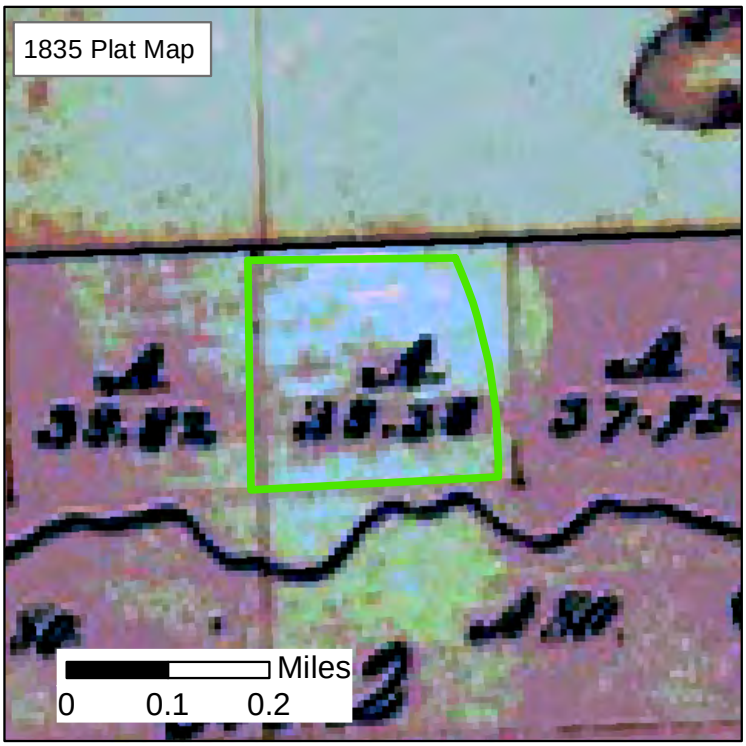
Stormwater Pond

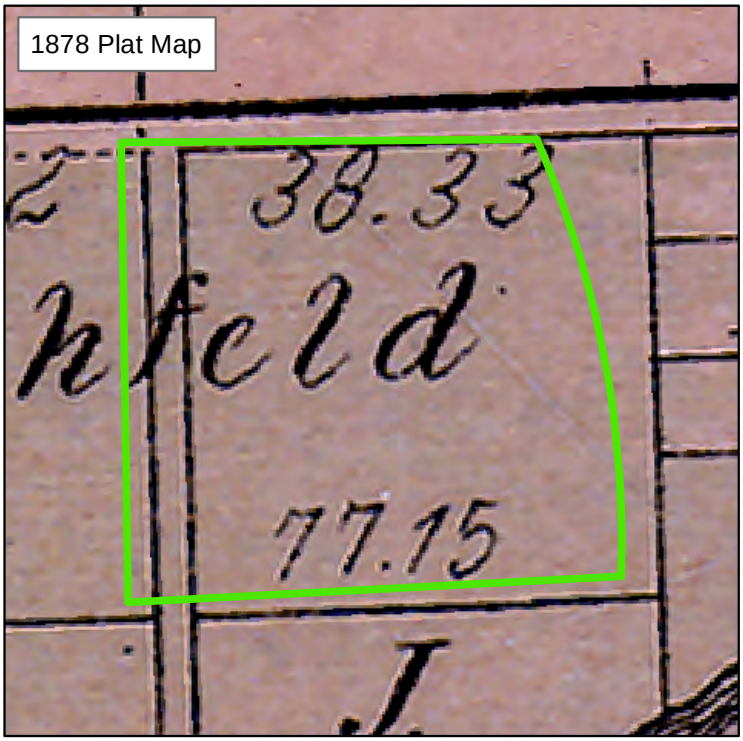
Swale

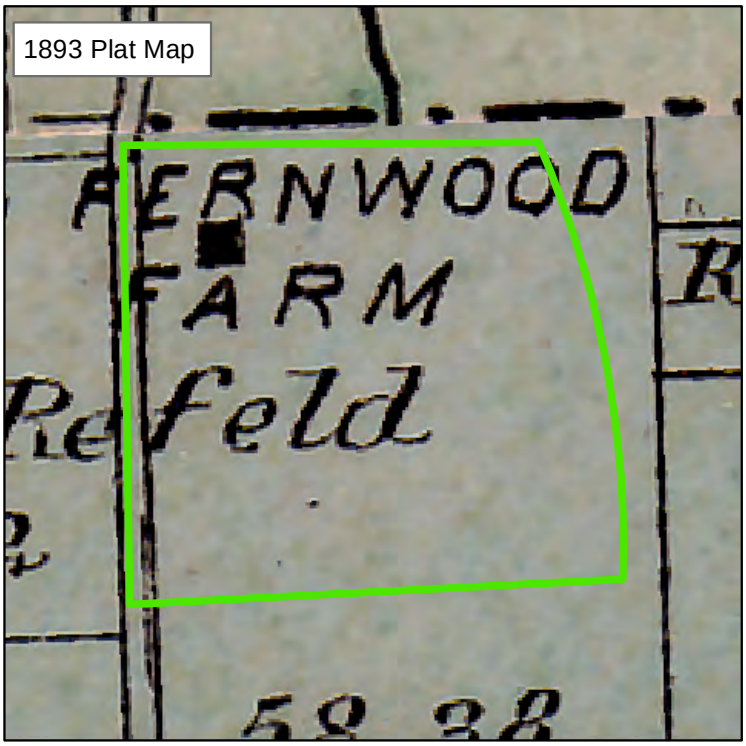
Notes

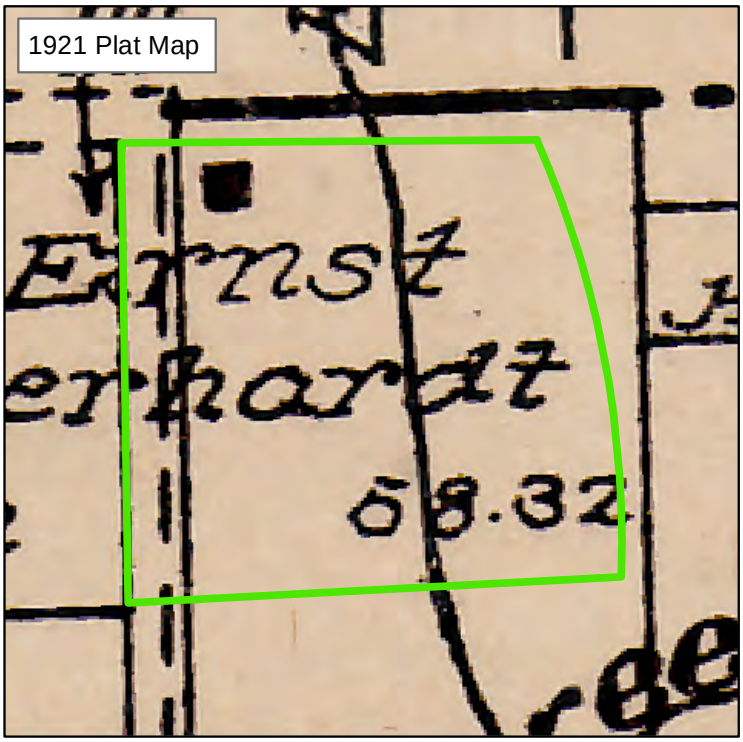
1. Coordinate System: NAD 1983 HARN WISCRS Manitowoc County Feet
2. Proposed reuse features digitized from Sheet 15 by RASmith (2023).
3. Geotech borings per lat/long and depth to water listed in Tetratech (2023). Groundwater elevation estimated based on ground contours illustrated on Sheet 15 by RASmith (2023).

Stantec









State Location

County Location

Legend

Target Parcel

N

0 362.5 725 1,450 Feet

Stantec
12075 Corporate Parkway
Suite 200
Mequon, WI 53092
(262) 643-9174

Viebahn St. Property
Manitowoc, Wisconsin

Figure 4
Historic Plat Maps

DWG: 03.mxd
DATE: November 2023
PROJ NO.

Figure No.
5

Title

Target Property and
1946 Orthophotograph

Client/Project

Viebahn Street Property
Manitowoc, Wisconsin

0 112.5 225
Feet

N

Legend

- Target Parcel

Proposed Construction Features

- Stormwater Pond
- Swale

Notes

1. Coordinate System: NAD 1983 HARN WISCRS Manitowoc County Feet
2. Proposed reuse features digitized from Sheet 15 by RASmith (2023).

Stantec

Stantec

TABLES

Design with community in mind

Table 1
Detected Constituents in Soil
Viebahn Street Property
Manitowoc, Wisconsin

Sample Location	Units	Wisconsin RCL Industrial	Wisconsin RCL Non- Industrial	Wisconsin RCL Groundwater	Wisconsin SBTV	SB-1		SB-2		SB-3		SB-4		SB-5		SB-6	SB-7	SB-8	Trip Blank
Sample Date						11/1/2023		11/1/2023		11/1/2023		11/1/2023		11/1/2023		11/1/2023	11/1/2023	11/1/2023	11/1/2023
Sample Depth (ft bgs)						3-5	7-9	4-5	8-10	3-5	8-10	3.5-5	6-8	0-1	1-2	0-2	0-2	0-2	
Sample Depth (ft amsl)						694-692	690-688	693-692	689-687	687-685	682-680	675-673	672-670	673-672	672-671	673-671	674-672	675-673	--
General Soil Lithology						CH	CH	SW	CH	CL	CH	SW	GPS	TS	CL	TS	TS	TS	
Detected Volatile Organic Compounds																			
Bromomethane	µg/kg	43,000	9,600	5.1	n/v	**82 J *+**	**67 J *+**	**53 J *+**	<56 *+	<56 *+	<52 *+	<49 *+	<42 *+	<64	<51	--	<54	--	**68 J *+**
Chloroform	µg/kg	1,980	454	3.3	n/v	**31 J**	<29	**22 J**	<26	**26 J**	<24	**25 J**	<20	<30	<24	--	<25	--	**19 J**
Chloromethane	µg/kg	669,000	159,000	15.5	n/v	**37 J**	36 J	**31 J**	**30 J**	**29 J**	<21	**21 J**	**22 J**	<26	<21	--	<22	--	**31 J**
Ethylbenzene	µg/kg	35,400	8,020	1,570	n/v	<14	<14	<11	<13	<13	<12	<11	<9.7	36	<12	--	35	--	<9.2
Xylenes, Total	µg/kg	260,000	260,000	3,960	n/v	38	38 J	31	34 J	36	32 J	30 J	25 J	37 J	<14	--	210	--	27
Detected Polycyclic Aromatic Hydrocarbons																			
Benzo[a]anthracene	µg/kg	20,800	1,140	n/v	n/v	<5.5	<5.5	12 J	<5.1	<5.3	17 J	<4.5	<4.5	26 J	<4.9	<5.7	<5.1	<5.5	--
Benzo[a]pyrene	µg/kg	2,110	115	470	n/v	<7.9	<8.0	9.4 J	<7.4	<7.6	<7.1	<6.5	<6.5	29 J	<7.0	<8.2	<7.4	<7.9	--
Benzo[b]fluoranthene	µg/kg	21,100	1,150	478	n/v	<8.8	<8.9	11 J	<8.2	<8.5	12 J	<7.3	<7.3	34 J	<7.8	<9.1	<8.2	<8.8	--
Benzo[g,h,i]perylene	µg/kg	n/v	n/v	n/v	n/v	<13	<13	<12	<12	<13	<12	<11	<11	20 J	<12	<14	<12	<13	--
Fluoranthene	µg/kg	30,100,000	2,390,000	88,878	n/v	<7.6	<7.6	7.7 J	<7.1	<7.3	14 J	<6.2	<6.2	41	8.7 J	9.6 J	<7.1	<7.6	--
Indeno[1,2,3-cd]pyrene	µg/kg	21,100	1,150	n/v	n/v	<11	<11	<9.3	<9.9	<10	<9.5	<8.7	<8.7	18 J	<9.4	<11	<9.9	<11	--
Pyrene	µg/kg	22,600,000	1,790,000	54,546	n/v	<8.1	<8.2	9.4 J	<7.6	<7.8	14 J	<6.7	<6.7	37 J	10 J	10 J	<7.6	<8.1	--
Detected Resource Conservation and Recovery Act Metals																			
Arsenic	mg/kg	**8.3*** [3]	**8.3*** [0.677]	**8.3*** [0.584]	8.3	4.5	2.2	0.71 J	3.1	3	1.7	0.94	0.89 J	8.1	3.8	8.2	3.8	7	--
Barium	mg/kg	100,000	15,300	**364*** [164.8]	364	52	87	11	58	67	31	13	12	83	39	69	54	81	--
Cadmium	mg/kg	985	71.1	**1.07*** [0.752]	1.07	0.16 J B	0.070 J B	0.13 J B	0.073 J B	0.11 J B	0.12 J B	0.096 J B	0.081 J B	0.82 B	0.26 B	0.43 B	0.14 J B	0.30 B	--
Chromium	mg/kg	n/v	n/v	360,000	44	18	35	4.5	23	21	9.5	4.9	7	30	16	19	19	24	--
Lead	mg/kg	800	400	**51.6*** [27]	51.6	7.1	7.5	1.8	7	7.7	3.5	1.2	1.8	17	4.7	12	5.9	10	--
Selenium	mg/kg	5,840	391	0.52	n/v	<0.70	<0.70	<0.61	<0.61	**0.76 J B**	**0.80 J B**	<0.52	**0.86 J B**	**0.73 J B**	**0.98 J B**	**1.4 B**	<0.67	<0.67	--
Mercury	mg/kg	3.13	3.13	0.208	n/v	0.051	0.026	<0.0090	0.055	0.028	<0.0097	<0.0087	<0.0086	0.080 F1	0.018	0.046	0.039	0.07	--

Notes:

Wisconsin SBTV	Wisconsin Soil Background Threshold Value
Wisconsin RCL	Wisconsin Soil Residual Contaminant Levels (Ch. NR 720 WAC, 2018)
	Concentration exceeds Wisconsin Soil to Groundwater RCL
--	Not sampled and/or analyzed
15.2	Measured concentration did not exceed the indicated standard
<0.03	Analyte not detected greater than the laboratory reporting limit
n/v	No standard/guideline value
*+	Laboratory control sample and/or laboratory control sample duplicate is outside acceptance limits, high biased
B	Compound was found in the laboratory blank and sample
J	The reported result is an estimated value
FS	Foundry sand
ft bgs	Feet below ground surface
mg/kg	Milligrams per kilogram
µg/kg	Micrograms per kilogram
XX* [XXX]	Standard in bold is the SBTV being used for the purpose of evaluation under ch. NR700 WAC. The established WAC RCL is noted in brackets

Soil Lithology

SW - well graded sand
CL - Inorganic clay of low to medium plasticity
CH - Inorganic clay of high plasticity
GPS - Poorly graded gravel
TS - Organic topsoil

Table 2
Soil Lithology
Viebahn Street Property
Manitowoc, Wisconsin

SB-1		SB-2		SB-3		SB-4		SB-5		SB-6		SB-7		SB-8	
Ft AMSL	Lithology	Ft AMSL	Lithology	Ft AMSL	Lithology	Ft AMSL	Lithology	Ft AMSL	Lithology	Ft AMSL	Lithology	Ft AMSL	Lithology	Ft AMSL	Lithology
697	TS	697	TS	690	TS	678	TS	673	TS	673	TS	694	TS	675	TS
696	CH	696	CL	689	CH	677		672	CL	672		693		674	
695		695		688		676	CL	671	CH	671	GPS	692	Cobble	673	GPS
694		694		687	CL	675		670	SW	670		691	GPS	672	
693		693	SW	686		674	SW	669	CH	669		690		671	
692		692	CH	685		673	GPS	668-666	EOB; Assumed CH	668		689		670-666	EOB; Assumed GPS
691		691		684		672				667		688			
690		690		683		671				666		687			
689		689		682	CH	670				665	CL	686			
688		688		681		669	CL			664		685			
687		687-686	EOB; Assumed CH	680								684-666	EOB; Assumed GPS		
686				679											
685				678											
684				677											
683				676											

Notes

Ft AMSL - elevation in feet above mean sea level

Soil intervals targeted for fill at the River Point District

Lithology Key

TS	Organic topsoil
CH	Inorganic clay of high plasticity
CL	Inorganic clay of low to medium plasticity
Cobble	Large rounded gravel with less than 5% fines
GPS	Poorly graded gravel
SW	Well graded sand

Stantec

ATTACHMENT A
LABORATORY REPORT

Design with community in mind

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Madeline Edwards
Stantec Consulting Corporation
12080 Corporate Parkway
Mequon, Wisconsin 53092

Generated 11/16/2023 4:06:54 PM

JOB DESCRIPTION

Manitowoc Farm Soil Characterization 193709822

JOB NUMBER

500-241942-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Compliance Statement

The LOD and LOQ reported are adjusted by the dilution factor when a dilution factor greater than 1 is needed. Additionally, where results are indicated as being reported on a dry weight basis, the LOD and LOQ are adjusted for moisture content as well.

Definitions of Limits
- LOD = Limit of Detection = MDL as defined by 40 CFR part 136 Appendix B
- LOQ = Limit of Quantitation = 3.33 x LOD as defined by Wisconsin
- RL = Report Limit = a concentration supported by a standard in the calibration curves

Authorization

Generated
11/16/2023 4:06:54 PM

Authorized for release by
Jodie Bracken, Project Management Assistant II
Jodie.Bracken@ET.EurofinsUS.com
Designee for
Sandie Fredrick, Project Manager II
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

Table of Contents

Job ID: 500-241942-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-241942-1

Receipt
The samples were received on 11/2/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS VOA
Method 8260D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 500-740288, 500-740288, 500-740288, 500-740288, 500-740288, 500-740288, 500-740288, 500-740288 and 500-740288 and analytical batch 500-741137: Bromoform, Bromomethane and 1,2-Dibromo-3-Chloropropane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8260D: The method blank for analytical batch 500-741137 contained 1,2,3-Trichlorobenzene above the method detection limit (MDL). Associated samples were not re-analyzed because the method blank results were less than the reporting limit (RL) OR practical quantitation limit (PQL).

