From: Cull, Whitney <Whitney.Cull@stantec.com>
Sent: Wednesday, September 4, 2024 9:34 AM
To: Beggs, Tauren R - DNR
Cc: Byers, Harris
Subject: RE: Soil Characterization for River Point - Orchard Lane

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Tauren,

Good catch - I did not realize how strange the Town of Newton's municipal boundary was. You are correct; technically, the Orchard Lane ROW represented in this report is entirely within the "Town of Newton".

The Town of Newton's Town Hall address is below:

Town of Newton
MANITOWOC COUNTY

Town of Newton Town Hall

6532 Carstens Lake Road
Manitowoc, WI 54220

Attention would be to Town of Newton Chairperson, Denise Thomas, phone number (920) 973-6961.

Thank you!

Whitney Cull PG, EIT
Stantec
Geologist
Mobile: (262) 219 – 4740

Stantec

From: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Sent: Tuesday, September 3, 2024 10:45 AM
To: Cull, Whitney <Whitney.Cull@stantec.com>
Cc: Byers, Harris <Harris.Byers@stantec.com>
Subject: RE: Soil Characterization for River Point - Orchard Lane

Good morning Whitney,

Is the Orchard Lane ROW owned by the City of Manitowoc or the Town of Newton? I will need to know the owner contact information if it is the Town.

Thanks,
Tauren

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Tauren R. Beggs
Phone: (920) 510-3472
Tauren.Beggs@wisconsin.gov

From: Cull, Whitney <Whitney.Cull@stantec.com>
Sent: Monday, August 26, 2024 5:11 PM
To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Cc: Byers, Harris <Harris.Byers@stantec.com>
Subject: Soil Characterization for River Point - Orchard Lane

Good afternoon Tauren,

We have additional opportunity to import some needed fill for raising the grade at River Point sourced from the Orchard Lane right of way reconstruction in Manitowoc, Wisconsin. Attached is a summary report documenting soil quality proposed for reuse at River Point.

High-level summary: Three (3) samples were collected representing approximately 900 CY (sample density: 1 per 300 CY) of native sands and clays that will be generated as part of Orchard Lane. Analytical results indicate that these soils are suitable for use anywhere within the River Point District, as there were no VOC, PAH or RCRA metal constituents detected at concentrations greater than applicable NR 720 standards.

Stantec is of the opinion that the sample density summarized above is appropriate given the non-industrial historical nature of this corridor, the lack of observed visual/olfactory impacts, the quality of the soils observed, and the lack of environmental cases in these area (no BRRTS cases within this alignment, with the nearest cases several hundred feet away). Photographs of these soils, along with tabulated analytical data are included in the summary report.

Our goal for this material is to give it flexibility to be imported to wherever it is next needed as part of raising or finishing grades at the River Point District. To accomplish this, our hope is to not have to “lock in” a designated location on River Point for it to be placed, as the best/most efficient placement may shift based on construction sequencing and pending development. Would you agree that this material is

suitable to import to River Point in this manner? Final/actual placement of these soils will be documented as part of future reporting.

Thank you, and stay cool with the incoming heat wave!

Whitney Cull **PG, EIT**
Stantec
Geologist

Mobile: (262) 219 - 4740

12080 Corporate Parkway Suite 200
Mequon WI 53092-2649

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Please consider the environment before printing this email.

Caution: This email originated from outside of Stantec. Please take extra precaution.

Attention: Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

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

August 26, 2024
File: 193710442

Attention: Mr. John Streu & Mr. Mike Fett
Vinton Construction Co. Vinton Construction Co.
jstreu@vintonwis.com mfett@vintonwis.com

Dear Mr. Streu and Mr. Fett,

Reference: Characterization of Soil from Orchard Lane Right of Way; Manitowoc, Wisconsin

Stantec Consulting Services Inc. (Stantec) prepared this letter report following collection and laboratory analysis of soil samples collected along the Orchard Lane right of way (ROW) in Manitowoc, Wisconsin. The purpose of this sampling was to characterize representative soil targeted for use as potential fill at the River Point District (outlined in yellow on **Figure 1**). The location of the Orchard Lane ROW project corridor is illustrated on **Figure 2**.

BACKGROUND

Vinton Construction Company (Vinton) is reconstructing a portion of the Orchard Lane ROW in Manitowoc, Wisconsin (**Figure 2**). The project is expected to generate approximately 900 cubic yards of soil that Vinton has offered to the City of Manitowoc as fill for the River Point District. The River Point District is undergoing investigation under chapter NR 700 of the Wisconsin Administrative Code (WAC); therefore, at the recommendation of the Wisconsin Department of Natural Resources (WDNR), sampling of representative soil prior to placement at the River Point District was warranted.

METHODS

On August 2, 2024, Stantec met Vinton onsite and collected three discrete soil samples for characterization as potential fill for the River Point District property. Soil samples were collected via 4.25-inch hollow-stem augers along the centerline of the Orchard Lane ROW and were extended to a maximum depth of two feet below ground surface, the maximum proposed cut depth for the project. Sample locations are illustrated on **Figure 2**, and qualitative observations of soils encountered are illustrated on **Table 1**. A photographic log depicting subsurface lithology is provided in **Attachment A**.

Stantec field personnel screened each soil sample using a portable photoionization detector (PID), calibrated to a 100 parts per million isobutylene standard, to screen the soil samples for volatile organic compounds (VOCs). Soil was sampled from representative soil units and submitted to Eurofins TestAmerica (Chicago, Illinois) under chain-of-custody procedures for analysis of Resource Conservation and Recovery Act (RCRA) metals, polycyclic aromatic hydrocarbons (PAHs), and VOCs. Laboratory analytical results are provided in **Attachment B** and detected constituents are compared to ch. NR 720 WAC health-based residual contaminant levels (RCLs) and background threshold values (BTVs) on **Table 2**.

RESULTS

The existing soils beneath Orchard Lane ROW consisted largely of organic topsoil and apparent native sands and clays (**Table 1**). The encountered soil horizons appear to be reworked native soil similar to soils

encountered in other ROWs in the City of Manitowoc. All PID measurements were below one instrument unit and no waste materials, odors, or evidence of staining was observed.

VOCs. As summarized on **Table 2**, VOC constituent concentrations were less than their respective laboratory limits of detection in soil samples collected within the Orchard Lane ROW. As such, VOCs do not appear to limit the potential to reuse this material as fill at the River Point District.

RCRA Metals. As summarized on **Table 2**, the concentrations of RCRA metals detected in soil within the Orchard Lane ROW were all less than applicable health based RCLs and/or BTVs. As such, RCRA metals do not appear to limit the potential to reuse this material as fill at the River Point District.

PAHs. As summarized on **Table 2**, PAH constituent concentrations were less than their respective laboratory limits of detection in soil samples collected within the Orchard Lane ROW. As such, PAHs do not appear to limit the potential to reuse this material as fill at the River Point District.

CONCLUSIONS

The approximate 900 total cubic yards of native sand/clay soils to be generated as part of the Orchard Lane ROW reconstruction are suitable for use as fill material at the River Point District (as general fill to achieve target grades, and/or as surface/capping material).

If soils with apparent impacts (unusual odor, color, staining, or evidence of waste materials) not observed during the Stantec August 2024 soil characterization sampling are encountered during the Orchard Lane ROW reconstruction work, those materials shall not be placed at the River Point District.

Stantec recommends submitting this letter to WDNR for concurrence with our conclusions prior to placement of excavation spoil from the Orchard Lane ROW on the River Point District.

Regards,

Stantec Consulting Services, Inc.

Whitney Cull, PG, EIT
Project Manager
whitney.cull@stantec.com

Harris Byers, Ph.D.
Senior Project Manager
harris.byers@stantec.com

Enclosures
Figures
Tables
Attachments:
- Attachment A: Photographic Log
- Attachment B: Laboratory Report

LIMITATIONS

The conclusions in this letter are Stantec's professional opinion, as of the time of the letter, and concerning the scope described in the letter. 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 letter relates solely to the specific project for which Stantec was retained and the stated purpose for which the letter was prepared. This letter 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 third parties in the preparation of this letter 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 letter is intended solely for use by Vinton in accordance with Stantec's contract with Vinton. While this letter may be provided to applicable authorities having jurisdiction and others for whom Vinton is responsible, Stantec does not warrant the services to any third party. This letter 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
River Point District Location

Client/Project
River Point District
City of Manitowoc

Prepared by HLB on 2/1/2022

0 305 610 Feet

Legend

N

River Point District

Notes
1. Coordinate System: NAD 1983 HARN WISCRS Manitowoc County Feet
2. Orthophotograph: Manitowoc County, 2020