Method 8260D: The laboratory control sample (LCS) for preparation batch 500-740288 and analytical batch 500-742187 recovered outside control limits for the following analytes: Vinyl chloride, Bromomethane, and Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.(LB3 500-740288/19-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in batch 500-741797 was outside the method criteria for the following analyte(s): Nitrobenzene-d5. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: Trip Blank — Lab Sample ID: 500-241942-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane	68	J *+	150	40	ug/Kg	50		8260D	Total/NA
Chloroform	19	J	100	19	ug/Kg	50		8260D	Total/NA
Chloromethane	31	J	250	16	ug/Kg	50		8260D	Total/NA
Xylenes, Total	27		25	11	ug/Kg	50		8260D	Total/NA

Client Sample ID: SB-1 (3-5) — Lab Sample ID: 500-241942-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane	82	J *+	220	59	ug/Kg	50	☼	8260D	Total/NA
Chloroform	31	J	150	28	ug/Kg	50	☼	8260D	Total/NA
Chloromethane	37	J	370	24	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	38		37	16	ug/Kg	50	☼	8260D	Total/NA
Arsenic	4.5		1.2	0.41	mg/Kg	1	☼	6010D	Total/NA
Barium	52		1.2	0.14	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.16	J B	0.24	0.043	mg/Kg	1	☼	6010D	Total/NA
Chromium	18		1.2	0.59	mg/Kg	1	☼	6010D	Total/NA
Lead	7.1		0.60	0.28	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.051		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-1 (7-9) — Lab Sample ID: 500-241942-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane	67	J *+	240	62	ug/Kg	50	☼	8260D	Total/NA
Chloromethane	36	J	390	25	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	38	J	39	17	ug/Kg	50	☼	8260D	Total/NA
Arsenic	2.2		1.2	0.41	mg/Kg	1	☼	6010D	Total/NA
Barium	87		1.2	0.14	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.070	J B	0.24	0.043	mg/Kg	1	☼	6010D	Total/NA
Chromium	35		1.2	0.59	mg/Kg	1	☼	6010D	Total/NA
Lead	7.5		0.60	0.28	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.026		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-2 (4-5) — Lab Sample ID: 500-241942-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane	53	J *+	180	48	ug/Kg	50	☼	8260D	Total/NA
Chloroform	22	J	120	22	ug/Kg	50	☼	8260D	Total/NA
Chloromethane	31	J	300	19	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	31		30	13	ug/Kg	50	☼	8260D	Total/NA
Benzo[a]anthracene	12	J	36	4.8	ug/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	9.4	J	36	6.9	ug/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	11	J	36	7.7	ug/Kg	1	☼	8270E	Total/NA
Fluoranthene	7.7	J	36	6.6	ug/Kg	1	☼	8270E	Total/NA
Pyrene	9.4	J	36	7.1	ug/Kg	1	☼	8270E	Total/NA
Arsenic	0.71	J	1.0	0.35	mg/Kg	1	☼	6010D	Total/NA
Barium	11		1.0	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.13	J B	0.21	0.037	mg/Kg	1	☼	6010D	Total/NA
Chromium	4.5		1.0	0.51	mg/Kg	1	☼	6010D	Total/NA
Lead	1.8		0.51	0.24	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-2 (8-10) — Lab Sample ID: 500-241942-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	30	J	350	23	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	34	J	35	16	ug/Kg	50	☼	8260D	Total/NA
Arsenic	3.1		1.0	0.35	mg/Kg	1	☼	6010D	Total/NA
Barium	58		1.0	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.073	J B	0.21	0.037	mg/Kg	1	☼	6010D	Total/NA
Chromium	23		1.0	0.51	mg/Kg	1	☼	6010D	Total/NA
Lead	7.0		0.52	0.24	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.055		0.019	0.0099	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-3 (3-5) — Lab Sample ID: 500-241942-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	26	J	140	26	ug/Kg	50	☼	8260D	Total/NA
Chloromethane	29	J	350	22	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	36		35	15	ug/Kg	50	☼	8260D	Total/NA
Arsenic	3.0		1.1	0.39	mg/Kg	1	☼	6010D	Total/NA
Barium	67		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.11	J B	0.23	0.041	mg/Kg	1	☼	6010D	Total/NA
Chromium	21		1.1	0.56	mg/Kg	1	☼	6010D	Total/NA
Lead	7.7		0.57	0.26	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.76	J B	1.1	0.67	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.028		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-3 (8-10) — Lab Sample ID: 500-241942-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	32	J	33	14	ug/Kg	50	☼	8260D	Total/NA
Benzo[a]anthracene	17	J	36	4.9	ug/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	12	J	36	7.9	ug/Kg	1	☼	8270E	Total/NA
Fluoranthene	14	J	36	6.8	ug/Kg	1	☼	8270E	Total/NA
Phenanthrene	9.7	J	36	5.1	ug/Kg	1	☼	8270E	Total/NA
Pyrene	14	J	36	7.3	ug/Kg	1	☼	8270E	Total/NA
Arsenic	1.7		0.99	0.34	mg/Kg	1	☼	6010D	Total/NA
Barium	31		0.99	0.11	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.12	J B	0.20	0.036	mg/Kg	1	☼	6010D	Total/NA
Chromium	9.5		0.99	0.49	mg/Kg	1	☼	6010D	Total/NA
Lead	3.5		0.49	0.23	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.80	J B	0.99	0.58	mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: SB-4 (3.5-5) — Lab Sample ID: 500-241942-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	25	J	120	23	ug/Kg	50	☼	8260D	Total/NA
Chloromethane	21	J	310	20	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	30	J	31	14	ug/Kg	50	☼	8260D	Total/NA
Arsenic	0.94		0.89	0.30	mg/Kg	1	☼	6010D	Total/NA
Barium	13		0.89	0.10	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.096	J B	0.18	0.032	mg/Kg	1	☼	6010D	Total/NA
Chromium	4.9		0.89	0.44	mg/Kg	1	☼	6010D	Total/NA
Lead	1.2		0.44	0.20	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-4 (6-8) — Lab Sample ID: 500-241942-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	22	J	270	17	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	25	J	27	12	ug/Kg	50	☼	8260D	Total/NA
Arsenic	0.89	J	0.99	0.34	mg/Kg	1	☼	6010D	Total/NA
Barium	12		0.99	0.11	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.081	J B	0.20	0.036	mg/Kg	1	☼	6010D	Total/NA
Chromium	7.0		0.99	0.49	mg/Kg	1	☼	6010D	Total/NA
Lead	1.8		0.49	0.23	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.86	J B	0.99	0.58	mg/Kg	1	☼	6010D	Total/NA

Client Sample ID: SB-5 (0-1) — Lab Sample ID: 500-241942-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	36		20	15	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	37	J	40	18	ug/Kg	50	☼	8260D	Total/NA
Benzo[a]anthracene	26	J	41	5.5	ug/Kg	1	☼	8270E	Total/NA
Benzo[a]pyrene	29	J	41	8.0	ug/Kg	1	☼	8270E	Total/NA
Benzo[b]fluoranthene	34	J	41	8.9	ug/Kg	1	☼	8270E	Total/NA
Benzo[g,h,i]perylene	20	J	41	13	ug/Kg	1	☼	8270E	Total/NA
Chrysene	28	J	41	11	ug/Kg	1	☼	8270E	Total/NA
Fluoranthene	41		41	7.6	ug/Kg	1	☼	8270E	Total/NA
Indeno[1,2,3-cd]pyrene	18	J	41	11	ug/Kg	1	☼	8270E	Total/NA
Phenanthrene	18	J	41	5.7	ug/Kg	1	☼	8270E	Total/NA
Pyrene	37	J	41	8.2	ug/Kg	1	☼	8270E	Total/NA
Arsenic	8.1		1.1	0.39	mg/Kg	1	☼	6010D	Total/NA
Barium	83		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.82	B	0.23	0.041	mg/Kg	1	☼	6010D	Total/NA
Chromium	30		1.1	0.57	mg/Kg	1	☼	6010D	Total/NA
Lead	17		0.57	0.26	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.73	J B	1.1	0.67	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.080	F1	0.021	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-5 (1-2) — Lab Sample ID: 500-241942-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	8.7	J	36	6.7	ug/Kg	1	☼	8270E	Total/NA
Phenanthrene	8.2	J	36	5.0	ug/Kg	1	☼	8270E	Total/NA
Pyrene	10	J	36	7.2	ug/Kg	1	☼	8270E	Total/NA
Arsenic	3.8		1.0	0.34	mg/Kg	1	☼	6010D	Total/NA
Barium	39		1.0	0.11	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.26	B	0.20	0.036	mg/Kg	1	☼	6010D	Total/NA
Chromium	16		1.0	0.50	mg/Kg	1	☼	6010D	Total/NA
Lead	4.7		0.50	0.23	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.98	J B	1.0	0.59	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.018		0.017	0.0090	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-6 (0-2) — Lab Sample ID: 500-241942-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	9.6	J	42	7.8	ug/Kg	1	☼	8270E	Total/NA
Pyrene	10	J	42	8.4	ug/Kg	1	☼	8270E	Total/NA
Arsenic	8.2		1.2	0.40	mg/Kg	1	☼	6010D	Total/NA
Barium	69		1.2	0.13	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-6 (0-2) (Continued)
Lab Sample ID: 500-241942-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.43	B	0.23	0.042	mg/Kg	1	☼	6010D	Total/NA
Chromium	19		1.2	0.58	mg/Kg	1	☼	6010D	Total/NA
Lead	12		0.59	0.27	mg/Kg	1	☼	6010D	Total/NA
Selenium	1.4	B	1.2	0.69	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.046		0.020	0.011	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-7 (0-2)
Lab Sample ID: 500-241942-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	35		17	12	ug/Kg	50	☼	8260D	Total/NA
Xylenes, Total	210		34	15	ug/Kg	50	☼	8260D	Total/NA
Arsenic	3.8		1.1	0.39	mg/Kg	1	☼	6010D	Total/NA
Barium	54		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.14	J B	0.23	0.041	mg/Kg	1	☼	6010D	Total/NA
Chromium	19		1.1	0.57	mg/Kg	1	☼	6010D	Total/NA
Lead	5.9		0.57	0.26	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.039		0.018	0.0095	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-8 (0-2)
Lab Sample ID: 500-241942-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.0		1.1	0.39	mg/Kg	1	☼	6010D	Total/NA
Barium	81		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.30	B	0.23	0.041	mg/Kg	1	☼	6010D	Total/NA
Chromium	24		1.1	0.57	mg/Kg	1	☼	6010D	Total/NA
Lead	10		0.57	0.27	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.070		0.019	0.010	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CHI
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CHI
6010D	Metals (ICP)	SW846	EET CHI
7471B	Mercury (CVAA)	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3050B	Preparation, Metals	SW846	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI
5035	Closed System Purge and Trap	SW846	EET CHI
7471B	Preparation, Mercury	SW846	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241942-1	Trip Blank	Solid	11/01/23 00:00	11/02/23 09:35
500-241942-2	SB-1 (3-5)	Solid	11/01/23 11:10	11/02/23 09:35
500-241942-3	SB-1 (7-9)	Solid	11/01/23 11:00	11/02/23 09:35
500-241942-4	SB-2 (4-5)	Solid	11/01/23 11:30	11/02/23 09:35
500-241942-5	SB-2 (8-10)	Solid	11/01/23 11:20	11/02/23 09:35
500-241942-6	SB-3 (3-5)	Solid	11/01/23 11:40	11/02/23 09:35
500-241942-7	SB-3 (8-10)	Solid	11/01/23 11:45	11/02/23 09:35
500-241942-8	SB-4 (3.5-5)	Solid	11/01/23 12:10	11/02/23 09:35
500-241942-9	SB-4 (6-8)	Solid	11/01/23 12:15	11/02/23 09:35
500-241942-10	SB-5 (0-1)	Solid	11/01/23 12:20	11/02/23 09:35
500-241942-11	SB-5 (1-2)	Solid	11/01/23 12:25	11/02/23 09:35
500-241942-12	SB-6 (0-2)	Solid	11/01/23 12:45	11/02/23 09:35
500-241942-13	SB-7 (0-2)	Solid	11/01/23 12:55	11/02/23 09:35
500-241942-14	SB-8 (0-2)	Solid	11/01/23 13:10	11/02/23 09:35

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: Trip Blank
Date Collected: 11/01/23 00:00
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-1
Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,1-Dichloroethane	<21		50	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,1-Dichloroethene	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,1-Dichloropropene	<15		50	15	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2-Dibromo-3-Chloropropane	<100	*+	250	100	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2-Dichloroethane	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,2-Dichloropropane	<21		50	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,3-Dichloropropane	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
2,2-Dichloropropane	<22		250	22	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
2-Chlorotoluene	<16		50	16	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
4-Chlorotoluene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
4-Isopropyltoluene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Benzene	<7.3		13	7.3	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Bromobenzene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Bromoform	<24	*+	50	24	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Bromomethane	**68**	**J *+**	150	40	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Carbon tetrachloride	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Chlorobenzene	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Chlorobromomethane	<21		50	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Chlorodibromomethane	<24		50	24	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Chloroethane	<25		250	25	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Chloroform	**19**	**J**	100	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Chloromethane	**31**	**J**	250	16	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Dibromomethane	<14		50	14	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Dichlorobromomethane	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Ethylene Dibromide	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Hexachlorobutadiene	<22		50	22	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Isopropyl ether	<14		50	14	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Isopropylbenzene	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Methylene Chloride	<82		250	82	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Naphthalene	<17		50	17	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
n-Butylbenzene	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
N-Propylbenzene	<21		50	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: Trip Blank
Lab Sample ID: 500-241942-1
Date Collected: 11/01/23 00:00
Matrix: Solid
Date Received: 11/02/23 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Styrene	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
tert-Butylbenzene	<20		50	20	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Tetrachloroethene	<19		50	19	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Toluene	<7.4		13	7.4	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Trichloroethene	<8.2		25	8.2	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Trichlorofluoromethane	<21		50	21	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Vinyl chloride	<13		50	13	ug/Kg		11/01/23 00:00	11/08/23 16:58	50
Xylenes, Total	**27**		25	11	ug/Kg		11/01/23 00:00	11/08/23 16:58	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 126*	*11/01/23 00:00*	*11/08/23 16:58*	*50*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*	*11/01/23 00:00*	*11/08/23 16:58*	*50*
Dibromofluoromethane (Surr)	*114*		*75 - 120*	*11/01/23 00:00*	*11/08/23 16:58*	*50*
Toluene-d8 (Surr)	*90*		*75 - 120*	*11/01/23 00:00*	*11/08/23 16:58*	*50*

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-1 (3-5)
Date Collected: 11/01/23 11:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-2
Matrix: Solid
Percent Solids: 80.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		75	34	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,1,1-Trichloroethane	<28		75	28	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,1,2,2-Tetrachloroethane	<30		75	30	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,1,2-Trichloroethane	<26		75	26	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,1-Dichloroethane	<31		75	31	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,1-Dichloroethene	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,1-Dichloropropene	<22		75	22	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2,3-Trichlorobenzene	<34		75	34	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2,3-Trichloropropane	<31		150	31	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2,4-Trichlorobenzene	<26		75	26	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2,4-Trimethylbenzene	<27		75	27	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2-Dibromo-3-Chloropropane	<150	*+	370	150	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2-Dichlorobenzene	<25		75	25	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2-Dichloroethane	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,2-Dichloropropane	<32		75	32	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,3,5-Trimethylbenzene	<28		75	28	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,3-Dichlorobenzene	<30		75	30	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,3-Dichloropropane	<27		75	27	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
1,4-Dichlorobenzene	<27		75	27	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
2,2-Dichloropropane	<33		370	33	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
2-Chlorotoluene	<23		75	23	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
4-Chlorotoluene	<26		75	26	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
4-Isopropyltoluene	<27		75	27	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Benzene	<11		19	11	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Bromobenzene	<27		75	27	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Bromoform	<36	*+	75	36	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Bromomethane	**82**	**J *+**	220	59	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Carbon tetrachloride	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Chlorobenzene	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Chlorobromomethane	<32		75	32	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Chlorodibromomethane	<36		75	36	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Chloroethane	<38		370	38	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Chloroform	**31**	**J**	150	28	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Chloromethane	**37**	**J**	370	24	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
cis-1,2-Dichloroethene	<30		75	30	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
cis-1,3-Dichloropropene	<31		75	31	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Dibromomethane	<20		75	20	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Dichlorobromomethane	<28		75	28	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Dichlorodifluoromethane	<50		220	50	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Ethylbenzene	<14		19	14	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Ethylene Dibromide	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Hexachlorobutadiene	<33		75	33	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Isopropyl ether	<21		75	21	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Isopropylbenzene	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Methyl tert-butyl ether	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Methylene Chloride	<120		370	120	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Naphthalene	<25		75	25	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
n-Butylbenzene	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
N-Propylbenzene	<31		75	31	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-1 (3-5)
Date Collected: 11/01/23 11:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-2
Matrix: Solid
Percent Solids: 80.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<30		75	30	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Styrene	<29		75	29	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
tert-Butylbenzene	<30		75	30	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Tetrachloroethene	<28		75	28	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Toluene	<11		19	11	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
trans-1,2-Dichloroethene	<26		75	26	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
trans-1,3-Dichloropropene	<27		75	27	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Trichloroethene	<12		37	12	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Trichlorofluoromethane	<32		75	32	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Vinyl chloride	<20		75	20	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50
Xylenes, Total	**38**		37	16	ug/Kg	☼	11/01/23 11:10	11/08/23 17:24	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 126*	*11/01/23 11:10*	*11/08/23 17:24*	*50*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*11/01/23 11:10*	*11/08/23 17:24*	*50*
Dibromofluoromethane (Surr)	*113*		*75 - 120*	*11/01/23 11:10*	*11/08/23 17:24*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*11/01/23 11:10*	*11/08/23 17:24*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<10		83	10	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
2-Methylnaphthalene	<7.5		83	7.5	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Acenaphthene	<7.4		41	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Acenaphthylene	<5.4		41	5.4	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Anthracene	<6.8		41	6.8	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Benzo[a]anthracene	<5.5		41	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Benzo[a]pyrene	<7.9		41	7.9	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Benzo[b]fluoranthene	<8.8		41	8.8	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Benzo[g,h,i]perylene	<13		41	13	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Benzo[k]fluoranthene	<12		41	12	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Chrysene	<11		41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Dibenz(a,h)anthracene	<7.9		41	7.9	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Fluoranthene	<7.6		41	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Fluorene	<5.8		41	5.8	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Indeno[1,2,3-cd]pyrene	<11		41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Naphthalene	<6.3		41	6.3	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Phenanthrene	<5.7		41	5.7	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1
Pyrene	<8.1		41	8.1	ug/Kg	☼	11/13/23 07:16	11/13/23 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*99*		*37 - 147*	*11/13/23 07:16*	*11/13/23 19:11*	*1*
2-Fluorobiphenyl (Surr)	*79*		*43 - 145*	*11/13/23 07:16*	*11/13/23 19:11*	*1*
Terphenyl-d14 (Surr)	*80*		*42 - 157*	*11/13/23 07:16*	*11/13/23 19:11*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.5**		1.2	0.41	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1
Barium	**52**		1.2	0.14	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1
Cadmium	**0.16**	**J B**	0.24	0.043	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1
Chromium	**18**		1.2	0.59	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-1 (3-5)
Date Collected: 11/01/23 11:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-2
Matrix: Solid
Percent Solids: 80.0