Stantec

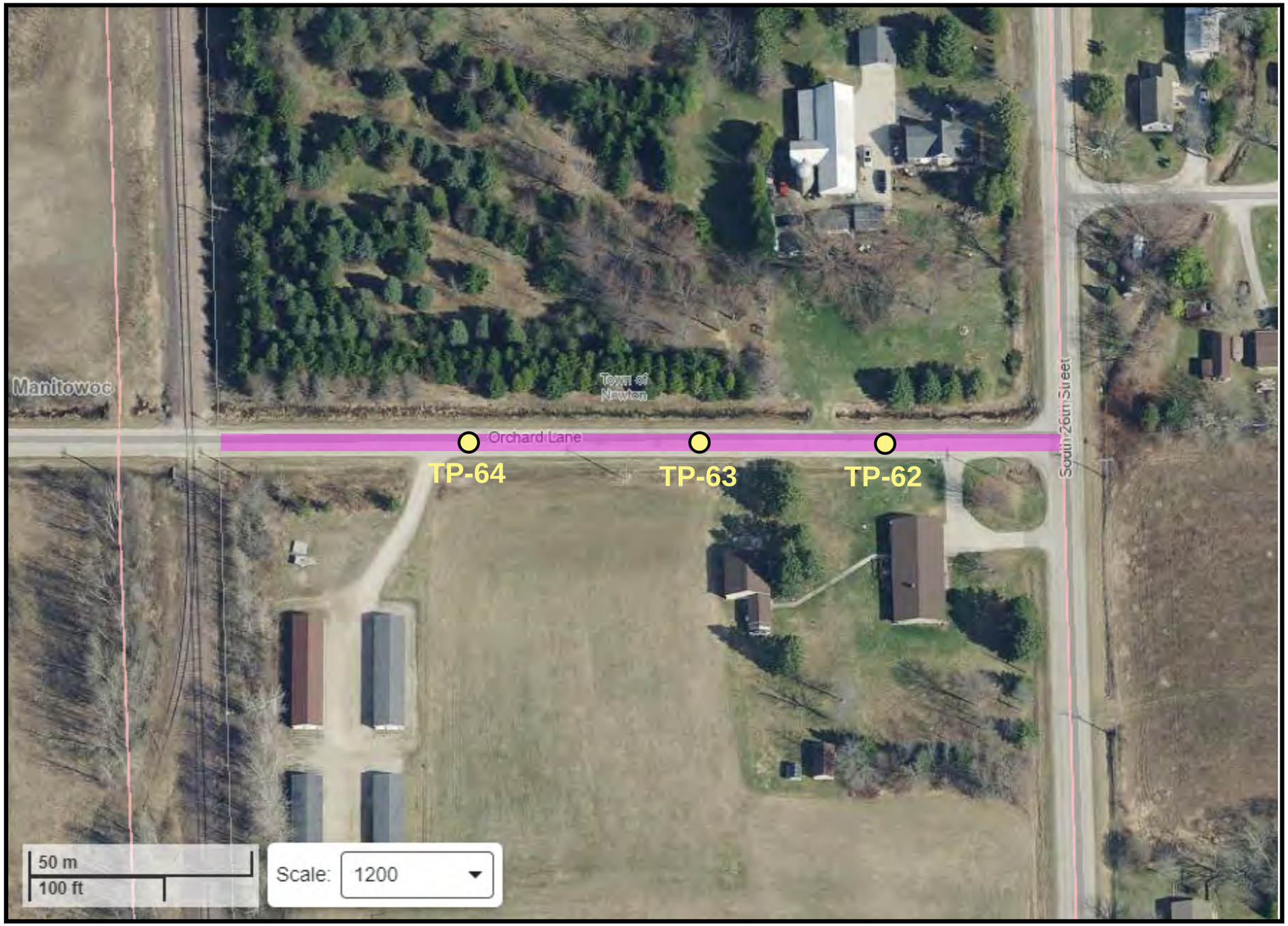

Figure No.
2

Orchard Lane Project Area **and Test Pit Locations**

Project
River Point Fill Characterization
Orchard Lane
City of Manitowoc

Prepared by JLH on 2/1/2024

Legend

N

Project Corridor Limits

Test Pit Locations (3)

Notes

1. Orthophotograph Source: WDNR BRRTS (Wisconsin Department of Natural Resources Bureau of Remediation and Redevelopment Tracking System) on the Web

Stantec

TABLES

Table 1 - Qualitative Soil Observations
Orchard Lane
Manitowoc, Wisconsin

Site	ID	Depth (ft bgs)	PID	Odor	Soil Description
Orchard Lane	TP-62	0 - 2	0.4	None	SAND, brown, moist to wet, medium-grained, uniform, subrounded
	TP-63	0 - 2	0.8	None	CLAYEY SAND, dark brown, moist, soft, contains topsoil/organics
	TP-64	0 - 2	0.7	None	SANDY CLAY, dark brown/black, moist, contains topsoil/organics

Notes:

ft bgs Feet below ground surface

PID Photoionization detector reading

Table 2 - Detected Constituents in Soil
Orchard Lane
Manitowoc, Wisconsin

Analyte	Industrial Direct Contact RCL	Non-Industrial Direct Contact RCL	Soil to Groundwater RCL	Wisconsin BTV	Laboratory ID; Sample ID & Depth; Sample Date		
					500-254508-1	500-254508-2	500-254508-3
					TP-62 0-2	**TP-63 0-2**	**TP-64 0-2**
					08/02/2024	08/02/2024	08/02/2024
Detected Volatile Organic Compounds (µg/kg)							
(60) Constituents Analyzed	Various	Various	Various	n/v	Less than laboratory limits of detection		
Detected Polycyclic Aromatic Hydrocarbons (µg/kg)							
(18) Constituents Analyzed	Various	Various	Various	n/v	Less than laboratory limits of detection		
Detected Resource Conservation and Recovery Act Metals (mg/kg)							
Arsenic	**8.3*** [3]	**8.3*** [0.677]	**8.3*** [0.584]	8.3	3.3	2.0	1.7
Barium	100,000	15,300	**364*** [164.8]	364	12	29	44
Cadmium	985	71	**1*** [0.752]	1	0.075 J	0.21	0.16 J
Chromium	n/v	n/v	360,000	44	11	12	15
Lead	800	400	**51.6*** [27]	51.6	1.8	3.9	5.8
Mercury	3.13	3.13	0.208	n/v	0.017 J	0.044	0.040

Notes:

µg/kg	Micrograms per kilogram
mg/kg	Milligrams per kilogram
BTV	Background threshold value
NR 720	ch. NR 720 Wisconsin Administrative Code (WAC)
RCL	Residual contaminant level
n/v	No value/standard
J	Reported concentration is an approximate value.
XX* [XXX]	Standard in bold is the BTV being used for the purpose of evaluation under ch. NR 720 WAC. The established WAC RCL is noted in brackets.

ATTACHMENT A

Photographic Log

Stantec

Photographic Log

Client:	**Vinton Construction Co.**	**Project:**	**193710442**
Site Name:	**Orchard Lane Soil Characterization**	**Site Location:**	**Manitowoc, Wisconsin**

Photograph ID: 1

Photo Location:
Orchard Lane

Direction:
Looking west from S 26th St

Survey Date:
8/2/2024

Comments:
Orchard Lane Project Corridor

Photograph ID: 2

Photo Location:
TP-62 (125' W of S 26th St Centerline)

Direction:

Survey Date:
8/2/2024

Comments:
Soil from TP-62

Stantec

Photographic Log

Client:	**Vinton Construction Co.**	**Project:**	**193710442**
Site Name:	**Orchard Lane Soil Characterization**	**Site Location:**	**Manitowoc, Wisconsin**

Photograph ID: 3	
Photo Location: TP-63 (250' W of S 26th St Centerline)	
Direction:	
Survey Date: 8/2/2024	
Comments: Soil from TP-63	

Photograph ID: 4	
Photo Location: TP-64 (405' W of S 26th St Centerline)	
Direction:	
Survey Date: 8/2/2024	
Comments: Soil from TP-64	

ATTACHMENT B

Laboratory Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Whitney Cull
Stantec Consulting Corporation
12080 Corporate Parkway, Suite 200
Mequon, Wisconsin 53092

Generated 8/8/2024 4:45:25 PM

JOB DESCRIPTION

ORCHARD LANE MANITOWOC - 193710447

JOB NUMBER

500-254508-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

my EOL

Eurofins Chicago

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
8/8/2024 4:45:25 PM

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Detection Summary 5
Method Summary 6
Sample Summary 7
Client Sample Results 8
Definitions 17
QC Association 18
Surrogate Summary 20
QC Sample Results 21
Chronicle 32
Certification Summary 34
Chain of Custody 35
Receipt Checklists 37

Job Narrative
500-254508-1

Receipt
The samples were received on 8/3/2024 9:45 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 2.0º C.