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.1**		0.60	0.28	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1
Selenium	<0.70		1.2	0.70	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1
Silver	<0.15		0.60	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:08	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.051**		0.020	0.011	mg/Kg	☼	11/13/23 13:50	11/14/23 08:20	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-1 (7-9)
Date Collected: 11/01/23 11:00
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-3
Matrix: Solid
Percent Solids: 78.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<36		79	36	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,1,1-Trichloroethane	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,1,2,2-Tetrachloroethane	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,1,2-Trichloroethane	<28		79	28	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,1-Dichloroethane	<32		79	32	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,1-Dichloroethene	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,1-Dichloropropene	<23		79	23	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2,3-Trichlorobenzene	<36		79	36	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2,3-Trichloropropane	<33		160	33	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2,4-Trichlorobenzene	<27		79	27	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2,4-Trimethylbenzene	<28		79	28	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2-Dibromo-3-Chloropropane	<160	*+	390	160	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2-Dichlorobenzene	<26		79	26	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2-Dichloroethane	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,2-Dichloropropane	<34		79	34	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,3,5-Trimethylbenzene	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,3-Dichlorobenzene	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,3-Dichloropropane	<28		79	28	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
1,4-Dichlorobenzene	<29		79	29	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
2,2-Dichloropropane	<35		390	35	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
2-Chlorotoluene	<25		79	25	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
4-Chlorotoluene	<27		79	27	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
4-Isopropyltoluene	<28		79	28	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Benzene	<11		20	11	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Bromobenzene	<28		79	28	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Bromoform	<38	*+	79	38	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Bromomethane	**67**	**J *+**	240	62	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Carbon tetrachloride	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Chlorobenzene	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Chlorobromomethane	<34		79	34	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Chlorodibromomethane	<38		79	38	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Chloroethane	<40		390	40	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Chloroform	<29		160	29	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Chloromethane	**36**	**J**	390	25	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
cis-1,2-Dichloroethene	<32		79	32	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
cis-1,3-Dichloropropene	<33		79	33	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Dibromomethane	<21		79	21	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Dichlorobromomethane	<29		79	29	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Dichlorodifluoromethane	<53		240	53	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Ethylbenzene	<14		20	14	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Ethylene Dibromide	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Hexachlorobutadiene	<35		79	35	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Isopropyl ether	<22		79	22	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Isopropylbenzene	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Methyl tert-butyl ether	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Methylene Chloride	<130		390	130	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Naphthalene	<26		79	26	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
n-Butylbenzene	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
N-Propylbenzene	<33		79	33	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50

Client Sample ID: SB-1 (7-9)
Date Collected: 11/01/23 11:00
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-3
Matrix: Solid
Percent Solids: 78.4

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Styrene	<30		79	30	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
tert-Butylbenzene	<31		79	31	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Tetrachloroethene	<29		79	29	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Toluene	<12		20	12	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
trans-1,2-Dichloroethene	<27		79	27	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
trans-1,3-Dichloropropene	<28		79	28	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Trichloroethene	<13		39	13	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Trichlorofluoromethane	<34		79	34	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Vinyl chloride	<21		79	21	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50
Xylenes, Total	**38**	**J**	39	17	ug/Kg	☼	11/01/23 11:00	11/08/23 17:50	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*75 - 126*	*11/01/23 11:00*	*11/08/23 17:50*	*50*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*11/01/23 11:00*	*11/08/23 17:50*	*50*
Dibromofluoromethane (Surr)	*112*		*75 - 120*	*11/01/23 11:00*	*11/08/23 17:50*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*11/01/23 11:00*	*11/08/23 17:50*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<10		83	10	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
2-Methylnaphthalene	<7.6		83	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Acenaphthene	<7.4		41	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Acenaphthylene	<5.4		41	5.4	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Anthracene	<6.9		41	6.9	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Benzo[a]anthracene	<5.5		41	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Benzo[a]pyrene	<8.0		41	8.0	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Benzo[b]fluoranthene	<8.9		41	8.9	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Benzo[g,h,i]perylene	<13		41	13	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Benzo[k]fluoranthene	<12		41	12	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Chrysene	<11		41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Dibenz(a,h)anthracene	<8.0		41	8.0	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Fluoranthene	<7.6		41	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Fluorene	<5.8		41	5.8	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Indeno[1,2,3-cd]pyrene	<11		41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Naphthalene	<6.3		41	6.3	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Phenanthrene	<5.7		41	5.7	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1
Pyrene	<8.2		41	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*92*		*37 - 147*	*11/13/23 07:16*	*11/13/23 20:00*	*1*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*11/13/23 07:16*	*11/13/23 20:00*	*1*
Terphenyl-d14 (Surr)	*85*		*42 - 157*	*11/13/23 07:16*	*11/13/23 20:00*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.2**		1.2	0.41	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1
Barium	**87**		1.2	0.14	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1
Cadmium	**0.070**	**J B**	0.24	0.043	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1
Chromium	**35**		1.2	0.59	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-1 (7-9)
Lab Sample ID: 500-241942-3
Date Collected: 11/01/23 11:00
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 78.4

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.5**		0.60	0.28	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1
Selenium	<0.70		1.2	0.70	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1
Silver	<0.15		0.60	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:11	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.026**		0.020	0.011	mg/Kg	☼	11/13/23 13:50	11/14/23 08:22	1

Client Sample ID: SB-2 (4-5)
Date Collected: 11/01/23 11:30
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-4
Matrix: Solid
Percent Solids: 90.2

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		60	28	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,1,1-Trichloroethane	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,1,2,2-Tetrachloroethane	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,1,2-Trichloroethane	<21		60	21	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,1-Dichloroethane	<25		60	25	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,1-Dichloroethene	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,1-Dichloropropene	<18		60	18	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2,3-Trichlorobenzene	<28		60	28	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2,3-Trichloropropane	<25		120	25	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2,4-Trichlorobenzene	<21		60	21	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2,4-Trimethylbenzene	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2-Dibromo-3-Chloropropane	<120	*+	300	120	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2-Dichlorobenzene	<20		60	20	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2-Dichloroethane	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,2-Dichloropropane	<26		60	26	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,3,5-Trimethylbenzene	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,3-Dichlorobenzene	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,3-Dichloropropane	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
1,4-Dichlorobenzene	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
2,2-Dichloropropane	<27		300	27	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
2-Chlorotoluene	<19		60	19	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
4-Chlorotoluene	<21		60	21	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
4-Isopropyltoluene	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Benzene	<8.8		15	8.8	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Bromobenzene	<21		60	21	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Bromoform	<29	*+	60	29	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Bromomethane	**53**	**J *+**	180	48	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Carbon tetrachloride	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Chlorobenzene	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Chlorobromomethane	<26		60	26	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Chlorodibromomethane	<29		60	29	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Chloroethane	<30		300	30	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Chloroform	**22**	**J**	120	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Chloromethane	**31**	**J**	300	19	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
cis-1,2-Dichloroethene	<25		60	25	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
cis-1,3-Dichloropropene	<25		60	25	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Dibromomethane	<16		60	16	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Dichlorobromomethane	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Dichlorodifluoromethane	<41		180	41	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Ethylbenzene	<11		15	11	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Ethylene Dibromide	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Hexachlorobutadiene	<27		60	27	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Isopropyl ether	<17		60	17	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Isopropylbenzene	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Methyl tert-butyl ether	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Methylene Chloride	<98		300	98	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Naphthalene	<20		60	20	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
n-Butylbenzene	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
N-Propylbenzene	<25		60	25	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50

Client Sample ID: SB-2 (4-5)
Lab Sample ID: 500-241942-4

Date Collected: 11/01/23 11:30
Matrix: Solid

Date Received: 11/02/23 09:35
Percent Solids: 90.2

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Styrene	<23		60	23	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
tert-Butylbenzene	<24		60	24	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Tetrachloroethene	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Toluene	<8.9		15	8.9	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
trans-1,2-Dichloroethene	<21		60	21	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
trans-1,3-Dichloropropene	<22		60	22	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Trichloroethene	<9.9		30	9.9	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Trichlorofluoromethane	<26		60	26	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Vinyl chloride	<16		60	16	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50
Xylenes, Total	**31**		30	13	ug/Kg	☼	11/01/23 11:30	11/08/23 18:17	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*	*11/01/23 11:30*	*11/08/23 18:17*	*50*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*	*11/01/23 11:30*	*11/08/23 18:17*	*50*
Dibromofluoromethane (Surr)	*114*		*75 - 120*	*11/01/23 11:30*	*11/08/23 18:17*	*50*
Toluene-d8 (Surr)	*90*		*75 - 120*	*11/01/23 11:30*	*11/08/23 18:17*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.7		72	8.7	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
2-Methylnaphthalene	<6.6		72	6.6	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Acenaphthene	<6.4		36	6.4	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Acenaphthylene	<4.7		36	4.7	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Anthracene	<6.0		36	6.0	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Benzo[a]anthracene	**12**	**J**	36	4.8	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Benzo[a]pyrene	**9.4**	**J**	36	6.9	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Benzo[b]fluoranthene	**11**	**J**	36	7.7	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Benzo[g,h,i]perylene	<12		36	12	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Benzo[k]fluoranthene	<11		36	11	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Chrysene	<9.7		36	9.7	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Dibenz(a,h)anthracene	<6.9		36	6.9	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Fluoranthene	**7.7**	**J**	36	6.6	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Fluorene	<5.0		36	5.0	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Indeno[1,2,3-cd]pyrene	<9.3		36	9.3	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Naphthalene	<5.5		36	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Phenanthrene	<5.0		36	5.0	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1
Pyrene	**9.4**	**J**	36	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*98*		*37 - 147*	*11/13/23 07:16*	*11/13/23 19:35*	*1*
2-Fluorobiphenyl (Surr)	*79*		*43 - 145*	*11/13/23 07:16*	*11/13/23 19:35*	*1*
Terphenyl-d14 (Surr)	*84*		*42 - 157*	*11/13/23 07:16*	*11/13/23 19:35*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.71**	**J**	1.0	0.35	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1
Barium	**11**		1.0	0.12	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1
Cadmium	**0.13**	**J B**	0.21	0.037	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1
Chromium	**4.5**		1.0	0.51	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-2 (4-5)
Lab Sample ID: 500-241942-4
Date Collected: 11/01/23 11:30
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 90.2

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.8**		0.51	0.24	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1
Selenium	<0.61		1.0	0.61	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1
Silver	<0.13		0.51	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:15	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0090		0.017	0.0090	mg/Kg	☼	11/13/23 13:50	11/14/23 08:28	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-2 (8-10)
Date Collected: 11/01/23 11:20
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-5
Matrix: Solid
Percent Solids: 82.2

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,1,2-Trichloroethane	<25		71	25	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,1-Dichloroethane	<29		71	29	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,1-Dichloroethene	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,1-Dichloropropene	<21		71	21	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2,3-Trichlorobenzene	<32		71	32	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2,4-Trimethylbenzene	<25		71	25	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2-Dibromo-3-Chloropropane	<140	*+	350	140	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2-Dichloroethane	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,2-Dichloropropane	<30		71	30	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,3-Dichlorobenzene	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,3-Dichloropropane	<26		71	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
2,2-Dichloropropane	<31		350	31	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
2-Chlorotoluene	<22		71	22	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
4-Chlorotoluene	<25		71	25	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
4-Isopropyltoluene	<26		71	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Benzene	<10		18	10	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Bromobenzene	<25		71	25	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Bromoform	<34	*+	71	34	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Bromomethane	<56	*+	210	56	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Carbon tetrachloride	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Chlorobenzene	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Chlorobromomethane	<30		71	30	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Chlorodibromomethane	<35		71	35	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Chloroethane	<36		350	36	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Chloroform	<26		140	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Chloromethane	**30**	**J**	350	23	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
cis-1,2-Dichloroethene	<29		71	29	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
cis-1,3-Dichloropropene	<29		71	29	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Dibromomethane	<19		71	19	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Dichlorobromomethane	<26		71	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Dichlorodifluoromethane	<48		210	48	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Ethylbenzene	<13		18	13	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Ethylene Dibromide	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Hexachlorobutadiene	<32		71	32	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Isopropyl ether	<20		71	20	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Isopropylbenzene	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Methyl tert-butyl ether	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Methylene Chloride	<120		350	120	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Naphthalene	<24		71	24	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
n-Butylbenzene	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
N-Propylbenzene	<29		71	29	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50

Client Sample ID: SB-2 (8-10)
Lab Sample ID: 500-241942-5

Date Collected: 11/01/23 11:20
Matrix: Solid

Date Received: 11/02/23 09:35
Percent Solids: 82.2

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Styrene	<27		71	27	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
tert-Butylbenzene	<28		71	28	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Tetrachloroethene	<26		71	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Toluene	<10		18	10	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
trans-1,2-Dichloroethene	<25		71	25	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Trichloroethene	<12		35	12	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Trichlorofluoromethane	<30		71	30	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Vinyl chloride	<19		71	19	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50
Xylenes, Total	**34**	**J**	35	16	ug/Kg	☼	11/01/23 11:20	11/08/23 18:43	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*75 - 126*	*11/01/23 11:20*	*11/08/23 18:43*	*50*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*	*11/01/23 11:20*	*11/08/23 18:43*	*50*
Dibromofluoromethane (Surr)	*114*		*75 - 120*	*11/01/23 11:20*	*11/08/23 18:43*	*50*
Toluene-d8 (Surr)	*90*		*75 - 120*	*11/01/23 11:20*	*11/08/23 18:43*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.3		77	9.3	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
2-Methylnaphthalene	<7.0		77	7.0	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Acenaphthene	<6.8		38	6.8	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Acenaphthylene	<5.0		38	5.0	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Anthracene	<6.4		38	6.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Benzo[a]anthracene	<5.1		38	5.1	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Benzo[a]pyrene	<7.4		38	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Benzo[b]fluoranthene	<8.2		38	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Benzo[g,h,i]perylene	<12		38	12	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Benzo[k]fluoranthene	<11		38	11	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Chrysene	<10		38	10	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Dibenz(a,h)anthracene	<7.4		38	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Fluoranthene	<7.1		38	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Fluorene	<5.4		38	5.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Indeno[1,2,3-cd]pyrene	<9.9		38	9.9	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Naphthalene	<5.9		38	5.9	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Phenanthrene	<5.3		38	5.3	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1
Pyrene	<7.6		38	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*98*		*37 - 147*	*11/13/23 07:16*	*11/13/23 22:03*	*1*
2-Fluorobiphenyl (Surr)	*83*		*43 - 145*	*11/13/23 07:16*	*11/13/23 22:03*	*1*
Terphenyl-d14 (Surr)	*83*		*42 - 157*	*11/13/23 07:16*	*11/13/23 22:03*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.1**		1.0	0.35	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1
Barium	**58**		1.0	0.12	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1
Cadmium	**0.073**	**J B**	0.21	0.037	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1
Chromium	**23**		1.0	0.51	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-2 (8-10)
Date Collected: 11/01/23 11:20
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-5
Matrix: Solid
Percent Solids: 82.2

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.0**		0.52	0.24	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1
Selenium	<0.61		1.0	0.61	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1
Silver	<0.13		0.52	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:18	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.055**		0.019	0.0099	mg/Kg	☼	11/13/23 13:50	11/14/23 08:30	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-3 (3-5)
Date Collected: 11/01/23 11:40
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-6
Matrix: Solid
Percent Solids: 82.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		70	32	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,1,1-Trichloroethane	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,1-Dichloropropene	<21		70	21	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2,4-Trimethylbenzene	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2-Dibromo-3-Chloropropane	<140	*+	350	140	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2-Dichlorobenzene	<23		70	23	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2-Dichloroethane	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,3,5-Trimethylbenzene	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
1,4-Dichlorobenzene	<26		70	26	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
2,2-Dichloropropane	<31		350	31	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
4-Chlorotoluene	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
4-Isopropyltoluene	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Benzene	<10		18	10	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Bromobenzene	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Bromoform	<34	*+	70	34	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Bromomethane	<56	*+	210	56	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Chlorobenzene	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Chlorobromomethane	<30		70	30	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Chlorodibromomethane	<34		70	34	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Chloroethane	<35		350	35	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Chloroform	**26**	**J**	140	26	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Chloromethane	**29**	**J**	350	22	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
cis-1,2-Dichloroethene	<29		70	29	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Dibromomethane	<19		70	19	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Dichlorobromomethane	<26		70	26	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Ethylbenzene	<13		18	13	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Ethylene Dibromide	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Hexachlorobutadiene	<31		70	31	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Isopropyl ether	<19		70	19	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Methyl tert-butyl ether	<28		70	28	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Methylene Chloride	<110		350	110	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Naphthalene	<23		70	23	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-3 (3-5)
Date Collected: 11/01/23 11:40
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-6
Matrix: Solid
Percent Solids: 82.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<28		70	28	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Styrene	<27		70	27	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Toluene	<10		18	10	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
trans-1,2-Dichloroethene	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Trichloroethene	<12		35	12	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Vinyl chloride	<18		70	18	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50
Xylenes, Total	**36**		35	15	ug/Kg	☼	11/01/23 11:40	11/08/23 19:09	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*	*11/01/23 11:40*	*11/08/23 19:09*	*50*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*	*11/01/23 11:40*	*11/08/23 19:09*	*50*
Dibromofluoromethane (Surr)	*114*		*75 - 120*	*11/01/23 11:40*	*11/08/23 19:09*	*50*
Toluene-d8 (Surr)	*90*		*75 - 120*	*11/01/23 11:40*	*11/08/23 19:09*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.6		79	9.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
2-Methylnaphthalene	<7.2		79	7.2	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Acenaphthene	<7.1		39	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Acenaphthylene	<5.2		39	5.2	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Anthracene	<6.6		39	6.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Benzo[a]anthracene	<5.3		39	5.3	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Benzo[a]pyrene	<7.6		39	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Benzo[b]fluoranthene	<8.5		39	8.5	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Benzo[g,h,i]perylene	<13		39	13	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Benzo[k]fluoranthene	<12		39	12	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Chrysene	<11		39	11	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Dibenz(a,h)anthracene	<7.6		39	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Fluoranthene	<7.3		39	7.3	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Fluorene	<5.5		39	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Indeno[1,2,3-cd]pyrene	<10		39	10	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Naphthalene	<6.1		39	6.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Phenanthrene	<5.5		39	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1
Pyrene	<7.8		39	7.8	ug/Kg	☼	11/13/23 07:16	11/13/23 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*92*		*37 - 147*	*11/13/23 07:16*	*11/13/23 20:25*	*1*
2-Fluorobiphenyl (Surr)	*78*		*43 - 145*	*11/13/23 07:16*	*11/13/23 20:25*	*1*
Terphenyl-d14 (Surr)	*83*		*42 - 157*	*11/13/23 07:16*	*11/13/23 20:25*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.0**		1.1	0.39	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1
Barium	**67**		1.1	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1
Cadmium	**0.11**	**J B**	0.23	0.041	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1
Chromium	**21**		1.1	0.56	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-3 (3-5)
Lab Sample ID: 500-241942-6
Date Collected: 11/01/23 11:40
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 82.5

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.7**		0.57	0.26	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1
Selenium	**0.76**	**J B**	1.1	0.67	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1
Silver	<0.15		0.57	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:22	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.028**		0.019	0.010	mg/Kg	☼	11/13/23 13:50	11/14/23 08:32	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-3 (8-10)
Date Collected: 11/01/23 11:45
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-7
Matrix: Solid
Percent Solids: 86.3

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		65	30	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,1,1-Trichloroethane	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,1,2,2-Tetrachloroethane	<26		65	26	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,1,2-Trichloroethane	<23		65	23	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,1-Dichloroethane	<27		65	27	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,1-Dichloroethene	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,1-Dichloropropene	<19		65	19	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2,3-Trichlorobenzene	<30		65	30	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2,3-Trichloropropane	<27		130	27	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2,4-Trichlorobenzene	<22		65	22	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2-Dibromo-3-Chloropropane	<130	*+	330	130	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2-Dichlorobenzene	<22		65	22	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2-Dichloroethane	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,2-Dichloropropane	<28		65	28	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,3-Dichloropropane	<24		65	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
1,4-Dichlorobenzene	<24		65	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
2,2-Dichloropropane	<29		330	29	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
2-Chlorotoluene	<20		65	20	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
4-Chlorotoluene	<23		65	23	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
4-Isopropyltoluene	<24		65	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Benzene	<9.5		16	9.5	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Bromobenzene	<23		65	23	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Bromoform	<31	*+	65	31	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Bromomethane	<52	*+	200	52	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Carbon tetrachloride	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Chlorobenzene	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Chlorobromomethane	<28		65	28	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Chlorodibromomethane	<32		65	32	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Chloroethane	<33		330	33	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Chloroform	<24		130	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Chloromethane	<21		330	21	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
cis-1,2-Dichloroethene	<27		65	27	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
cis-1,3-Dichloropropene	<27		65	27	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Dibromomethane	<18		65	18	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Dichlorobromomethane	<24		65	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Dichlorodifluoromethane	<44		200	44	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Ethylbenzene	<12		16	12	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Ethylene Dibromide	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Hexachlorobutadiene	<29		65	29	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Isopropyl ether	<18		65	18	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Isopropylbenzene	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Methyl tert-butyl ether	<26		65	26	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Methylene Chloride	<110		330	110	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Naphthalene	<22		65	22	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
n-Butylbenzene	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
N-Propylbenzene	<27		65	27	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50

Client Sample ID: SB-3 (8-10)
Date Collected: 11/01/23 11:45
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-7
Matrix: Solid
Percent Solids: 86.3

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<26		65	26	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Styrene	<25		65	25	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
tert-Butylbenzene	<26		65	26	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Tetrachloroethene	<24		65	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Toluene	<9.6		16	9.6	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
trans-1,2-Dichloroethene	<23		65	23	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
trans-1,3-Dichloropropene	<24		65	24	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Trichloroethene	<11		33	11	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Trichlorofluoromethane	<28		65	28	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Vinyl chloride	<17		65	17	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50
Xylenes, Total	**32**	**J**	33	14	ug/Kg	☼	11/01/23 11:45	11/08/23 19:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*75 - 126*	*11/01/23 11:45*	*11/08/23 19:35*	*50*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*11/01/23 11:45*	*11/08/23 19:35*	*50*
Dibromofluoromethane (Surr)	*114*		*75 - 120*	*11/01/23 11:45*	*11/08/23 19:35*	*50*
Toluene-d8 (Surr)	*89*		*75 - 120*	*11/01/23 11:45*	*11/08/23 19:35*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.9		74	8.9	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
2-Methylnaphthalene	<6.7		74	6.7	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Acenaphthene	<6.6		36	6.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Acenaphthylene	<4.8		36	4.8	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Anthracene	<6.1		36	6.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Benzo[a]anthracene	**17**	**J**	36	4.9	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Benzo[a]pyrene	<7.1		36	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Benzo[b]fluoranthene	**12**	**J**	36	7.9	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Benzo[g,h,i]perylene	<12		36	12	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Benzo[k]fluoranthene	<11		36	11	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Chrysene	<10		36	10	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Dibenz(a,h)anthracene	<7.1		36	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Fluoranthene	**14**	**J**	36	6.8	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Fluorene	<5.1		36	5.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Indeno[1,2,3-cd]pyrene	<9.5		36	9.5	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Naphthalene	<5.6		36	5.6	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Phenanthrene	**9.7**	**J**	36	5.1	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1
Pyrene	**14**	**J**	36	7.3	ug/Kg	☼	11/13/23 07:16	11/13/23 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*93*		*37 - 147*	*11/13/23 07:16*	*11/13/23 20:49*	*1*
2-Fluorobiphenyl (Surr)	*80*		*43 - 145*	*11/13/23 07:16*	*11/13/23 20:49*	*1*
Terphenyl-d14 (Surr)	*84*		*42 - 157*	*11/13/23 07:16*	*11/13/23 20:49*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.7**		0.99	0.34	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1
Barium	**31**		0.99	0.11	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1
Cadmium	**0.12**	**J B**	0.20	0.036	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1
Chromium	**9.5**		0.99	0.49	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-3 (8-10)
Lab Sample ID: 500-241942-7
Date Collected: 11/01/23 11:45
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 86.3

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**3.5**		0.49	0.23	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1
Selenium	**0.80**	**J B**	0.99	0.58	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1
Silver	<0.13		0.49	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:25	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0097		0.018	0.0097	mg/Kg	☼	11/13/23 13:50	11/14/23 08:35	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-4 (3.5-5)
Date Collected: 11/01/23 12:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-8
Matrix: Solid
Percent Solids: 95.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		62	28	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,1,1-Trichloroethane	<23		62	23	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,1,2,2-Tetrachloroethane	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,1,2-Trichloroethane	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,1-Dichloroethane	<25		62	25	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,1-Dichloroethene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,1-Dichloropropene	<18		62	18	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2,3-Trichlorobenzene	<28		62	28	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2,3-Trichloropropane	<25		120	25	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2,4-Trichlorobenzene	<21		62	21	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2,4-Trimethylbenzene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2-Dibromo-3-Chloropropane	<120	*+	310	120	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2-Dichlorobenzene	<21		62	21	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2-Dichloroethane	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,2-Dichloropropane	<26		62	26	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,3,5-Trimethylbenzene	<23		62	23	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,3-Dichlorobenzene	<25		62	25	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,3-Dichloropropane	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
1,4-Dichlorobenzene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
2,2-Dichloropropane	<27		310	27	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
2-Chlorotoluene	<19		62	19	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
4-Chlorotoluene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
4-Isopropyltoluene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Benzene	<9.0		15	9.0	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Bromobenzene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Bromoform	<30	*+	62	30	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Bromomethane	<49	*+	180	49	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Carbon tetrachloride	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Chlorobenzene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Chlorobromomethane	<26		62	26	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Chlorodibromomethane	<30		62	30	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Chloroethane	<31		310	31	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Chloroform	**25**	**J**	120	23	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Chloromethane	**21**	**J**	310	20	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
cis-1,2-Dichloroethene	<25		62	25	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
cis-1,3-Dichloropropene	<26		62	26	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Dibromomethane	<17		62	17	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Dichlorobromomethane	<23		62	23	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Dichlorodifluoromethane	<41		180	41	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Ethylbenzene	<11		15	11	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Ethylene Dibromide	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Hexachlorobutadiene	<27		62	27	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Isopropyl ether	<17		62	17	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Isopropylbenzene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Methyl tert-butyl ether	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Methylene Chloride	<100		310	100	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Naphthalene	<21		62	21	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
n-Butylbenzene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
N-Propylbenzene	<25		62	25	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50

Client Sample ID: SB-4 (3.5-5)
Date Collected: 11/01/23 12:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-8
Matrix: Solid
Percent Solids: 95.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Styrene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
tert-Butylbenzene	<24		62	24	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Tetrachloroethene	<23		62	23	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Toluene	<9.0		15	9.0	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
trans-1,2-Dichloroethene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
trans-1,3-Dichloropropene	<22		62	22	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Trichloroethene	<10		31	10	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Trichlorofluoromethane	<26		62	26	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Vinyl chloride	<16		62	16	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50
Xylenes, Total	**30**	**J**	31	14	ug/Kg	☼	11/01/23 12:10	11/08/23 20:01	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 126*	*11/01/23 12:10*	*11/08/23 20:01*	*50*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*11/01/23 12:10*	*11/08/23 20:01*	*50*
Dibromofluoromethane (Surr)	*115*		*75 - 120*	*11/01/23 12:10*	*11/08/23 20:01*	*50*
Toluene-d8 (Surr)	*90*		*75 - 120*	*11/01/23 12:10*	*11/08/23 20:01*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.2		68	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
2-Methylnaphthalene	<6.2		68	6.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Acenaphthene	<6.0		33	6.0	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Acenaphthylene	<4.4		33	4.4	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Anthracene	<5.6		33	5.6	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Benzo[a]pyrene	<6.5		33	6.5	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Benzo[b]fluoranthene	<7.3		33	7.3	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Benzo[k]fluoranthene	<9.9		33	9.9	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Chrysene	<9.2		33	9.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Dibenz(a,h)anthracene	<6.5		33	6.5	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Fluoranthene	<6.2		33	6.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Fluorene	<4.7		33	4.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Indeno[1,2,3-cd]pyrene	<8.7		33	8.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Naphthalene	<5.2		33	5.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Phenanthrene	<4.7		33	4.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1
Pyrene	<6.7		33	6.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*96*		*37 - 147*	*11/13/23 07:16*	*11/13/23 21:14*	*1*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*11/13/23 07:16*	*11/13/23 21:14*	*1*
Terphenyl-d14 (Surr)	*86*		*42 - 157*	*11/13/23 07:16*	*11/13/23 21:14*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.94**		0.89	0.30	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1
Barium	**13**		0.89	0.10	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1
Cadmium	**0.096**	**J B**	0.18	0.032	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1
Chromium	**4.9**		0.89	0.44	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-4 (3.5-5)
Lab Sample ID: 500-241942-8
Date Collected: 11/01/23 12:10
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 95.7

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.2**		0.44	0.20	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1
Selenium	<0.52		0.89	0.52	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1
Silver	<0.11		0.44	0.11	mg/Kg	☼	11/03/23 09:54	11/08/23 15:29	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0087		0.016	0.0087	mg/Kg	☼	11/13/23 13:50	11/14/23 08:37	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-4 (6-8)
Date Collected: 11/01/23 12:15
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-9
Matrix: Solid
Percent Solids: 96.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<25		53	25	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,1,1-Trichloroethane	<20		53	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,1,2,2-Tetrachloroethane	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,1,2-Trichloroethane	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,1-Dichloroethane	<22		53	22	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,1-Dichloroethene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,1-Dichloropropene	<16		53	16	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2,3-Trichlorobenzene	<24		53	24	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2,3-Trichloropropane	<22		110	22	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2,4-Trichlorobenzene	<18		53	18	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2,4-Trimethylbenzene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2-Dibromo-3-Chloropropane	<110	*+	270	110	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2-Dichlorobenzene	<18		53	18	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2-Dichloroethane	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,2-Dichloropropane	<23		53	23	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,3,5-Trimethylbenzene	<20		53	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,3-Dichlorobenzene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,3-Dichloropropane	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
1,4-Dichlorobenzene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
2,2-Dichloropropane	<24		270	24	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
2-Chlorotoluene	<17		53	17	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
4-Chlorotoluene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
4-Isopropyltoluene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Benzene	<7.8		13	7.8	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Bromobenzene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Bromoform	<26	*+	53	26	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Bromomethane	<42	*+	160	42	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Carbon tetrachloride	<20		53	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Chlorobenzene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Chlorobromomethane	<23		53	23	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Chlorodibromomethane	<26		53	26	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Chloroethane	<27		270	27	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Chloroform	<20		110	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Chloromethane	**22**	**J**	270	17	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
cis-1,2-Dichloroethene	<22		53	22	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
cis-1,3-Dichloropropene	<22		53	22	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Dibromomethane	<14		53	14	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Dichlorobromomethane	<20		53	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Dichlorodifluoromethane	<36		160	36	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Ethylbenzene	<9.7		13	9.7	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Ethylene Dibromide	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Hexachlorobutadiene	<24		53	24	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Isopropyl ether	<15		53	15	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Isopropylbenzene	<20		53	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Methyl tert-butyl ether	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Methylene Chloride	<87		270	87	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Naphthalene	<18		53	18	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
n-Butylbenzene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
N-Propylbenzene	<22		53	22	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50

Client Sample ID: SB-4 (6-8)
Date Collected: 11/01/23 12:15
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-9
Matrix: Solid
Percent Solids: 96.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Styrene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
tert-Butylbenzene	<21		53	21	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Tetrachloroethene	<20		53	20	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Toluene	<7.8		13	7.8	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
trans-1,2-Dichloroethene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
trans-1,3-Dichloropropene	<19		53	19	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Trichloroethene	<8.7		27	8.7	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Trichlorofluoromethane	<23		53	23	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Vinyl chloride	<14		53	14	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50
Xylenes, Total	**25**	**J**	27	12	ug/Kg	☼	11/01/23 12:15	11/08/23 20:27	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*	*11/01/23 12:15*	*11/08/23 20:27*	*50*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*11/01/23 12:15*	*11/08/23 20:27*	*50*
Dibromofluoromethane (Surr)	*116*		*75 - 120*	*11/01/23 12:15*	*11/08/23 20:27*	*50*
Toluene-d8 (Surr)	*90*		*75 - 120*	*11/01/23 12:15*	*11/08/23 20:27*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.2		68	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
2-Methylnaphthalene	<6.2		68	6.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Acenaphthene	<6.0		33	6.0	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Acenaphthylene	<4.4		33	4.4	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Anthracene	<5.6		33	5.6	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Benzo[a]pyrene	<6.5		33	6.5	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Benzo[b]fluoranthene	<7.3		33	7.3	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Benzo[k]fluoranthene	<9.9		33	9.9	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Chrysene	<9.2		33	9.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Dibenz(a,h)anthracene	<6.5		33	6.5	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Fluoranthene	<6.2		33	6.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Fluorene	<4.7		33	4.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Indeno[1,2,3-cd]pyrene	<8.7		33	8.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Naphthalene	<5.2		33	5.2	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Phenanthrene	<4.7		33	4.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1
Pyrene	<6.7		33	6.7	ug/Kg	☼	11/13/23 07:16	11/13/23 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*88*		*37 - 147*	*11/13/23 07:16*	*11/13/23 21:38*	*1*
2-Fluorobiphenyl (Surr)	*73*		*43 - 145*	*11/13/23 07:16*	*11/13/23 21:38*	*1*
Terphenyl-d14 (Surr)	*84*		*42 - 157*	*11/13/23 07:16*	*11/13/23 21:38*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.89**	**J**	0.99	0.34	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1
Barium	**12**		0.99	0.11	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1
Cadmium	**0.081**	**J B**	0.20	0.036	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1
Chromium	**7.0**		0.99	0.49	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-4 (6-8)
Lab Sample ID: 500-241942-9
Date Collected: 11/01/23 12:15
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 96.0

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.8**		0.49	0.23	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1
Selenium	**0.86**	**J B**	0.99	0.58	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1
Silver	<0.13		0.49	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:32	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0086		0.016	0.0086	mg/Kg	☼	11/13/23 13:50	11/14/23 08:39	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-5 (0-1)
Date Collected: 11/01/23 12:20
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-10
Matrix: Solid
Percent Solids: 75.8

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<37		81	37	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,1,1-Trichloroethane	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,1,2,2-Tetrachloroethane	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,1,2-Trichloroethane	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,1-Dichloroethane	<33		81	33	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,1-Dichloroethene	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,1-Dichloropropene	<24		81	24	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2,3-Trichlorobenzene	<37		81	37	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2,3-Trichloropropane	<34		160	34	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2,4-Trichlorobenzene	<28		81	28	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2,4-Trimethylbenzene	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2-Dibromo-3-Chloropropane	<160		400	160	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2-Dichlorobenzene	<27		81	27	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2-Dichloroethane	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,2-Dichloropropane	<35		81	35	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,3,5-Trimethylbenzene	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,3-Dichlorobenzene	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,3-Dichloropropane	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
1,4-Dichlorobenzene	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
2,2-Dichloropropane	<36		400	36	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
2-Chlorotoluene	<25		81	25	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
4-Chlorotoluene	<28		81	28	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
4-Isopropyltoluene	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Benzene	<12		20	12	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Bromobenzene	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Bromoform	<39		81	39	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Bromomethane	<64		240	64	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Carbon tetrachloride	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Chlorobenzene	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Chlorobromomethane	<35		81	35	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Chlorodibromomethane	<40		81	40	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Chloroethane	<41		400	41	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Chloroform	<30		160	30	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Chloromethane	<26		400	26	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
cis-1,2-Dichloroethene	<33		81	33	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
cis-1,3-Dichloropropene	<34		81	34	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Dibromomethane	<22		81	22	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Dichlorobromomethane	<30		81	30	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Dichlorodifluoromethane	<55		240	55	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Ethylbenzene	**36**		20	15	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Ethylene Dibromide	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Hexachlorobutadiene	<36		81	36	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Isopropyl ether	<22		81	22	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Isopropylbenzene	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Methyl tert-butyl ether	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Methylene Chloride	<130		400	130	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Naphthalene	<27		81	27	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
n-Butylbenzene	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
N-Propylbenzene	<34		81	34	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50