GC/MS VOA
Method 8260D: The matrix spike duplicate (MS/MSD) for the following sample was analyzed outside the 12 hour tune window. No further action was taken.(500-254508-A-1-A MSD)

Method 8260D: The method blank for analytical batch 500-780014 contained Methylene Chloride and Napthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The laboratory control sample (LCS) for 779792 recovered outside control limits for Dichloro-difluoromethane. This is a prepped 5035 LCS. All daily instrument LCS were acceptable, and the data have been reported.(LCS 500-779792/20-A)

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described 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
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-62 0-2 — Lab Sample ID: 500-254508-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		1.1	0.36	mg/Kg	1	☼	6010D	Total/NA
Barium	12		1.1	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.075	J	0.21	0.038	mg/Kg	1	☼	6010D	Total/NA
Chromium	11		1.1	0.53	mg/Kg	1	☼	6010D	Total/NA
Lead	1.8		0.53	0.25	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.017	J	0.019	0.0077	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-63 0-2 — Lab Sample ID: 500-254508-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0		1.0	0.35	mg/Kg	1	☼	6010D	Total/NA
Barium	29		1.0	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.21		0.21	0.037	mg/Kg	1	☼	6010D	Total/NA
Chromium	12		1.0	0.51	mg/Kg	1	☼	6010D	Total/NA
Lead	3.9		0.52	0.24	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.044		0.019	0.0078	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-64 0-2 — Lab Sample ID: 500-254508-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.7		1.0	0.35	mg/Kg	1	☼	6010D	Total/NA
Barium	44		1.0	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.16	J	0.20	0.036	mg/Kg	1	☼	6010D	Total/NA
Chromium	15		1.0	0.50	mg/Kg	1	☼	6010D	Total/NA
Lead	5.8		0.51	0.23	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.040		0.019	0.0077	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

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
3546	Microwave 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
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-254508-1	TP-62 0-2	Solid	08/02/24 11:45	08/03/24 09:45
500-254508-2	TP-63 0-2	Solid	08/02/24 11:50	08/03/24 09:45
500-254508-3	TP-64 0-2	Solid	08/02/24 11:55	08/03/24 09:45

Client Sample Results

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-62 0-2

Date Collected: 08/02/24 11:45
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-1

Matrix: Solid
Percent Solids: 86.7

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	<43		65	43	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,1,1-Trichloroethane	<29		65	29	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,1,2,2-Tetrachloroethane	<42		65	42	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,1,2-Trichloroethane	<48		65	48	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,1-Dichloroethane	<24		65	24	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,1-Dichloroethene	<31		65	31	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,1-Dichloropropene	<22		65	22	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2,3-Trichlorobenzene	<23		65	23	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2,3-Trichloropropane	<97		130	97	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2,4-Trichlorobenzene	<20		65	20	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2,4-Trimethylbenzene	<20		65	20	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2-Dibromo-3-Chloropropane	<260		330	260	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2-Dichlorobenzene	<31		65	31	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2-Dichloroethane	<38		65	38	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,2-Dichloropropane	<24		65	24	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,3,5-Trimethylbenzene	<19		65	19	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,3-Dichloropropane	<36		65	36	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
1,4-Dichlorobenzene	<30		65	30	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
2,2-Dichloropropane	<31		330	31	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
2-Chlorotoluene	<23		65	23	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
4-Chlorotoluene	<22		65	22	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
4-Isopropyltoluene	<19		65	19	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Benzene	<8.0		16	8.0	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Bromobenzene	<39		65	39	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Bromoform	<63		65	63	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Bromomethane	<120		200	120	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Carbon tetrachloride	<27		65	27	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Chlorobenzene	<27		65	27	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Chlorobromomethane	<33		65	33	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Chlorodibromomethane	<54		65	54	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Chloroethane	<31		330	31	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Chloroform	<60		130	60	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Chloromethane	<51		330	51	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
cis-1,2-Dichloroethene	<27		65	27	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
cis-1,3-Dichloropropene	<34		65	34	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Dibromomethane	<38		65	38	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Dichlorobromomethane	<37		65	37	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Dichlorodifluoromethane	<110	*-	200	110	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Ethylbenzene	<11		16	11	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Ethylene Dibromide	<37		65	37	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Hexachlorobutadiene	<35		65	35	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Isopropyl ether	<25		65	25	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Isopropylbenzene	<19		65	19	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Methyl tert-butyl ether	<28		65	28	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Methylene Chloride	<140		330	140	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Naphthalene	<29		65	29	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
n-Butylbenzene	<21		65	21	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
N-Propylbenzene	<21		65	21	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50

Client Sample ID: TP-62 0-2

Date Collected: 08/02/24 11:45
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-1

Matrix: Solid
Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<18		65	18	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Styrene	<20		65	20	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
tert-Butylbenzene	<17		65	17	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Tetrachloroethene	<25		65	25	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Toluene	<14		16	14	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
trans-1,2-Dichloroethene	<29		65	29	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
trans-1,3-Dichloropropene	<41		65	41	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Trichloroethene	<9.7		33	9.7	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Trichlorofluoromethane	<29		65	29	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Vinyl chloride	<31		65	31	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50
Xylenes, Total	<15		33	15	ug/Kg	☼	08/02/24 11:45	08/06/24 17:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 126*	*08/02/24 11:45*	*08/06/24 17:38*	*50*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*08/02/24 11:45*	*08/06/24 17:38*	*50*
Dibromofluoromethane (Surr)	*86*		*75 - 120*	*08/02/24 11:45*	*08/06/24 17:38*	*50*
Toluene-d8 (Surr)	*93*		*75 - 120*	*08/02/24 11:45*	*08/06/24 17:38*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<6.6		74	6.6	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
2-Methylnaphthalene	<7.4		74	7.4	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Acenaphthene	<7.5		36	7.5	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Acenaphthylene	<6.2		36	6.2	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Anthracene	<7.5		36	7.5	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Benzo[a]anthracene	<7.8		36	7.8	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Benzo[a]pyrene	<35		36	35	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Benzo[b]fluoranthene	<35		36	35	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Benzo[g,h,i]perylene	<7.9		36	7.9	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Benzo[k]fluoranthene	<14		36	14	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Chrysene	<9.7		36	9.7	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Dibenz(a,h)anthracene	<36		36	36	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Fluoranthene	<8.5		36	8.5	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Fluorene	<11		36	11	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Indeno[1,2,3-cd]pyrene	<36		36	36	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Naphthalene	<6.6		36	6.6	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Phenanthrene	<8.0		36	8.0	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1
Pyrene	<10		36	10	ug/Kg	☼	08/05/24 17:00	08/06/24 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*72*		*37 - 147*	*08/05/24 17:00*	*08/06/24 15:49*	*1*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*08/05/24 17:00*	*08/06/24 15:49*	*1*
Terphenyl-d14 (Surr)	*103*		*42 - 157*	*08/05/24 17:00*	*08/06/24 15:49*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.3**		1.1	0.36	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1
Barium	**12**		1.1	0.12	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1
Cadmium	**0.075**	**J**	0.21	0.038	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1
Chromium	**11**		1.1	0.53	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1

Client Sample Results

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-62 0-2

Date Collected: 08/02/24 11:45
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-1

Matrix: Solid
Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.8**		0.53	0.25	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1
Selenium	<0.63		1.1	0.63	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1
Silver	<0.14		0.53	0.14	mg/Kg	☼	08/07/24 17:09	08/08/24 13:13	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.017**	**J**	0.019	0.0077	mg/Kg	☼	08/07/24 15:50	08/08/24 10:48	1

Client Sample Results

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-63 0-2

Date Collected: 08/02/24 11:50
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-2

Matrix: Solid
Percent Solids: 84.2

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	<45		68	45	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,1,1-Trichloroethane	<31		68	31	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,1,2,2-Tetrachloroethane	<44		68	44	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,1,2-Trichloroethane	<50		68	50	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,1-Dichloroethane	<25		68	25	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,1-Dichloroethene	<33		68	33	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,1-Dichloropropene	<23		68	23	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2,3-Trichlorobenzene	<24		68	24	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2,3-Trichloropropane	<100		140	100	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2,4-Trichlorobenzene	<21		68	21	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2,4-Trimethylbenzene	<21		68	21	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2-Dibromo-3-Chloropropane	<280		340	280	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2-Dichlorobenzene	<33		68	33	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2-Dichloroethane	<39		68	39	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,2-Dichloropropane	<26		68	26	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,3,5-Trimethylbenzene	<20		68	20	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,3-Dichlorobenzene	<28		68	28	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,3-Dichloropropane	<38		68	38	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
1,4-Dichlorobenzene	<31		68	31	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
2,2-Dichloropropane	<33		340	33	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
2-Chlorotoluene	<24		68	24	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
4-Chlorotoluene	<23		68	23	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
4-Isopropyltoluene	<20		68	20	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Benzene	<8.4		17	8.4	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Bromobenzene	<41		68	41	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Bromoform	<66		68	66	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Bromomethane	<120		210	120	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Carbon tetrachloride	<28		68	28	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Chlorobenzene	<28		68	28	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Chlorobromomethane	<34		68	34	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Chlorodibromomethane	<57		68	57	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Chloroethane	<32		340	32	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Chloroform	<63		140	63	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Chloromethane	<54		340	54	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
cis-1,2-Dichloroethene	<28		68	28	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
cis-1,3-Dichloropropene	<35		68	35	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Dibromomethane	<40		68	40	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Dichlorobromomethane	<39		68	39	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Dichlorodifluoromethane	<120	*-	210	120	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Ethylbenzene	<12		17	12	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Ethylene Dibromide	<38		68	38	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Hexachlorobutadiene	<37		68	37	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Isopropyl ether	<26		68	26	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Isopropylbenzene	<20		68	20	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Methyl tert-butyl ether	<30		68	30	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Methylene Chloride	<150		340	150	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Naphthalene	<30		68	30	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
n-Butylbenzene	<22		68	22	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
N-Propylbenzene	<22		68	22	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50

Client Sample ID: TP-63 0-2

Date Collected: 08/02/24 11:50
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-2

Matrix: Solid
Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<19		68	19	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Styrene	<21		68	21	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
tert-Butylbenzene	<18		68	18	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Tetrachloroethene	<27		68	27	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Toluene	<14		17	14	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
trans-1,2-Dichloroethene	<30		68	30	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
trans-1,3-Dichloropropene	<43		68	43	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Trichloroethene	<10		34	10	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Trichlorofluoromethane	<30		68	30	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Vinyl chloride	<32		68	32	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50
Xylenes, Total	<16		34	16	ug/Kg	☼	08/02/24 11:50	08/06/24 18:03	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 126*	*08/02/24 11:50*	*08/06/24 18:03*	*50*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*08/02/24 11:50*	*08/06/24 18:03*	*50*
Dibromofluoromethane (Surr)	*85*		*75 - 120*	*08/02/24 11:50*	*08/06/24 18:03*	*50*
Toluene-d8 (Surr)	*92*		*75 - 120*	*08/02/24 11:50*	*08/06/24 18:03*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<6.8		77	6.8	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
2-Methylnaphthalene	<7.7		77	7.7	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Acenaphthene	<7.8		38	7.8	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Acenaphthylene	<6.5		38	6.5	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Anthracene	<7.8		38	7.8	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Benzo[a]anthracene	<8.1		38	8.1	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Benzo[a]pyrene	<37		38	37	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Benzo[b]fluoranthene	<36		38	36	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Benzo[g,h,i]perylene	<8.3		38	8.3	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Benzo[k]fluoranthene	<15		38	15	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Chrysene	<10		38	10	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Dibenz(a,h)anthracene	<38		38	38	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Fluoranthene	<8.9		38	8.9	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Fluorene	<11		38	11	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Indeno[1,2,3-cd]pyrene	<37		38	37	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Naphthalene	<6.9		38	6.9	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Phenanthrene	<8.3		38	8.3	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1
Pyrene	<10		38	10	ug/Kg	☼	08/05/24 17:00	08/06/24 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*65*		*37 - 147*	*08/05/24 17:00*	*08/06/24 16:14*	*1*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*08/05/24 17:00*	*08/06/24 16:14*	*1*
Terphenyl-d14 (Surr)	*79*		*42 - 157*	*08/05/24 17:00*	*08/06/24 16:14*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.0**		1.0	0.35	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1
Barium	**29**		1.0	0.12	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1
Cadmium	**0.21**		0.21	0.037	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1
Chromium	**12**		1.0	0.51	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1