Client Sample ID: SB-5 (0-1)
Lab Sample ID: 500-241942-10

Date Collected: 11/01/23 12:20
Matrix: Solid

Date Received: 11/02/23 09:35
Percent Solids: 75.8

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Styrene	<31		81	31	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
tert-Butylbenzene	<32		81	32	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Tetrachloroethene	<30		81	30	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Toluene	<12		20	12	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
trans-1,2-Dichloroethene	<28		81	28	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
trans-1,3-Dichloropropene	<29		81	29	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Trichloroethene	<13		40	13	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Trichlorofluoromethane	<35		81	35	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Vinyl chloride	<21		81	21	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50
Xylenes, Total	**37**	**J**	40	18	ug/Kg	☼	11/01/23 12:20	11/10/23 23:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*	*11/01/23 12:20*	*11/10/23 23:51*	*50*
4-Bromofluorobenzene (Surr)	*81*		*72 - 124*	*11/01/23 12:20*	*11/10/23 23:51*	*50*
Dibromofluoromethane (Surr)	*106*		*75 - 120*	*11/01/23 12:20*	*11/10/23 23:51*	*50*
Toluene-d8 (Surr)	*96*		*75 - 120*	*11/01/23 12:20*	*11/10/23 23:51*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<10		83	10	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
2-Methylnaphthalene	<7.6		83	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Acenaphthene	<7.4		41	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Acenaphthylene	<5.4		41	5.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Anthracene	<6.9		41	6.9	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Benzo[a]anthracene	**26**	**J**	41	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Benzo[a]pyrene	**29**	**J**	41	8.0	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Benzo[b]fluoranthene	**34**	**J**	41	8.9	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Benzo[g,h,i]perylene	**20**	**J**	41	13	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Benzo[k]fluoranthene	<12		41	12	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Chrysene	**28**	**J**	41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Dibenz(a,h)anthracene	<7.9		41	7.9	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Fluoranthene	**41**		41	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Fluorene	<5.8		41	5.8	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Indeno[1,2,3-cd]pyrene	**18**	**J**	41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Naphthalene	<6.3		41	6.3	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Phenanthrene	**18**	**J**	41	5.7	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1
Pyrene	**37**	**J**	41	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*82*		*37 - 147*	*11/13/23 07:16*	*11/13/23 22:52*	*1*
2-Fluorobiphenyl (Surr)	*68*		*43 - 145*	*11/13/23 07:16*	*11/13/23 22:52*	*1*
Terphenyl-d14 (Surr)	*83*		*42 - 157*	*11/13/23 07:16*	*11/13/23 22:52*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.1**		1.1	0.39	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1
Barium	**83**		1.1	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1
Cadmium	**0.82**	**B**	0.23	0.041	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1
Chromium	**30**		1.1	0.57	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-5 (0-1)
Lab Sample ID: 500-241942-10
Date Collected: 11/01/23 12:20
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 75.8

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**17**		0.57	0.26	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1
Selenium	**0.73**	**J B**	1.1	0.67	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1
Silver	<0.15		0.57	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:36	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.080**	**F1**	0.021	0.011	mg/Kg	☼	11/13/23 13:50	11/14/23 08:41	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-5 (1-2)
Date Collected: 11/01/23 12:25
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-11
Matrix: Solid
Percent Solids: 87.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		65	30	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,1,1-Trichloroethane	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,1,2,2-Tetrachloroethane	<26		65	26	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,1,2-Trichloroethane	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,1-Dichloroethane	<26		65	26	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,1-Dichloroethene	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,1-Dichloropropene	<19		65	19	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2,3-Trichlorobenzene	<30		65	30	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2,3-Trichloropropane	<27		130	27	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2,4-Trichlorobenzene	<22		65	22	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2-Dichlorobenzene	<22		65	22	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2-Dichloroethane	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,2-Dichloropropane	<28		65	28	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,3-Dichloropropane	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
1,4-Dichlorobenzene	<24		65	24	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
2,2-Dichloropropane	<29		320	29	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
2-Chlorotoluene	<20		65	20	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
4-Chlorotoluene	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
4-Isopropyltoluene	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Benzene	<9.4		16	9.4	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Bromobenzene	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Bromoform	<31		65	31	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Bromomethane	<51		190	51	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Carbon tetrachloride	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Chlorobenzene	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Chlorobromomethane	<28		65	28	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Chlorodibromomethane	<32		65	32	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Chloroethane	<33		320	33	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Chloroform	<24		130	24	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Chloromethane	<21		320	21	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
cis-1,2-Dichloroethene	<26		65	26	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
cis-1,3-Dichloropropene	<27		65	27	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Dibromomethane	<17		65	17	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Dichlorobromomethane	<24		65	24	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Dichlorodifluoromethane	<44		190	44	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Ethylbenzene	<12		16	12	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Ethylene Dibromide	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Hexachlorobutadiene	<29		65	29	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Isopropyl ether	<18		65	18	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Isopropylbenzene	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Methyl tert-butyl ether	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Methylene Chloride	<110		320	110	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Naphthalene	<22		65	22	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
n-Butylbenzene	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
N-Propylbenzene	<27		65	27	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-5 (1-2)

Date Collected: 11/01/23 12:25
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-11

Matrix: Solid
Percent Solids: 87.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<26		65	26	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Styrene	<25		65	25	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
tert-Butylbenzene	<26		65	26	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Tetrachloroethene	<24		65	24	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Toluene	<9.5		16	9.5	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
trans-1,2-Dichloroethene	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
trans-1,3-Dichloropropene	<23		65	23	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Trichloroethene	<11		32	11	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Trichlorofluoromethane	<28		65	28	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Vinyl chloride	<17		65	17	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50
Xylenes, Total	<14		32	14	ug/Kg	☼	11/01/23 12:25	11/11/23 00:14	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*11/01/23 12:25*	*11/11/23 00:14*	*50*
4-Bromofluorobenzene (Surr)	*81*		*72 - 124*	*11/01/23 12:25*	*11/11/23 00:14*	*50*
Dibromofluoromethane (Surr)	*104*		*75 - 120*	*11/01/23 12:25*	*11/11/23 00:14*	*50*
Toluene-d8 (Surr)	*95*		*75 - 120*	*11/01/23 12:25*	*11/11/23 00:14*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.8		73	8.8	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
2-Methylnaphthalene	<6.7		73	6.7	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Acenaphthene	<6.5		36	6.5	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Acenaphthylene	<4.8		36	4.8	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Anthracene	<6.1		36	6.1	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Benzo[a]anthracene	<4.9		36	4.9	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Benzo[a]pyrene	<7.0		36	7.0	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Benzo[b]fluoranthene	<7.8		36	7.8	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Benzo[g,h,i]perylene	<12		36	12	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Benzo[k]fluoranthene	<11		36	11	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Chrysene	<9.9		36	9.9	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Dibenz(a,h)anthracene	<7.0		36	7.0	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Fluoranthene	**8.7**	**J**	36	6.7	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Fluorene	<5.1		36	5.1	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Indeno[1,2,3-cd]pyrene	<9.4		36	9.4	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Naphthalene	<5.6		36	5.6	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Phenanthrene	**8.2**	**J**	36	5.0	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1
Pyrene	**10**	**J**	36	7.2	ug/Kg	☼	11/13/23 07:16	11/13/23 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*89*		*37 - 147*	*11/13/23 07:16*	*11/13/23 18:21*	*1*
2-Fluorobiphenyl (Surr)	*70*		*43 - 145*	*11/13/23 07:16*	*11/13/23 18:21*	*1*
Terphenyl-d14 (Surr)	*84*		*42 - 157*	*11/13/23 07:16*	*11/13/23 18:21*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.8**		1.0	0.34	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1
Barium	**39**		1.0	0.11	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1
Cadmium	**0.26**	**B**	0.20	0.036	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1
Chromium	**16**		1.0	0.50	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-5 (1-2)
Date Collected: 11/01/23 12:25
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-11
Matrix: Solid
Percent Solids: 87.5

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.7		0.50	0.23	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1
Selenium	0.98	J B	1.0	0.59	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1
Silver	<0.13		0.50	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:39	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.017	0.0090	mg/Kg	☼	11/13/23 13:50	11/14/23 08:54	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-6 (0-2)

Date Collected: 11/01/23 12:45
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-12

Matrix: Solid
Percent Solids: 78.4

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<10		85	10	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
2-Methylnaphthalene	<7.8		85	7.8	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Acenaphthene	<7.6		42	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Acenaphthylene	<5.6		42	5.6	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Anthracene	<7.1		42	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Benzo[a]anthracene	<5.7		42	5.7	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Benzo[a]pyrene	<8.2		42	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Benzo[b]fluoranthene	<9.1		42	9.1	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Benzo[g,h,i]perylene	<14		42	14	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Benzo[k]fluoranthene	<12		42	12	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Chrysene	<12		42	12	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Dibenz(a,h)anthracene	<8.2		42	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Fluoranthene	**9.6**	**J**	42	7.8	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Fluorene	<6.0		42	6.0	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Indeno[1,2,3-cd]pyrene	<11		42	11	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Naphthalene	<6.5		42	6.5	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Phenanthrene	<5.9		42	5.9	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1
Pyrene	**10**	**J**	42	8.4	ug/Kg	☼	11/13/23 07:16	11/13/23 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*81*		*37 - 147*	*11/13/23 07:16*	*11/13/23 22:27*	*1*
2-Fluorobiphenyl (Surr)	*74*		*43 - 145*	*11/13/23 07:16*	*11/13/23 22:27*	*1*
Terphenyl-d14 (Surr)	*76*		*42 - 157*	*11/13/23 07:16*	*11/13/23 22:27*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.2**		1.2	0.40	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1
Barium	**69**		1.2	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1
Cadmium	**0.43**	**B**	0.23	0.042	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1
Chromium	**19**		1.2	0.58	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1
Lead	**12**		0.59	0.27	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1
Selenium	**1.4**	**B**	1.2	0.69	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1
Silver	<0.15		0.59	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:49	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.046**		0.020	0.011	mg/Kg	☼	11/13/23 13:50	11/14/23 08:56	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-7 (0-2)
Date Collected: 11/01/23 12:55
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-13
Matrix: Solid
Percent Solids: 84.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		68	31	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,1,1-Trichloroethane	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,1,2,2-Tetrachloroethane	<27		68	27	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,1,2-Trichloroethane	<24		68	24	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,1-Dichloroethane	<28		68	28	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,1-Dichloroethene	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,1-Dichloropropene	<20		68	20	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2,3-Trichlorobenzene	<31		68	31	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2,3-Trichloropropane	<28		140	28	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2,4-Trichlorobenzene	<23		68	23	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2,4-Trimethylbenzene	<24		68	24	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2-Dibromo-3-Chloropropane	<130		340	130	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2-Dichlorobenzene	<23		68	23	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2-Dichloroethane	<27		68	27	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,2-Dichloropropane	<29		68	29	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,3,5-Trimethylbenzene	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,3-Dichlorobenzene	<27		68	27	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,3-Dichloropropane	<25		68	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
1,4-Dichlorobenzene	<25		68	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
2,2-Dichloropropane	<30		340	30	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
2-Chlorotoluene	<21		68	21	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
4-Chlorotoluene	<24		68	24	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
4-Isopropyltoluene	<25		68	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Benzene	<9.9		17	9.9	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Bromobenzene	<24		68	24	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Bromoform	<33		68	33	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Bromomethane	<54		200	54	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Carbon tetrachloride	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Chlorobenzene	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Chlorobromomethane	<29		68	29	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Chlorodibromomethane	<33		68	33	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Chloroethane	<34		340	34	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Chloroform	<25		140	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Chloromethane	<22		340	22	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
cis-1,2-Dichloroethene	<28		68	28	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
cis-1,3-Dichloropropene	<28		68	28	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Dibromomethane	<18		68	18	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Dichlorobromomethane	<25		68	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Dichlorodifluoromethane	<46		200	46	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Ethylbenzene	**35**		17	12	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Ethylene Dibromide	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Hexachlorobutadiene	<30		68	30	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Isopropyl ether	<19		68	19	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Isopropylbenzene	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Methyl tert-butyl ether	<27		68	27	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Methylene Chloride	<110		340	110	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Naphthalene	<23		68	23	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
n-Butylbenzene	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
N-Propylbenzene	<28		68	28	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-7 (0-2)

Date Collected: 11/01/23 12:55
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-13

Matrix: Solid
Percent Solids: 84.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<27		68	27	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Styrene	<26		68	26	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
tert-Butylbenzene	<27		68	27	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Tetrachloroethene	<25		68	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Toluene	<10		17	10	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
trans-1,2-Dichloroethene	<24		68	24	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
trans-1,3-Dichloropropene	<25		68	25	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Trichloroethene	<11		34	11	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Trichlorofluoromethane	<29		68	29	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Vinyl chloride	<18		68	18	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50
Xylenes, Total	**210**		34	15	ug/Kg	☼	11/01/23 12:55	11/11/23 00:37	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*11/01/23 12:55*	*11/11/23 00:37*	*50*
4-Bromofluorobenzene (Surr)	*81*		*72 - 124*	*11/01/23 12:55*	*11/11/23 00:37*	*50*
Dibromofluoromethane (Surr)	*106*		*75 - 120*	*11/01/23 12:55*	*11/11/23 00:37*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*11/01/23 12:55*	*11/11/23 00:37*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.3		77	9.3	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
2-Methylnaphthalene	<7.0		77	7.0	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Acenaphthene	<6.8		38	6.8	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Acenaphthylene	<5.0		38	5.0	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Anthracene	<6.4		38	6.4	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Benzo[a]anthracene	<5.1		38	5.1	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Benzo[a]pyrene	<7.4		38	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Benzo[b]fluoranthene	<8.2		38	8.2	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Benzo[g,h,i]perylene	<12		38	12	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Benzo[k]fluoranthene	<11		38	11	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Chrysene	<10		38	10	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Dibenz(a,h)anthracene	<7.4		38	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Fluoranthene	<7.1		38	7.1	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Fluorene	<5.4		38	5.4	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Indeno[1,2,3-cd]pyrene	<9.9		38	9.9	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Naphthalene	<5.9		38	5.9	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Phenanthrene	<5.3		38	5.3	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1
Pyrene	<7.6		38	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*72*		*37 - 147*	*11/13/23 07:16*	*11/13/23 17:57*	*1*
2-Fluorobiphenyl (Surr)	*59*		*43 - 145*	*11/13/23 07:16*	*11/13/23 17:57*	*1*
Terphenyl-d14 (Surr)	*74*		*42 - 157*	*11/13/23 07:16*	*11/13/23 17:57*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.8**		1.1	0.39	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1
Barium	**54**		1.1	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1
Cadmium	**0.14**	**J B**	0.23	0.041	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1
Chromium	**19**		1.1	0.57	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-7 (0-2)
Lab Sample ID: 500-241942-13
Date Collected: 11/01/23 12:55
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 84.6

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.9**		0.57	0.26	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1
Selenium	<0.67		1.1	0.67	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1
Silver	<0.15		0.57	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:53	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.018	0.0095	mg/Kg	☼	11/13/23 13:50	11/14/23 08:58	1

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-8 (0-2)

Date Collected: 11/01/23 13:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-14

Matrix: Solid
Percent Solids: 78.9

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<10		83	10	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
2-Methylnaphthalene	<7.5		83	7.5	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Acenaphthene	<7.4		41	7.4	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Acenaphthylene	<5.4		41	5.4	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Anthracene	<6.8		41	6.8	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Benzo[a]anthracene	<5.5		41	5.5	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Benzo[a]pyrene	<7.9		41	7.9	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Benzo[b]fluoranthene	<8.8		41	8.8	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Benzo[g,h,i]perylene	<13		41	13	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Benzo[k]fluoranthene	<12		41	12	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Chrysene	<11		41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Dibenz(a,h)anthracene	<7.9		41	7.9	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Fluoranthene	<7.6		41	7.6	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Fluorene	<5.8		41	5.8	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Indeno[1,2,3-cd]pyrene	<11		41	11	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Naphthalene	<6.3		41	6.3	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Phenanthrene	<5.7		41	5.7	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1
Pyrene	<8.1		41	8.1	ug/Kg	☼	11/13/23 07:16	11/13/23 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*37 - 147*	*11/13/23 07:16*	*11/13/23 18:46*	*1*
2-Fluorobiphenyl (Surr)	*68*		*43 - 145*	*11/13/23 07:16*	*11/13/23 18:46*	*1*
Terphenyl-d14 (Surr)	*80*		*42 - 157*	*11/13/23 07:16*	*11/13/23 18:46*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.0**		1.1	0.39	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1
Barium	**81**		1.1	0.13	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1
Cadmium	**0.30**	**B**	0.23	0.041	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1
Chromium	**24**		1.1	0.57	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1
Lead	**10**		0.57	0.27	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1
Selenium	<0.67		1.1	0.67	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1
Silver	<0.15		0.57	0.15	mg/Kg	☼	11/03/23 09:54	11/08/23 15:56	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.070**		0.019	0.010	mg/Kg	☼	11/13/23 13:50	11/14/23 09:00	1

Definitions/Glossary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

GC/MS VOA

Prep Batch: 740288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-1	Trip Blank	Total/NA	Solid	5035	
500-241942-2	SB-1 (3-5)	Total/NA	Solid	5035	
500-241942-3	SB-1 (7-9)	Total/NA	Solid	5035	
500-241942-4	SB-2 (4-5)	Total/NA	Solid	5035	
500-241942-5	SB-2 (8-10)	Total/NA	Solid	5035	
500-241942-6	SB-3 (3-5)	Total/NA	Solid	5035	
500-241942-7	SB-3 (8-10)	Total/NA	Solid	5035	
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	5035	
500-241942-9	SB-4 (6-8)	Total/NA	Solid	5035	
500-241942-10	SB-5 (0-1)	Total/NA	Solid	5035	
500-241942-11	SB-5 (1-2)	Total/NA	Solid	5035	
500-241942-13	SB-7 (0-2)	Total/NA	Solid	5035	
LB3 500-740288/19-A	Method Blank	Total/NA	Solid	5035	
LCS 500-740288/20-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 741137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-1	Trip Blank	Total/NA	Solid	8260D	740288
500-241942-2	SB-1 (3-5)	Total/NA	Solid	8260D	740288
500-241942-3	SB-1 (7-9)	Total/NA	Solid	8260D	740288
500-241942-4	SB-2 (4-5)	Total/NA	Solid	8260D	740288
500-241942-5	SB-2 (8-10)	Total/NA	Solid	8260D	740288
500-241942-6	SB-3 (3-5)	Total/NA	Solid	8260D	740288
500-241942-7	SB-3 (8-10)	Total/NA	Solid	8260D	740288
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	8260D	740288
500-241942-9	SB-4 (6-8)	Total/NA	Solid	8260D	740288
MB 500-741137/7	Method Blank	Total/NA	Solid	8260D	
LCS 500-741137/4	Lab Control Sample	Total/NA	Solid	8260D	