Client Sample Results

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-63 0-2

Date Collected: 08/02/24 11:50
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-2

Matrix: Solid
Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**3.9**		0.52	0.24	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1
Selenium	<0.61		1.0	0.61	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1
Silver	<0.13		0.52	0.13	mg/Kg	☼	08/07/24 17:09	08/08/24 13:17	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.044**		0.019	0.0078	mg/Kg	☼	08/07/24 15:50	08/08/24 10:50	1

Client Sample Results

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-64 0-2

Date Collected: 08/02/24 11:55
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-3

Matrix: Solid
Percent Solids: 84.8

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	<45		68	45	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,1,1-Trichloroethane	<31		68	31	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,1,2,2-Tetrachloroethane	<44		68	44	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,1,2-Trichloroethane	<50		68	50	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,1-Dichloroethane	<25		68	25	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,1-Dichloroethene	<33		68	33	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,1-Dichloropropene	<23		68	23	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2,3-Trichlorobenzene	<24		68	24	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2,3-Trichloropropane	<100		140	100	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2,4-Trichlorobenzene	<21		68	21	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2,4-Trimethylbenzene	<21		68	21	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2-Dibromo-3-Chloropropane	<280		340	280	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2-Dichlorobenzene	<33		68	33	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2-Dichloroethane	<39		68	39	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,2-Dichloropropane	<25		68	25	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,3,5-Trimethylbenzene	<20		68	20	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,3-Dichlorobenzene	<28		68	28	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,3-Dichloropropane	<38		68	38	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
1,4-Dichlorobenzene	<31		68	31	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
2,2-Dichloropropane	<33		340	33	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
2-Chlorotoluene	<24		68	24	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
4-Chlorotoluene	<23		68	23	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
4-Isopropyltoluene	<20		68	20	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Benzene	<8.4		17	8.4	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Bromobenzene	<41		68	41	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Bromoform	<66		68	66	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Bromomethane	<120		200	120	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Carbon tetrachloride	<28		68	28	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Chlorobenzene	<28		68	28	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Chlorobromomethane	<34		68	34	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Chlorodibromomethane	<57		68	57	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Chloroethane	<32		340	32	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Chloroform	<63		140	63	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Chloromethane	<54		340	54	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
cis-1,2-Dichloroethene	<28		68	28	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
cis-1,3-Dichloropropene	<35		68	35	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Dibromomethane	<40		68	40	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Dichlorobromomethane	<39		68	39	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Dichlorodifluoromethane	<120	*-	200	120	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Ethylbenzene	<12		17	12	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Ethylene Dibromide	<38		68	38	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Hexachlorobutadiene	<37		68	37	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Isopropyl ether	<26		68	26	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Isopropylbenzene	<20		68	20	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Methyl tert-butyl ether	<30		68	30	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Methylene Chloride	<150		340	150	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Naphthalene	<30		68	30	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
n-Butylbenzene	<22		68	22	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
N-Propylbenzene	<22		68	22	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50

Client Sample ID: TP-64 0-2

Date Collected: 08/02/24 11:55
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-3

Matrix: Solid
Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<19		68	19	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Styrene	<21		68	21	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
tert-Butylbenzene	<18		68	18	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Tetrachloroethene	<27		68	27	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Toluene	<14		17	14	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
trans-1,2-Dichloroethene	<30		68	30	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
trans-1,3-Dichloropropene	<43		68	43	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Trichloroethene	<10		34	10	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Trichlorofluoromethane	<30		68	30	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Vinyl chloride	<32		68	32	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50
Xylenes, Total	<16		34	16	ug/Kg	☼	08/02/24 11:55	08/06/24 18:29	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 126*	*08/02/24 11:55*	*08/06/24 18:29*	*50*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*08/02/24 11:55*	*08/06/24 18:29*	*50*
Dibromofluoromethane (Surr)	*86*		*75 - 120*	*08/02/24 11:55*	*08/06/24 18:29*	*50*
Toluene-d8 (Surr)	*93*		*75 - 120*	*08/02/24 11:55*	*08/06/24 18:29*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<6.8		77	6.8	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
2-Methylnaphthalene	<7.7		77	7.7	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Acenaphthene	<7.8		38	7.8	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Acenaphthylene	<6.5		38	6.5	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Anthracene	<7.8		38	7.8	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Benzo[a]anthracene	<8.1		38	8.1	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Benzo[a]pyrene	<37		38	37	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Benzo[b]fluoranthene	<36		38	36	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Benzo[g,h,i]perylene	<8.3		38	8.3	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Benzo[k]fluoranthene	<14		38	14	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Chrysene	<10		38	10	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Dibenz(a,h)anthracene	<38		38	38	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Fluoranthene	<8.9		38	8.9	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Fluorene	<11		38	11	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Indeno[1,2,3-cd]pyrene	<37		38	37	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Naphthalene	<6.9		38	6.9	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Phenanthrene	<8.3		38	8.3	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1
Pyrene	<10		38	10	ug/Kg	☼	08/05/24 17:00	08/06/24 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*69*		*37 - 147*	*08/05/24 17:00*	*08/06/24 16:39*	*1*
2-Fluorobiphenyl (Surr)	*78*		*43 - 145*	*08/05/24 17:00*	*08/06/24 16:39*	*1*
Terphenyl-d14 (Surr)	*80*		*42 - 157*	*08/05/24 17:00*	*08/06/24 16:39*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.7**		1.0	0.35	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1
Barium	**44**		1.0	0.12	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1
Cadmium	**0.16**	**J**	0.20	0.036	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1
Chromium	**15**		1.0	0.50	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1

Client Sample Results

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-64 0-2

Date Collected: 08/02/24 11:55
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-3

Matrix: Solid
Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.8**		0.51	0.23	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1
Selenium	<0.59		1.0	0.59	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1
Silver	<0.13		0.51	0.13	mg/Kg	☼	08/07/24 17:09	08/08/24 13:21	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.040**		0.019	0.0077	mg/Kg	☼	08/07/24 15:50	08/08/24 10:51	1

Definitions/Glossary

Client: Stantec Consulting Corporation
Job ID: 500-254508-1
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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
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

QC Association Summary

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

GC/MS VOA

Prep Batch: 779792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	5035	
500-254508-2	TP-63 0-2	Total/NA	Solid	5035	
500-254508-3	TP-64 0-2	Total/NA	Solid	5035	
LB3 500-779792/19-A	Method Blank	Total/NA	Solid	5035	
LCS 500-779792/20-A	Lab Control Sample	Total/NA	Solid	5035	
500-254508-1 MS	TP-62 0-2	Total/NA	Solid	5035	
500-254508-1 MSD	TP-62 0-2	Total/NA	Solid	5035	

Analysis Batch: 780014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	8260D	779792
500-254508-2	TP-63 0-2	Total/NA	Solid	8260D	779792
500-254508-3	TP-64 0-2	Total/NA	Solid	8260D	779792
LB3 500-779792/19-A	Method Blank	Total/NA	Solid	8260D	779792
MB 500-780014/7	Method Blank	Total/NA	Solid	8260D	
LCS 500-779792/20-A	Lab Control Sample	Total/NA	Solid	8260D	779792
LCS 500-780014/5	Lab Control Sample	Total/NA	Solid	8260D	
500-254508-1 MS	TP-62 0-2	Total/NA	Solid	8260D	779792
500-254508-1 MSD	TP-62 0-2	Total/NA	Solid	8260D	779792

GC/MS Semi VOA

Prep Batch: 779983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	3546	
500-254508-2	TP-63 0-2	Total/NA	Solid	3546	
500-254508-3	TP-64 0-2	Total/NA	Solid	3546	
MB 500-779983/1-A	Method Blank	Total/NA	Solid	3546	
LCS 500-779983/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 780025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	8270E	779983
500-254508-2	TP-63 0-2	Total/NA	Solid	8270E	779983
500-254508-3	TP-64 0-2	Total/NA	Solid	8270E	779983
MB 500-779983/1-A	Method Blank	Total/NA	Solid	8270E	779983
LCS 500-779983/2-A	Lab Control Sample	Total/NA	Solid	8270E	779983

Metals

Prep Batch: 780316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	7471B	
500-254508-2	TP-63 0-2	Total/NA	Solid	7471B	
500-254508-3	TP-64 0-2	Total/NA	Solid	7471B	
MB 500-780316/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-780316/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 780346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	3050B	
500-254508-2	TP-63 0-2	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 780346 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-3	TP-64 0-2	Total/NA	Solid	3050B	
MB 500-780346/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-780346/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 780509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	7471B	780316
500-254508-2	TP-63 0-2	Total/NA	Solid	7471B	780316
500-254508-3	TP-64 0-2	Total/NA	Solid	7471B	780316
MB 500-780316/12-A	Method Blank	Total/NA	Solid	7471B	780316
LCS 500-780316/13-A	Lab Control Sample	Total/NA	Solid	7471B	780316

Analysis Batch: 780568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	6010D	780346
500-254508-2	TP-63 0-2	Total/NA	Solid	6010D	780346
500-254508-3	TP-64 0-2	Total/NA	Solid	6010D	780346
MB 500-780346/1-A	Method Blank	Total/NA	Solid	6010D	780346
LCS 500-780346/2-A	Lab Control Sample	Total/NA	Solid	6010D	780346

Analysis Batch: 780583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-780346/2-A	Lab Control Sample	Total/NA	Solid	6010D	780346

General Chemistry

Analysis Batch: 780096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-254508-1	TP-62 0-2	Total/NA	Solid	Moisture	
500-254508-2	TP-63 0-2	Total/NA	Solid	Moisture	
500-254508-3	TP-64 0-2	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

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)
500-254508-1	TP-62 0-2	80	88	86	93
500-254508-1 MS	TP-62 0-2	79	90	84	95
500-254508-1 MSD	TP-62 0-2	79	89	83	93
500-254508-2	TP-63 0-2	80	89	85	92
500-254508-3	TP-64 0-2	81	88	86	93
LB3 500-779792/19-A	Method Blank	81	89	86	91
LCS 500-779792/20-A	Lab Control Sample	78	89	84	94
LCS 500-780014/5	Lab Control Sample	78	91	85	92
MB 500-780014/7	Method Blank	82	90	89	92