Analysis Batch: 741717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-10	SB-5 (0-1)	Total/NA	Solid	8260D	740288
500-241942-11	SB-5 (1-2)	Total/NA	Solid	8260D	740288
500-241942-13	SB-7 (0-2)	Total/NA	Solid	8260D	740288
MB 500-741717/5	Method Blank	Total/NA	Solid	8260D	
LCS 500-740288/20-A	Lab Control Sample	Total/NA	Solid	8260D	740288
LCS 500-741717/3	Lab Control Sample	Total/NA	Solid	8260D	

Analysis Batch: 742187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-740288/19-A	Method Blank	Total/NA	Solid	8260D	740288
MB 500-742187/6	Method Blank	Total/NA	Solid	8260D	
LCS 500-742187/4	Lab Control Sample	Total/NA	Solid	8260D	

GC/MS Semi VOA

Analysis Batch: 741797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	8270E	741816
500-241942-3	SB-1 (7-9)	Total/NA	Solid	8270E	741816
500-241942-4	SB-2 (4-5)	Total/NA	Solid	8270E	741816

GC/MS Semi VOA (Continued)

Analysis Batch: 741797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-5	SB-2 (8-10)	Total/NA	Solid	8270E	741816
500-241942-6	SB-3 (3-5)	Total/NA	Solid	8270E	741816
500-241942-7	SB-3 (8-10)	Total/NA	Solid	8270E	741816
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	8270E	741816
500-241942-9	SB-4 (6-8)	Total/NA	Solid	8270E	741816
500-241942-10	SB-5 (0-1)	Total/NA	Solid	8270E	741816
500-241942-11	SB-5 (1-2)	Total/NA	Solid	8270E	741816
500-241942-12	SB-6 (0-2)	Total/NA	Solid	8270E	741816
500-241942-13	SB-7 (0-2)	Total/NA	Solid	8270E	741816
500-241942-14	SB-8 (0-2)	Total/NA	Solid	8270E	741816

Prep Batch: 741816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	3541	
500-241942-3	SB-1 (7-9)	Total/NA	Solid	3541	
500-241942-4	SB-2 (4-5)	Total/NA	Solid	3541	
500-241942-5	SB-2 (8-10)	Total/NA	Solid	3541	
500-241942-6	SB-3 (3-5)	Total/NA	Solid	3541	
500-241942-7	SB-3 (8-10)	Total/NA	Solid	3541	
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	3541	
500-241942-9	SB-4 (6-8)	Total/NA	Solid	3541	
500-241942-10	SB-5 (0-1)	Total/NA	Solid	3541	
500-241942-11	SB-5 (1-2)	Total/NA	Solid	3541	
500-241942-12	SB-6 (0-2)	Total/NA	Solid	3541	
500-241942-13	SB-7 (0-2)	Total/NA	Solid	3541	
500-241942-14	SB-8 (0-2)	Total/NA	Solid	3541	
MB 500-741816/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-741816/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 742098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-741816/1-A	Method Blank	Total/NA	Solid	8270E	741816
LCS 500-741816/2-A	Lab Control Sample	Total/NA	Solid	8270E	741816

Metals

Prep Batch: 740391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	3050B	
500-241942-3	SB-1 (7-9)	Total/NA	Solid	3050B	
500-241942-4	SB-2 (4-5)	Total/NA	Solid	3050B	
500-241942-5	SB-2 (8-10)	Total/NA	Solid	3050B	
500-241942-6	SB-3 (3-5)	Total/NA	Solid	3050B	
500-241942-7	SB-3 (8-10)	Total/NA	Solid	3050B	
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	3050B	
500-241942-9	SB-4 (6-8)	Total/NA	Solid	3050B	
500-241942-10	SB-5 (0-1)	Total/NA	Solid	3050B	
500-241942-11	SB-5 (1-2)	Total/NA	Solid	3050B	
500-241942-12	SB-6 (0-2)	Total/NA	Solid	3050B	
500-241942-13	SB-7 (0-2)	Total/NA	Solid	3050B	
500-241942-14	SB-8 (0-2)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 740391 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-740391/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-740391/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 741265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	6010D	740391
500-241942-3	SB-1 (7-9)	Total/NA	Solid	6010D	740391
500-241942-4	SB-2 (4-5)	Total/NA	Solid	6010D	740391
500-241942-5	SB-2 (8-10)	Total/NA	Solid	6010D	740391
500-241942-6	SB-3 (3-5)	Total/NA	Solid	6010D	740391
500-241942-7	SB-3 (8-10)	Total/NA	Solid	6010D	740391
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	6010D	740391
500-241942-9	SB-4 (6-8)	Total/NA	Solid	6010D	740391
500-241942-10	SB-5 (0-1)	Total/NA	Solid	6010D	740391
500-241942-11	SB-5 (1-2)	Total/NA	Solid	6010D	740391
500-241942-12	SB-6 (0-2)	Total/NA	Solid	6010D	740391
500-241942-13	SB-7 (0-2)	Total/NA	Solid	6010D	740391
500-241942-14	SB-8 (0-2)	Total/NA	Solid	6010D	740391
MB 500-740391/1-A	Method Blank	Total/NA	Solid	6010D	740391
LCS 500-740391/2-A	Lab Control Sample	Total/NA	Solid	6010D	740391

Prep Batch: 741887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	7471B	
500-241942-3	SB-1 (7-9)	Total/NA	Solid	7471B	
500-241942-4	SB-2 (4-5)	Total/NA	Solid	7471B	
500-241942-5	SB-2 (8-10)	Total/NA	Solid	7471B	
500-241942-6	SB-3 (3-5)	Total/NA	Solid	7471B	
500-241942-7	SB-3 (8-10)	Total/NA	Solid	7471B	
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	7471B	
500-241942-9	SB-4 (6-8)	Total/NA	Solid	7471B	
500-241942-10	SB-5 (0-1)	Total/NA	Solid	7471B	
500-241942-11	SB-5 (1-2)	Total/NA	Solid	7471B	
500-241942-12	SB-6 (0-2)	Total/NA	Solid	7471B	
500-241942-13	SB-7 (0-2)	Total/NA	Solid	7471B	
500-241942-14	SB-8 (0-2)	Total/NA	Solid	7471B	
MB 500-741887/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-741887/13-A	Lab Control Sample	Total/NA	Solid	7471B	
500-241942-10 MS	SB-5 (0-1)	Total/NA	Solid	7471B	
500-241942-10 MSD	SB-5 (0-1)	Total/NA	Solid	7471B	
500-241942-10 DU	SB-5 (0-1)	Total/NA	Solid	7471B	

Analysis Batch: 742076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	7471B	741887
500-241942-3	SB-1 (7-9)	Total/NA	Solid	7471B	741887
500-241942-4	SB-2 (4-5)	Total/NA	Solid	7471B	741887
500-241942-5	SB-2 (8-10)	Total/NA	Solid	7471B	741887
500-241942-6	SB-3 (3-5)	Total/NA	Solid	7471B	741887
500-241942-7	SB-3 (8-10)	Total/NA	Solid	7471B	741887
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	7471B	741887

Metals (Continued)

Analysis Batch: 742076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-9	SB-4 (6-8)	Total/NA	Solid	7471B	741887
500-241942-10	SB-5 (0-1)	Total/NA	Solid	7471B	741887
500-241942-11	SB-5 (1-2)	Total/NA	Solid	7471B	741887
500-241942-12	SB-6 (0-2)	Total/NA	Solid	7471B	741887
500-241942-13	SB-7 (0-2)	Total/NA	Solid	7471B	741887
500-241942-14	SB-8 (0-2)	Total/NA	Solid	7471B	741887
MB 500-741887/12-A	Method Blank	Total/NA	Solid	7471B	741887
LCS 500-741887/13-A	Lab Control Sample	Total/NA	Solid	7471B	741887
500-241942-10 MS	SB-5 (0-1)	Total/NA	Solid	7471B	741887
500-241942-10 MSD	SB-5 (0-1)	Total/NA	Solid	7471B	741887
500-241942-10 DU	SB-5 (0-1)	Total/NA	Solid	7471B	741887

General Chemistry

Analysis Batch: 741167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-2	SB-1 (3-5)	Total/NA	Solid	Moisture	
500-241942-3	SB-1 (7-9)	Total/NA	Solid	Moisture	
500-241942-4	SB-2 (4-5)	Total/NA	Solid	Moisture	
500-241942-5	SB-2 (8-10)	Total/NA	Solid	Moisture	
500-241942-6	SB-3 (3-5)	Total/NA	Solid	Moisture	
500-241942-7	SB-3 (8-10)	Total/NA	Solid	Moisture	
500-241942-8	SB-4 (3.5-5)	Total/NA	Solid	Moisture	
500-241942-9	SB-4 (6-8)	Total/NA	Solid	Moisture	
500-241942-10	SB-5 (0-1)	Total/NA	Solid	Moisture	
500-241942-11	SB-5 (1-2)	Total/NA	Solid	Moisture	
500-241942-4 DU	SB-2 (4-5)	Total/NA	Solid	Moisture	

Analysis Batch: 741176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241942-12	SB-6 (0-2)	Total/NA	Solid	Moisture	
500-241942-13	SB-7 (0-2)	Total/NA	Solid	Moisture	
500-241942-14	SB-8 (0-2)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-241942-1	Trip Blank	109	87	114	90
500-241942-2	SB-1 (3-5)	108	89	113	91
500-241942-3	SB-1 (7-9)	108	88	112	91
500-241942-4	SB-2 (4-5)	113	87	114	90
500-241942-5	SB-2 (8-10)	111	87	114	90
500-241942-6	SB-3 (3-5)	113	87	114	90
500-241942-7	SB-3 (8-10)	111	88	114	89
500-241942-8	SB-4 (3.5-5)	109	89	115	90
500-241942-9	SB-4 (6-8)	112	88	116	90
500-241942-10	SB-5 (0-1)	106	81	106	96
500-241942-11	SB-5 (1-2)	104	81	104	95
500-241942-13	SB-7 (0-2)	105	81	106	97
LB3 500-740288/19-A	Method Blank	101	103	101	92
LCS 500-740288/20-A	Lab Control Sample	107	78	105	97
LCS 500-741137/4	Lab Control Sample	97	93	106	94
LCS 500-741717/3	Lab Control Sample	101	78	100	97
LCS 500-742187/4	Lab Control Sample	99	104	98	94
MB 500-741137/7	Method Blank	106	90	109	92
MB 500-741717/5	Method Blank	107	82	106	97
MB 500-742187/6	Method Blank	104	109	102	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(37-147)	(43-145)	(42-157)
500-241942-2	SB-1 (3-5)	99	79	80
500-241942-3	SB-1 (7-9)	92	81	85
500-241942-4	SB-2 (4-5)	98	79	84
500-241942-5	SB-2 (8-10)	98	83	83
500-241942-6	SB-3 (3-5)	92	78	83
500-241942-7	SB-3 (8-10)	93	80	84
500-241942-8	SB-4 (3.5-5)	96	81	86
500-241942-9	SB-4 (6-8)	88	73	84
500-241942-10	SB-5 (0-1)	82	68	83
500-241942-11	SB-5 (1-2)	89	70	84
500-241942-12	SB-6 (0-2)	81	74	76
500-241942-13	SB-7 (0-2)	72	59	74
500-241942-14	SB-8 (0-2)	80	68	80
LCS 500-741816/2-A	Lab Control Sample	77	86	92
MB 500-741816/1-A	Method Blank	72	81	93

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LB3 500-740288/19-A
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740288

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,1-Dichloroethane	<21		50	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,1-Dichloroethene	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,1-Dichloropropene	<15		50	15	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2-Dichloroethane	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,2-Dichloropropane	<21		50	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,3-Dichloropropane	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
2,2-Dichloropropane	<22		250	22	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
2-Chlorotoluene	<16		50	16	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
4-Chlorotoluene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
4-Isopropyltoluene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Benzene	<7.3		13	7.3	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Bromobenzene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Bromoform	<24		50	24	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Bromomethane	<40		150	40	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Carbon tetrachloride	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Chlorobenzene	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Chlorobromomethane	<21		50	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Chlorodibromomethane	<24		50	24	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Chloroethane	<25		250	25	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Chloroform	<19		100	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Chloromethane	<16		250	16	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Dibromomethane	<14		50	14	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Dichlorobromomethane	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Ethylene Dibromide	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Hexachlorobutadiene	<22		50	22	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Isopropyl ether	<14		50	14	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Isopropylbenzene	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Methylene Chloride	<82		250	82	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Naphthalene	<17		50	17	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
n-Butylbenzene	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB3 500-740288/19-A
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740288

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<21		50	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
sec-Butylbenzene	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Styrene	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
tert-Butylbenzene	<20		50	20	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Tetrachloroethene	<19		50	19	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Toluene	<7.4		13	7.4	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Trichloroethene	<8.2		25	8.2	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Trichlorofluoromethane	<21		50	21	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Vinyl chloride	<13		50	13	ug/Kg		11/03/23 00:15	11/15/23 00:06	50
Xylenes, Total	<11		25	11	ug/Kg		11/03/23 00:15	11/15/23 00:06	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*11/03/23 00:15*	*11/15/23 00:06*	*50*
4-Bromofluorobenzene (Surr)	*103*		*72 - 124*	*11/03/23 00:15*	*11/15/23 00:06*	*50*
Dibromofluoromethane (Surr)	*101*		*75 - 120*	*11/03/23 00:15*	*11/15/23 00:06*	*50*
Toluene-d8 (Surr)	*92*		*75 - 120*	*11/03/23 00:15*	*11/15/23 00:06*	*50*

Lab Sample ID: LCS 500-740288/20-A
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	2500	2670		ug/Kg		107	70 - 125
1,1,1-Trichloroethane	2500	2470		ug/Kg		99	70 - 125
1,1,2,2-Tetrachloroethane	2500	1900		ug/Kg		76	62 - 140
1,1,2-Trichloroethane	2500	2260		ug/Kg		91	71 - 130
1,1-Dichloroethane	2500	2380		ug/Kg		95	70 - 125
1,1-Dichloroethene	2500	2200		ug/Kg		88	67 - 122
1,1-Dichloropropene	2500	2290		ug/Kg		92	70 - 121
1,2,3-Trichlorobenzene	2500	2250		ug/Kg		90	51 - 145
1,2,3-Trichloropropane	2500	2010		ug/Kg		81	50 - 133
1,2,4-Trichlorobenzene	2500	2330		ug/Kg		93	57 - 137
1,2,4-Trimethylbenzene	2500	2120		ug/Kg		85	70 - 123
1,2-Dibromo-3-Chloropropane	2500	1910		ug/Kg		77	56 - 123
1,2-Dichlorobenzene	2500	2450		ug/Kg		98	70 - 125
1,2-Dichloroethane	2500	2590		ug/Kg		103	68 - 127
1,2-Dichloropropane	2500	2400		ug/Kg		96	67 - 130
1,3,5-Trimethylbenzene	2500	2100		ug/Kg		84	70 - 123
1,3-Dichlorobenzene	2500	2360		ug/Kg		94	70 - 125
1,3-Dichloropropane	2500	2410		ug/Kg		96	62 - 136
1,4-Dichlorobenzene	2500	2350		ug/Kg		94	70 - 120
2,2-Dichloropropane	2500	2300		ug/Kg		92	58 - 139
2-Chlorotoluene	2500	2010		ug/Kg		80	70 - 125
4-Chlorotoluene	2500	2030		ug/Kg		81	68 - 124
4-Isopropyltoluene	2500	2160		ug/Kg		86	70 - 125
Benzene	2500	2340		ug/Kg		94	70 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 500-740288/20-A
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromobenzene	2500	2170		ug/Kg		87	70 - 122
Bromoform	2500	2770		ug/Kg		111	56 - 132
Bromomethane	2500	2100		ug/Kg		84	40 - 152
Carbon tetrachloride	2500	2660		ug/Kg		106	59 - 133
Chlorobenzene	2500	2460		ug/Kg		99	70 - 120
Chlorobromomethane	2500	2570		ug/Kg		103	65 - 122
Chlorodibromomethane	2500	2650		ug/Kg		106	68 - 125
Chloroethane	2500	2820		ug/Kg		113	48 - 136
Chloroform	2500	2380		ug/Kg		95	70 - 120
Chloromethane	2500	1820		ug/Kg		73	56 - 152
cis-1,2-Dichloroethene	2500	2280		ug/Kg		91	70 - 125
cis-1,3-Dichloropropene	2500	2320		ug/Kg		93	64 - 127
Dibromomethane	2500	2500		ug/Kg		100	70 - 120
Dichlorobromomethane	2500	2440		ug/Kg		98	69 - 120
Dichlorodifluoromethane	2500	1060		ug/Kg		42	40 - 159
Ethylbenzene	2500	2450		ug/Kg		98	70 - 123
Ethylene Dibromide	2500	2440		ug/Kg		98	70 - 125
Hexachlorobutadiene	2500	2260		ug/Kg		90	51 - 150
Isopropylbenzene	2500	2010		ug/Kg		80	70 - 126
Methyl tert-butyl ether	2500	2180		ug/Kg		87	55 - 123
Methylene Chloride	2500	2180		ug/Kg		87	69 - 125
Naphthalene	2500	2010		ug/Kg		81	53 - 144
n-Butylbenzene	2500	2040		ug/Kg		82	68 - 125
N-Propylbenzene	2500	1980		ug/Kg		79	69 - 127
sec-Butylbenzene	2500	2070		ug/Kg		83	70 - 123
Styrene	2500	2470		ug/Kg		99	70 - 120
tert-Butylbenzene	2500	2050		ug/Kg		82	70 - 121
Tetrachloroethene	2500	2600		ug/Kg		104	70 - 128
Toluene	2500	2210		ug/Kg		88	70 - 125
trans-1,2-Dichloroethene	2500	2230		ug/Kg		89	70 - 125
trans-1,3-Dichloropropene	2500	2330		ug/Kg		93	62 - 128
Trichloroethene	2500	2640		ug/Kg		106	70 - 125
Trichlorofluoromethane	2500	2600		ug/Kg		104	55 - 128
Vinyl chloride	2500	1910		ug/Kg		77	64 - 126
Xylenes, Total	5000	4790		ug/Kg		96	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*
4-Bromofluorobenzene (Surr)	*78*		*72 - 124*
Dibromofluoromethane (Surr)	*105*		*75 - 120*
Toluene-d8 (Surr)	*97*		*75 - 120*

Lab Sample ID: MB 500-741137/7
Matrix: Solid
Analysis Batch: 741137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			11/08/23 14:47	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 500-741137/7
Matrix: Solid
Analysis Batch: 741137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			11/08/23 14:47	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			11/08/23 14:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			11/08/23 14:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			11/08/23 14:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			11/08/23 14:47	1
1,2,3-Trichlorobenzene	0.589	J	1.0	0.46	ug/Kg			11/08/23 14:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			11/08/23 14:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			11/08/23 14:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			11/08/23 14:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			11/08/23 14:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			11/08/23 14:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			11/08/23 14:47	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			11/08/23 14:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			11/08/23 14:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			11/08/23 14:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			11/08/23 14:47	1
2,2-Dichloropropane	<0.44		5.0	0.44	ug/Kg			11/08/23 14:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			11/08/23 14:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			11/08/23 14:47	1
4-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			11/08/23 14:47	1
Benzene	<0.15		0.25	0.15	ug/Kg			11/08/23 14:47	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			11/08/23 14:47	1
Bromoform	<0.48		1.0	0.48	ug/Kg			11/08/23 14:47	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			11/08/23 14:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			11/08/23 14:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
Chlorobromomethane	<0.43		1.0	0.43	ug/Kg			11/08/23 14:47	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/Kg			11/08/23 14:47	1
Chloroethane	<0.50		5.0	0.50	ug/Kg			11/08/23 14:47	1
Chloroform	<0.37		2.0	0.37	ug/Kg			11/08/23 14:47	1
Chloromethane	<0.32		5.0	0.32	ug/Kg			11/08/23 14:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			11/08/23 14:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			11/08/23 14:47	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			11/08/23 14:47	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/Kg			11/08/23 14:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			11/08/23 14:47	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			11/08/23 14:47	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			11/08/23 14:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			11/08/23 14:47	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			11/08/23 14:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			11/08/23 14:47	1
Naphthalene	0.466	J	1.0	0.33	ug/Kg			11/08/23 14:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			11/08/23 14:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/08/23 14:47	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 500-741137/7
Matrix: Solid
Analysis Batch: 741137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.39		1.0	0.39	ug/Kg			11/08/23 14:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/08/23 14:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			11/08/23 14:47	1
Toluene	<0.15		0.25	0.15	ug/Kg			11/08/23 14:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			11/08/23 14:47	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			11/08/23 14:47	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			11/08/23 14:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			11/08/23 14:47	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			11/08/23 14:47	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			11/08/23 14:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*		*11/08/23 14:47*	*1*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*		*11/08/23 14:47*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*11/08/23 14:47*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/08/23 14:47*	*1*

Lab Sample ID: LCS 500-741137/4
Matrix: Solid
Analysis Batch: 741137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	40.0	44.6		ug/Kg		112	70 - 125
1,1,1-Trichloroethane	40.0	46.3		ug/Kg		116	70 - 125
1,1,2,2-Tetrachloroethane	40.0	39.8		ug/Kg		100	62 - 140
1,1,2-Trichloroethane	40.0	42.4		ug/Kg		106	71 - 130
1,1-Dichloroethane	40.0	37.5		ug/Kg		94	70 - 125
1,1-Dichloroethene	40.0	44.5		ug/Kg		111	67 - 122
1,1-Dichloropropene	40.0	44.0		ug/Kg		110	70 - 121
1,2,3-Trichlorobenzene	40.0	56.2		ug/Kg		140	51 - 145
1,2,3-Trichloropropane	40.0	44.2		ug/Kg		110	50 - 133
1,2,4-Trichlorobenzene	40.0	49.6		ug/Kg		124	57 - 137
1,2,4-Trimethylbenzene	40.0	39.7		ug/Kg		99	70 - 123
1,2-Dibromo-3-Chloropropane	40.0	51.8	*+	ug/Kg		129	56 - 123
1,2-Dichlorobenzene	40.0	41.8		ug/Kg		104	70 - 125
1,2-Dichloroethane	40.0	39.5		ug/Kg		99	68 - 127
1,2-Dichloropropane	40.0	37.2		ug/Kg		93	67 - 130
1,3,5-Trimethylbenzene	40.0	39.0		ug/Kg		98	70 - 123
1,3-Dichlorobenzene	40.0	41.2		ug/Kg		103	70 - 125
1,3-Dichloropropane	40.0	41.5		ug/Kg		104	62 - 136
1,4-Dichlorobenzene	40.0	40.4		ug/Kg		101	70 - 120
2,2-Dichloropropane	40.0	41.2		ug/Kg		103	58 - 139
2-Chlorotoluene	40.0	38.0		ug/Kg		95	70 - 125
4-Chlorotoluene	40.0	38.4		ug/Kg		96	68 - 124
4-Isopropyltoluene	40.0	38.0		ug/Kg		95	70 - 125
Benzene	40.0	41.1		ug/Kg		103	70 - 120
Bromobenzene	40.0	43.3		ug/Kg		108	70 - 122
Bromoform	40.0	54.3	*+	ug/Kg		136	56 - 132

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 500-741137/4
Matrix: Solid
Analysis Batch: 741137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	40.0	68.6	*+	ug/Kg		171	40 - 152
Carbon tetrachloride	40.0	49.1		ug/Kg		123	59 - 133
Chlorobenzene	40.0	40.8		ug/Kg		102	70 - 120
Chlorobromomethane	40.0	47.7		ug/Kg		119	65 - 122
Chlorodibromomethane	40.0	46.5		ug/Kg		116	68 - 125
Chloroethane	40.0	37.3		ug/Kg		93	48 - 136
Chloroform	40.0	42.8		ug/Kg		107	70 - 120
Chloromethane	40.0	34.2		ug/Kg		86	56 - 152
cis-1,2-Dichloroethene	40.0	43.2		ug/Kg		108	70 - 125
cis-1,3-Dichloropropene	40.0	41.1		ug/Kg		103	64 - 127
Dibromomethane	40.0	47.8		ug/Kg		120	70 - 120
Dichlorobromomethane	40.0	45.7		ug/Kg		114	69 - 120
Dichlorodifluoromethane	40.0	39.6		ug/Kg		99	40 - 159
Ethylbenzene	40.0	40.7		ug/Kg		102	70 - 123
Ethylene Dibromide	40.0	44.5		ug/Kg		111	70 - 125
Hexachlorobutadiene	40.0	45.3		ug/Kg		113	51 - 150
Isopropylbenzene	40.0	38.5		ug/Kg		96	70 - 126
Methyl tert-butyl ether	40.0	43.6		ug/Kg		109	55 - 123
Methylene Chloride	40.0	43.3		ug/Kg		108	69 - 125
Naphthalene	40.0	50.2		ug/Kg		125	53 - 144
n-Butylbenzene	40.0	36.9		ug/Kg		92	68 - 125
N-Propylbenzene	40.0	38.2		ug/Kg		95	69 - 127
sec-Butylbenzene	40.0	37.6		ug/Kg		94	70 - 123
Styrene	40.0	41.5		ug/Kg		104	70 - 120
tert-Butylbenzene	40.0	38.0		ug/Kg		95	70 - 121
Tetrachloroethene	40.0	47.4		ug/Kg		118	70 - 128
Toluene	40.0	37.5		ug/Kg		94	70 - 125
trans-1,2-Dichloroethene	40.0	43.3		ug/Kg		108	70 - 125
trans-1,3-Dichloropropene	40.0	44.5		ug/Kg		111	62 - 128
Trichloroethene	40.0	45.1		ug/Kg		113	70 - 125
Trichlorofluoromethane	40.0	48.5		ug/Kg		121	55 - 128
Vinyl chloride	40.0	46.6		ug/Kg		116	64 - 126
Xylenes, Total	80.0	78.2		ug/Kg		98	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*
4-Bromofluorobenzene (Surr)	*93*		*72 - 124*
Dibromofluoromethane (Surr)	*106*		*75 - 120*
Toluene-d8 (Surr)	*94*		*75 - 120*

Lab Sample ID: MB 500-741717/5
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			11/10/23 19:45	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			11/10/23 19:45	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			11/10/23 19:45	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 500-741717/5
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			11/10/23 19:45	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			11/10/23 19:45	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			11/10/23 19:45	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			11/10/23 19:45	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			11/10/23 19:45	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			11/10/23 19:45	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			11/10/23 19:45	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			11/10/23 19:45	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			11/10/23 19:45	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			11/10/23 19:45	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			11/10/23 19:45	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			11/10/23 19:45	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			11/10/23 19:45	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			11/10/23 19:45	1
2,2-Dichloropropane	<0.44		5.0	0.44	ug/Kg			11/10/23 19:45	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			11/10/23 19:45	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			11/10/23 19:45	1
4-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			11/10/23 19:45	1
Benzene	<0.15		0.25	0.15	ug/Kg			11/10/23 19:45	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			11/10/23 19:45	1
Bromoform	<0.48		1.0	0.48	ug/Kg			11/10/23 19:45	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			11/10/23 19:45	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			11/10/23 19:45	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
Chlorobromomethane	<0.43		1.0	0.43	ug/Kg			11/10/23 19:45	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/Kg			11/10/23 19:45	1
Chloroethane	<0.50		5.0	0.50	ug/Kg			11/10/23 19:45	1
Chloroform	<0.37		2.0	0.37	ug/Kg			11/10/23 19:45	1
Chloromethane	<0.32		5.0	0.32	ug/Kg			11/10/23 19:45	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			11/10/23 19:45	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			11/10/23 19:45	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			11/10/23 19:45	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/Kg			11/10/23 19:45	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			11/10/23 19:45	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			11/10/23 19:45	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			11/10/23 19:45	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			11/10/23 19:45	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			11/10/23 19:45	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			11/10/23 19:45	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			11/10/23 19:45	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			11/10/23 19:45	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/10/23 19:45	1
Styrene	<0.39		1.0	0.39	ug/Kg			11/10/23 19:45	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/10/23 19:45	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 500-741717/5
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			11/10/23 19:45	1
Toluene	<0.15		0.25	0.15	ug/Kg			11/10/23 19:45	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			11/10/23 19:45	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			11/10/23 19:45	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			11/10/23 19:45	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			11/10/23 19:45	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			11/10/23 19:45	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			11/10/23 19:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*		*11/10/23 19:45*	*1*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*		*11/10/23 19:45*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 120*		*11/10/23 19:45*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*11/10/23 19:45*	*1*

Lab Sample ID: LCS 500-741717/3
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	54.6		ug/Kg		109	70 - 125
1,1,1-Trichloroethane	50.0	51.4		ug/Kg		103	70 - 125
1,1,2,2-Tetrachloroethane	50.0	37.9		ug/Kg		76	62 - 140
1,1,2-Trichloroethane	50.0	45.2		ug/Kg		90	71 - 130
1,1-Dichloroethane	50.0	47.7		ug/Kg		95	70 - 125
1,1-Dichloroethene	50.0	47.1		ug/Kg		94	67 - 122
1,1-Dichloropropene	50.0	49.1		ug/Kg		98	70 - 121
1,2,3-Trichlorobenzene	50.0	43.0		ug/Kg		86	51 - 145
1,2,3-Trichloropropane	50.0	40.2		ug/Kg		80	50 - 133
1,2,4-Trichlorobenzene	50.0	45.3		ug/Kg		91	57 - 137
1,2,4-Trimethylbenzene	50.0	43.5		ug/Kg		87	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	37.5		ug/Kg		75	56 - 123
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 125
1,2-Dichloroethane	50.0	48.7		ug/Kg		97	68 - 127
1,2-Dichloropropane	50.0	47.7		ug/Kg		95	67 - 130
1,3,5-Trimethylbenzene	50.0	43.6		ug/Kg		87	70 - 123
1,3-Dichlorobenzene	50.0	46.8		ug/Kg		94	70 - 125
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	62 - 136
1,4-Dichlorobenzene	50.0	48.5		ug/Kg		97	70 - 120
2,2-Dichloropropane	50.0	49.2		ug/Kg		98	58 - 139
2-Chlorotoluene	50.0	40.6		ug/Kg		81	70 - 125
4-Chlorotoluene	50.0	42.2		ug/Kg		84	68 - 124
4-Isopropyltoluene	50.0	45.7		ug/Kg		91	70 - 125
Benzene	50.0	47.0		ug/Kg		94	70 - 120
Bromobenzene	50.0	42.9		ug/Kg		86	70 - 122
Bromoform	50.0	52.7		ug/Kg		105	56 - 132
Bromomethane	50.0	53.4		ug/Kg		107	40 - 152
Carbon tetrachloride	50.0	56.1		ug/Kg		112	59 - 133

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 500-741717/3
Matrix: Solid
Analysis Batch: 741717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	50.0	49.3		ug/Kg		99	70 - 120
Chlorobromomethane	50.0	49.2		ug/Kg		98	65 - 122
Chlorodibromomethane	50.0	52.7		ug/Kg		105	68 - 125
Chloroethane	50.0	44.8		ug/Kg		90	48 - 136
Chloroform	50.0	47.1		ug/Kg		94	70 - 120
Chloromethane	50.0	49.9		ug/Kg		100	56 - 152
cis-1,2-Dichloroethene	50.0	46.8		ug/Kg		94	70 - 125
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	64 - 127
Dibromomethane	50.0	46.2		ug/Kg		92	70 - 120
Dichlorobromomethane	50.0	46.9		ug/Kg		94	69 - 120
Dichlorodifluoromethane	50.0	39.3		ug/Kg		79	40 - 159
Ethylbenzene	50.0	50.5		ug/Kg		101	70 - 123
Ethylene Dibromide	50.0	47.7		ug/Kg		95	70 - 125
Hexachlorobutadiene	50.0	44.8		ug/Kg		90	51 - 150
Isopropylbenzene	50.0	41.4		ug/Kg		83	70 - 126
Methyl tert-butyl ether	50.0	41.8		ug/Kg		84	55 - 123
Methylene Chloride	50.0	42.0		ug/Kg		84	69 - 125
Naphthalene	50.0	40.3		ug/Kg		81	53 - 144
n-Butylbenzene	50.0	43.5		ug/Kg		87	68 - 125
N-Propylbenzene	50.0	41.2		ug/Kg		82	69 - 127
sec-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 123
Styrene	50.0	49.6		ug/Kg		99	70 - 120
tert-Butylbenzene	50.0	42.4		ug/Kg		85	70 - 121
Tetrachloroethene	50.0	54.8		ug/Kg		110	70 - 128
Toluene	50.0	44.9		ug/Kg		90	70 - 125
trans-1,2-Dichloroethene	50.0	47.4		ug/Kg		95	70 - 125
trans-1,3-Dichloropropene	50.0	46.5		ug/Kg		93	62 - 128
Trichloroethene	50.0	53.4		ug/Kg		107	70 - 125
Trichlorofluoromethane	50.0	52.4		ug/Kg		105	55 - 128
Vinyl chloride	50.0	52.8		ug/Kg		106	64 - 126
Xylenes, Total	100	94.5		ug/Kg		95	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*
4-Bromofluorobenzene (Surr)	*78*		*72 - 124*
Dibromofluoromethane (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*97*		*75 - 120*

Lab Sample ID: MB 500-742187/6
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			11/14/23 22:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			11/14/23 22:06	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			11/14/23 22:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			11/14/23 22:06	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			11/14/23 22:06	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 500-742187/6
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			11/14/23 22:06	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			11/14/23 22:06	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			11/14/23 22:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			11/14/23 22:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			11/14/23 22:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			11/14/23 22:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			11/14/23 22:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			11/14/23 22:06	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			11/14/23 22:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			11/14/23 22:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			11/14/23 22:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			11/14/23 22:06	1
2,2-Dichloropropane	<0.44		5.0	0.44	ug/Kg			11/14/23 22:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			11/14/23 22:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			11/14/23 22:06	1
4-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			11/14/23 22:06	1
Benzene	<0.15		0.25	0.15	ug/Kg			11/14/23 22:06	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			11/14/23 22:06	1
Bromoform	<0.48		1.0	0.48	ug/Kg			11/14/23 22:06	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			11/14/23 22:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			11/14/23 22:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
Chlorobromomethane	<0.43		1.0	0.43	ug/Kg			11/14/23 22:06	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/Kg			11/14/23 22:06	1
Chloroethane	<0.50		5.0	0.50	ug/Kg			11/14/23 22:06	1
Chloroform	<0.37		2.0	0.37	ug/Kg			11/14/23 22:06	1
Chloromethane	<0.32		5.0	0.32	ug/Kg			11/14/23 22:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			11/14/23 22:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			11/14/23 22:06	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			11/14/23 22:06	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/Kg			11/14/23 22:06	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			11/14/23 22:06	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			11/14/23 22:06	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			11/14/23 22:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			11/14/23 22:06	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			11/14/23 22:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			11/14/23 22:06	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			11/14/23 22:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			11/14/23 22:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/14/23 22:06	1
Styrene	<0.39		1.0	0.39	ug/Kg			11/14/23 22:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			11/14/23 22:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			11/14/23 22:06	1
Toluene	<0.15		0.25	0.15	ug/Kg			11/14/23 22:06	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 500-742187/6
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			11/14/23 22:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			11/14/23 22:06	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			11/14/23 22:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			11/14/23 22:06	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			11/14/23 22:06	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			11/14/23 22:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*		*11/14/23 22:06*	*1*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*		*11/14/23 22:06*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 120*		*11/14/23 22:06*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/14/23 22:06*	*1*

Lab Sample ID: LCS 500-742187/4
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	52.1		ug/Kg		104	70 - 125
1,1,1-Trichloroethane	50.0	51.2		ug/Kg		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	52.2		ug/Kg		104	62 - 140
1,1,2-Trichloroethane	50.0	48.7		ug/Kg		97	71 - 130
1,1-Dichloroethane	50.0	54.9		ug/Kg		110	70 - 125
1,1-Dichloroethene	50.0	49.2		ug/Kg		98	67 - 122
1,1-Dichloropropene	50.0	53.0		ug/Kg		106	70 - 121
1,2,3-Trichlorobenzene	50.0	31.5		ug/Kg		63	51 - 145
1,2,3-Trichloropropane	50.0	53.4		ug/Kg		107	50 - 133
1,2,4-Trichlorobenzene	50.0	33.5		ug/Kg		67	57 - 137
1,2,4-Trimethylbenzene	50.0	54.4		ug/Kg		109	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	56 - 123
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 125
1,2-Dichloroethane	50.0	53.2		ug/Kg		106	68 - 127
1,2-Dichloropropane	50.0	52.5		ug/Kg		105	67 - 130
1,3,5-Trimethylbenzene	50.0	54.8		ug/Kg		110	70 - 123
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 125
1,3-Dichloropropane	50.0	51.4		ug/Kg		103	62 - 136
1,4-Dichlorobenzene	50.0	48.6		ug/Kg		97	70 - 120
2,2-Dichloropropane	50.0	67.7		ug/Kg		135	58 - 139
2-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 125
4-Chlorotoluene	50.0	54.8		ug/Kg		110	68 - 124
4-Isopropyltoluene	50.0	54.3		ug/Kg		109	70 - 125
Benzene	50.0	50.5		ug/Kg		101	70 - 120
Bromobenzene	50.0	50.9		ug/Kg		102	70 - 122
Bromoform	50.0	57.2		ug/Kg		114	56 - 132
Bromomethane	50.0	102	*+	ug/Kg		205	40 - 152
Carbon tetrachloride	50.0	57.6		ug/Kg		115	59 - 133
Chlorobenzene	50.0	50.3		ug/Kg		101	70 - 120
Chlorobromomethane	50.0	50.2		ug/Kg		100	65 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 500-742187/4
Matrix: Solid
Analysis Batch: 742187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorodibromomethane	50.0	57.3		ug/Kg		115	68 - 125
Chloroethane	50.0	72.8	*+	ug/Kg		146	48 - 136
Chloroform	50.0	50.1		ug/Kg		100	70 - 120
Chloromethane	50.0	73.6		ug/Kg		147	56 - 152
cis-1,2-Dichloroethene	50.0	50.5		ug/Kg		101	70 - 125
cis-1,3-Dichloropropene	50.0	49.2		ug/Kg		98	64 - 127
Dibromomethane	50.0	50.2		ug/Kg		100	70 - 120
Dichlorobromomethane	50.0	52.8		ug/Kg		106	69 - 120
Dichlorodifluoromethane	50.0	64.3		ug/Kg		129	40 - 159
Ethylbenzene	50.0	50.1		ug/Kg		100	70 - 123
Ethylene Dibromide	50.0	49.0		ug/Kg		98	70 - 125
Hexachlorobutadiene	50.0	33.2		ug/Kg		66	51 - 150
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 126
Methyl tert-butyl ether	50.0	43.7		ug/Kg		87	55 - 123
Methylene Chloride	50.0	49.4		ug/Kg		99	69 - 125
Naphthalene	50.0	33.9		ug/Kg		68	53 - 144
n-Butylbenzene	50.0	52.7		ug/Kg		105	68 - 125
N-Propylbenzene	50.0	56.0		ug/Kg		112	69 - 127
sec-Butylbenzene	50.0	53.9		ug/Kg		108	70 - 123
Styrene	50.0	52.5		ug/Kg		105	70 - 120
tert-Butylbenzene	50.0	52.9		ug/Kg		106	70 - 121
Tetrachloroethene	50.0	45.2		ug/Kg		90	70 - 128
Toluene	50.0	51.5		ug/Kg		103	70 - 125
trans-1,2-Dichloroethene	50.0	51.8		ug/Kg		104	70 - 125
trans-1,3-Dichloropropene	50.0	51.2		ug/Kg		102	62 - 128
Trichloroethene	50.0	49.6		ug/Kg		99	70 - 125
Trichlorofluoromethane	50.0	63.1		ug/Kg		126	55 - 128
Vinyl chloride	50.0	68.5	*+	ug/Kg		137	64 - 126
Xylenes, Total	100	103		ug/Kg		103	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
4-Bromofluorobenzene (Surr)	*104*		*72 - 124*
Dibromofluoromethane (Surr)	*98*		*75 - 120*
Toluene-d8 (Surr)	*94*		*75 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-741816/1-A
Matrix: Solid
Analysis Batch: 742098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Acenaphthene	<6.0		33	6.0	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Anthracene	<5.6		33	5.6	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		11/13/23 07:16	11/14/23 12:16	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-741816/1-A
Matrix: Solid
Analysis Batch: 742098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Chrysene	<9.1		33	9.1	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Fluoranthene	<6.2		33	6.2	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Fluorene	<4.7		33	4.7	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Naphthalene	<5.1		33	5.1	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Phenanthrene	<4.6		33	4.6	ug/Kg		11/13/23 07:16	11/14/23 12:16	1
Pyrene	<6.6		33	6.6	ug/Kg		11/13/23 07:16	11/14/23 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*72*		*37 - 147*	*11/13/23 07:16*	*11/14/23 12:16*	*1*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*11/13/23 07:16*	*11/14/23 12:16*	*1*
Terphenyl-d14 (Surr)	*93*		*42 - 157*	*11/13/23 07:16*	*11/14/23 12:16*	*1*

Lab Sample ID: LCS 500-741816/2-A
Matrix: Solid
Analysis Batch: 742098

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 741816

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	3330	2950		ug/Kg		88	68 - 111
2-Methylnaphthalene	3330	2940		ug/Kg		88	69 - 112
Acenaphthene	3330	3030		ug/Kg		91	65 - 124
Acenaphthylene	3330	3000		ug/Kg		90	68 - 120
Anthracene	3330	3210		ug/Kg		96	70 - 114
Benzo[a]anthracene	3330	3250		ug/Kg		97	67 - 122
Benzo[a]pyrene	3330	3110		ug/Kg		93	65 - 133
Benzo[b]fluoranthene	3330	2950		ug/Kg		89	69 - 129
Benzo[g,h,i]perylene	3330	2890		ug/Kg		87	72 - 131
Benzo[k]fluoranthene	3330	3300		ug/Kg		99	68 - 127
Chrysene	3330	3330		ug/Kg		100	63 - 120
Dibenz(a,h)anthracene	3330	3270		ug/Kg		98	64 - 131
Fluoranthene	3330	3400		ug/Kg		102	62 - 120
Fluorene	3330	3200		ug/Kg		96	62 - 120
Indeno[1,2,3-cd]pyrene	3330	3020		ug/Kg		91	68 - 130
Naphthalene	3330	2920		ug/Kg		87	63 - 110
Phenanthrene	3330	3100		ug/Kg		93	62 - 120
Pyrene	3330	3450		ug/Kg		103	61 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*77*		*37 - 147*
2-Fluorobiphenyl (Surr)	*86*		*43 - 145*
Terphenyl-d14 (Surr)	*92*		*42 - 157*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 500-740391/1-A
Matrix: Solid
Analysis Batch: 741265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740391

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.34		1.0	0.34	mg/Kg		11/03/23 09:54	11/08/23 14:09	1
Barium	<0.11		1.0	0.11	mg/Kg		11/03/23 09:54	11/08/23 14:09	1
Cadmium	0.0487	J	0.20	0.036	mg/Kg		11/03/23 09:54	11/08/23 14:09	1
Chromium	<0.50		1.0	0.50	mg/Kg		11/03/23 09:54	11/08/23 14:09	1
Lead	<0.23		0.50	0.23	mg/Kg		11/03/23 09:54	11/08/23 14:09	1
Selenium	0.777	J	1.0	0.59	mg/Kg		11/03/23 09:54	11/08/23 14:09	1
Silver	<0.13		0.50	0.13	mg/Kg		11/03/23 09:54	11/08/23 14:09	1

Lab Sample ID: LCS 500-740391/2-A
Matrix: Solid
Analysis Batch: 741265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	10.0	10.0		mg/Kg		100	80 - 120
Barium	200	203		mg/Kg		101	80 - 120
Cadmium	5.00	4.93		mg/Kg		99	80 - 120
Chromium	20.0	19.8		mg/Kg		99	80 - 120
Lead	10.0	9.21		mg/Kg		92	80 - 120
Selenium	10.0	9.41		mg/Kg		94	80 - 120
Silver	5.00	4.63		mg/Kg		93	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-741887/12-A
Matrix: Solid
Analysis Batch: 742076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741887

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0088		0.017	0.0088	mg/Kg		11/13/23 13:50	11/14/23 08:15	1

Lab Sample ID: LCS 500-741887/13-A
Matrix: Solid
Analysis Batch: 742076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 741887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.176		mg/Kg		105	80 - 120

Lab Sample ID: 500-241942-10 MS
Matrix: Solid
Analysis Batch: 742076

Client Sample ID: SB-5 (0-1)
Prep Type: Total/NA
Prep Batch: 741887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.080	F1	0.104	0.153	F1	mg/Kg	☼	71	75 - 125

Lab Sample ID: 500-241942-10 MSD
Matrix: Solid
Analysis Batch: 742076

Client Sample ID: SB-5 (0-1)
Prep Type: Total/NA
Prep Batch: 741887

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.080	F1	0.103	0.185		mg/Kg	☼	102	75 - 125	19	20

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: 500-241942-10 DU
Matrix: Solid
Analysis Batch: 742076

Client Sample ID: SB-5 (0-1)
Prep Type: Total/NA
Prep Batch: 741887

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.080	F1		0.0804		mg/Kg	☼			0.8	20

Lab Chronicle

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: Trip Blank
Lab Sample ID: 500-241942-1
Date Collected: 11/01/23 00:00
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 00:00
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 16:58

Client Sample ID: SB-1 (3-5)
Lab Sample ID: 500-241942-2
Date Collected: 11/01/23 11:10
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-1 (3-5)
Lab Sample ID: 500-241942-2
Date Collected: 11/01/23 11:10
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 11:10
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 17:24
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 19:11
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:08
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:20

Client Sample ID: SB-1 (7-9)
Lab Sample ID: 500-241942-3
Date Collected: 11/01/23 11:00
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-1 (7-9)
Lab Sample ID: 500-241942-3
Date Collected: 11/01/23 11:00
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 11:00
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 17:50
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 20:00
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:11
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:22

Lab Chronicle

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-2 (4-5)
Lab Sample ID: 500-241942-4
Date Collected: 11/01/23 11:30
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-2 (4-5)
Lab Sample ID: 500-241942-4
Date Collected: 11/01/23 11:30
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 11:30
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 18:17
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 19:35
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:15
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:28

Client Sample ID: SB-2 (8-10)
Lab Sample ID: 500-241942-5
Date Collected: 11/01/23 11:20
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-2 (8-10)
Lab Sample ID: 500-241942-5
Date Collected: 11/01/23 11:20
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 11:20
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 18:43
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 22:03
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:18
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:30

Client Sample ID: SB-3 (3-5)
Lab Sample ID: 500-241942-6
Date Collected: 11/01/23 11:40
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-3 (3-5)
Date Collected: 11/01/23 11:40
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-6
Matrix: Solid
Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 11:40
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 19:09
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 20:25
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:22
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:32

Client Sample ID: SB-3 (8-10)
Date Collected: 11/01/23 11:45
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-3 (8-10)
Date Collected: 11/01/23 11:45
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-7
Matrix: Solid
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 11:45
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 19:35
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 20:49
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:25
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:35

Client Sample ID: SB-4 (3.5-5)
Date Collected: 11/01/23 12:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-4 (3.5-5)
Date Collected: 11/01/23 12:10
Date Received: 11/02/23 09:35

Lab Sample ID: 500-241942-8
Matrix: Solid
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 12:10
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 20:01
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 21:14

Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: Manitowoc Farm Soil Characterization 193709822

Job ID: 500-241942-1

Client Sample ID: SB-4 (3.5-5)

Lab Sample ID: 500-241942-8
Date Collected: 11/01/23 12:10
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:29
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:37

Client Sample ID: SB-4 (6-8)

Lab Sample ID: 500-241942-9
Date Collected: 11/01/23 12:15
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-4 (6-8)

Lab Sample ID: 500-241942-9
Date Collected: 11/01/23 12:15
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 12:15
Total/NA	Analysis	8260D		50	741137	W1T	EET CHI	11/08/23 20:27
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 21:38
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:32
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:39

Client Sample ID: SB-5 (0-1)

Lab Sample ID: 500-241942-10
Date Collected: 11/01/23 12:20
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-5 (0-1)

Lab Sample ID: 500-241942-10
Date Collected: 11/01/23 12:20
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 12:20
Total/NA	Analysis	8260D		50	741717	AJP	EET CHI	11/10/23 23:51
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 22:52
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:36
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:41

Lab Chronicle

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-5 (1-2)
Lab Sample ID: 500-241942-11
Date Collected: 11/01/23 12:25
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741167	LWN	EET CHI	11/08/23 09:03

Client Sample ID: SB-5 (1-2)
Lab Sample ID: 500-241942-11
Date Collected: 11/01/23 12:25
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 12:25
Total/NA	Analysis	8260D		50	741717	AJP	EET CHI	11/11/23 00:14
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 18:21
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:39
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:54

Client Sample ID: SB-6 (0-2)
Lab Sample ID: 500-241942-12
Date Collected: 11/01/23 12:45
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741176	LWN	EET CHI	11/08/23 09:35

Client Sample ID: SB-6 (0-2)
Lab Sample ID: 500-241942-12
Date Collected: 11/01/23 12:45
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 22:27
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:49
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:56

Client Sample ID: SB-7 (0-2)
Lab Sample ID: 500-241942-13
Date Collected: 11/01/23 12:55
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741176	LWN	EET CHI	11/08/23 09:35

Lab Chronicle

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Client Sample ID: SB-7 (0-2)
Lab Sample ID: 500-241942-13
Date Collected: 11/01/23 12:55
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			740288	WRE	EET CHI	11/01/23 12:55
Total/NA	Analysis	8260D		50	741717	AJP	EET CHI	11/11/23 00:37
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 17:57
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:53
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 08:58

Client Sample ID: SB-8 (0-2)
Lab Sample ID: 500-241942-14
Date Collected: 11/01/23 13:10
Matrix: Solid
Date Received: 11/02/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	741176	LWN	EET CHI	11/08/23 09:35

Client Sample ID: SB-8 (0-2)
Lab Sample ID: 500-241942-14
Date Collected: 11/01/23 13:10
Matrix: Solid
Date Received: 11/02/23 09:35
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			741816	FRG	EET CHI	11/13/23 07:16 - 11/13/23 11:48 [1]
Total/NA	Analysis	8270E		1	741797	SS	EET CHI	11/13/23 18:46
Total/NA	Prep	3050B			740391	BDE	EET CHI	11/03/23 09:54 - 11/03/23 10:24 [1]
Total/NA	Analysis	6010D		1	741265	RN	EET CHI	11/08/23 15:56
Total/NA	Prep	7471B			741887	MJG	EET CHI	11/13/23 13:50
Total/NA	Analysis	7471B		1	742076	MJG	EET CHI	11/14/23 09:00

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Stantec Consulting Corporation
Job ID: 500-241942-1
Project/Site: Manitowoc Farm Soil Characterization 193709822

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-24

Eurofins Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534 5211

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No:
	Madi Edwards	Fredrick, Sandie		500-118039-48209 1
Client Contact: Madeline Edwards	Phone: 262-336-4747	E-Mail: Sandra Fredrick@et eurofinsus com	State of Origin:	Page: Page 1 of 2
Company: Stantec Consulting Corporation	PWSID			Job #: 500-241942

Address: 12080 Corporate Parkway	Due Date Requested
City: Mequon	TAT Requested (days): 10 Days (standard)
State, Zip: WI 53092	Compliance Project: Δ Yes Δ No
Phone	PO #: Add project number here: Manitowoc Farm Field
Email: Madeline Edwards@stantec.com	WO #
Project Name: Manitowoc Farm Soil Characterization	Project #: 50006565
Site	SSOW#:

500-241942 COC

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - VOC	6010D, 7471B, 8270E	Total Number of containers	Special Instructions/Note
				Preservation Code:				N	N		
1	Trip Blank	11/1/23	—	—	~~Solid~~	N	N	X		1	
2	SB-1 (3-5)		1110	G	Solid			X	X	3	
3	SB-1 (7-9)		1100	G	Solid			X	X	3	
4	SB-2 (4-5)		1130	G	Solid			X	X	3	
5	SB-2 (8-10)		1120	G	Solid			X	X	3	
6	SB-3 (3-5)		1140	G	Solid			X	X	3	
7	SB-3 (8-10)		1145	G	Solid			X	X	3	
8	SB-4 (3.5-5)		1210	G	Solid			X	X	3	
9	SB-4 (6-8)		1215	G	Solid			X	X	3	
10	SB-5 (0-1)		1220	G	Solid			X	X	3	
11	SB-5 (1-2)		1225	G	Solid			X	X	3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV, Other (specify)

Special Instructions/QC Requirements: MSA # 40411

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Madi Edwards	11/1/2023, 1500	Stantec	[signature]	11/2/23 0935	EAT
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 4.3-3.7

Eurofins Chicago
2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708 534-5211

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Fredrick, Sandie		500-118039-48209 2
Client Contact: Madeline Edwards	Phone	E-Mail: Sandra Fredrick@et.eurofinsus com	State of Origin	Page: Page 2 of 2
Company: Stantec Consulting Corporation	PWSID:	Analysis Requested		Job #: 500-241942
Address: 12080 Corporate Parkway	Due Date Requested			Preservation Codes: A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V - MCAA, W pH 4-5, Y Trizma, Z other (specify)
City: Mequon	TAT Requested (days): 10 Days (Standard)			
State, Zip: WI, 53092	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Add project number here			Other:
Email: Madeline Edwards@stantec com	WO #:			
Project Name: Manitowoc Farm Soil Characterization	Project #: 50006565			
Site	SSOW#:			

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - VOC	6010D, 7471B, 8270E	Total Number of containers	Special Instructions/Note.
				Preservation Code:				N	N		
12	SB-6 (0-2)	11/1/23	1245	G	Solid	N	N		X	1	
13	SB-7 (0-2)	11/1/23	1255	G	Solid	↓	↓	X	X	3	
14	SB-8 (0-2)	11/1/23	1310	G	Solid	↓	↓		X	1	
					Solid						
					Solid						
					Solid						
					Solid						
					Solid						
					Solid						
					Solid						
					Solid						

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III, IV Other (specify)

Special Instructions/QC Requirements: MSA #4044

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Madeline Edwards	11/1/2023, 1500	Stantec	[illegible]	11/2/23 0935	EDD
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

ORIGIN ID:RRLA (262) 202-5955
MADELINE
STANTEC
12075 CORPORATE PARKWAY
SUITE 200
MEQUON, WI 53092
UNITED STATES US

SHIP DATE: 30OCT23
ACTWGT: 25.00 LB MAN
CAD: 0269688/CAFE3755

TO **SAMPLE RECIEPT**
EUROFINS CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 60484
(708) 534-5200 REF:
INV:
PO: DEPT:

500-241942 Waybi

RMA

FedEx Express

E

J233023051201uv

FedEx
TRK# 0221 **7044 8942 3208**

THU - 02 NOV AA
PRIORITY OVERNIGHT

60484
IL-US
ORD

79 JOTA

583246 01Nov2023 MKEA 581G4/C5BD/C0B8

48qt

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Login Sample Receipt Checklist

Client: Stantec Consulting Corporation

Job Number: 500-241942-1

Login Number: 241942
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	