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)
500-254508-1	TP-62 0-2	72	81	103
500-254508-2	TP-63 0-2	65	77	79
500-254508-3	TP-64 0-2	69	78	80
LCS 500-779983/2-A	Lab Control Sample	77	88	96
MB 500-779983/1-A	Method Blank	70	77	98

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

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

Lab Sample ID: LB3 500-779792/19-A
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779792

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		50	33	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,1,1-Trichloroethane	<23		50	23	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,1,2,2-Tetrachloroethane	<32		50	32	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,1,2-Trichloroethane	<37		50	37	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,1-Dichloroethane	<18		50	18	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,1-Dichloroethene	<24		50	24	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,1-Dichloropropene	<17		50	17	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2,3-Trichlorobenzene	<18		50	18	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2,3-Trichloropropane	<75		100	75	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2,4-Trichlorobenzene	<15		50	15	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2,4-Trimethylbenzene	<15		50	15	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2-Dibromo-3-Chloropropane	<200		250	200	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2-Dichlorobenzene	<24		50	24	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2-Dichloroethane	<29		50	29	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,2-Dichloropropane	<19		50	19	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,3,5-Trimethylbenzene	<14		50	14	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,3-Dichloropropane	<28		50	28	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
1,4-Dichlorobenzene	<23		50	23	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
2,2-Dichloropropane	<24		250	24	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
2-Chlorotoluene	<18		50	18	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
4-Chlorotoluene	<17		50	17	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
4-Isopropyltoluene	<15		50	15	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Benzene	<6.1		13	6.1	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Bromobenzene	<30		50	30	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Bromoform	<48		50	48	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Bromomethane	<90		150	90	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Carbon tetrachloride	<21		50	21	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Chlorobenzene	<21		50	21	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Chlorobromomethane	<25		50	25	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Chlorodibromomethane	<41		50	41	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Chloroethane	<24		250	24	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Chloroform	<46		100	46	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Chloromethane	<39		250	39	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
cis-1,2-Dichloroethene	<21		50	21	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
cis-1,3-Dichloropropene	<26		50	26	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Dibromomethane	<29		50	29	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Dichlorobromomethane	<28		50	28	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Dichlorodifluoromethane	<88		150	88	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Ethylbenzene	<8.6		13	8.6	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Ethylene Dibromide	<28		50	28	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Hexachlorobutadiene	<27		50	27	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Isopropyl ether	<19		50	19	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Isopropylbenzene	<15		50	15	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Methyl tert-butyl ether	<22		50	22	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Methylene Chloride	<110		250	110	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Naphthalene	<22		50	22	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
n-Butylbenzene	<16		50	16	ug/Kg		08/04/24 20:06	08/06/24 13:19	50

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

Lab Sample ID: LB3 500-779792/19-A
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779792

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<16		50	16	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
sec-Butylbenzene	<14		50	14	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Styrene	<15		50	15	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
tert-Butylbenzene	<13		50	13	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Tetrachloroethene	<19		50	19	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Toluene	<11		13	11	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
trans-1,2-Dichloroethene	<22		50	22	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
trans-1,3-Dichloropropene	<32		50	32	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Trichloroethene	<7.4		25	7.4	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Trichlorofluoromethane	<22		50	22	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Vinyl chloride	<23		50	23	ug/Kg		08/04/24 20:06	08/06/24 13:19	50
Xylenes, Total	<12		25	12	ug/Kg		08/04/24 20:06	08/06/24 13:19	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 126*	*08/04/24 20:06*	*08/06/24 13:19*	*50*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*08/04/24 20:06*	*08/06/24 13:19*	*50*
Dibromofluoromethane (Surr)	*86*		*75 - 120*	*08/04/24 20:06*	*08/06/24 13:19*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*08/04/24 20:06*	*08/06/24 13:19*	*50*

Lab Sample ID: LCS 500-779792/20-A
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	2500	2360		ug/Kg		95	70 - 125
1,1,1-Trichloroethane	2500	2160		ug/Kg		86	70 - 125
1,1,2,2-Tetrachloroethane	2500	2350		ug/Kg		94	62 - 140
1,1,2-Trichloroethane	2500	2050		ug/Kg		82	71 - 130
1,1-Dichloroethane	2500	2250		ug/Kg		90	70 - 125
1,1-Dichloroethene	2500	2160		ug/Kg		86	67 - 122
1,1-Dichloropropene	2500	2050		ug/Kg		82	70 - 121
1,2,3-Trichlorobenzene	2500	2270		ug/Kg		91	51 - 145
1,2,3-Trichloropropane	2500	2160		ug/Kg		87	50 - 133
1,2,4-Trichlorobenzene	2500	2190		ug/Kg		87	57 - 137
1,2,4-Trimethylbenzene	2500	2280		ug/Kg		91	70 - 123
1,2-Dibromo-3-Chloropropane	2500	1980		ug/Kg		79	56 - 123
1,2-Dichlorobenzene	2500	2300		ug/Kg		92	70 - 125
1,2-Dichloroethane	2500	2120		ug/Kg		85	68 - 127
1,2-Dichloropropane	2500	2310		ug/Kg		92	67 - 130
1,3,5-Trimethylbenzene	2500	2290		ug/Kg		92	70 - 123
1,3-Dichlorobenzene	2500	2270		ug/Kg		91	70 - 125
1,3-Dichloropropane	2500	2380		ug/Kg		95	62 - 136
1,4-Dichlorobenzene	2500	2260		ug/Kg		90	70 - 120
2,2-Dichloropropane	2500	1840		ug/Kg		74	58 - 139
2-Chlorotoluene	2500	2330		ug/Kg		93	70 - 125
4-Chlorotoluene	2500	2320		ug/Kg		93	68 - 124
4-Isopropyltoluene	2500	2100		ug/Kg		84	70 - 125
Benzene	2500	2360		ug/Kg		94	70 - 120

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

Lab Sample ID: LCS 500-779792/20-A
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromobenzene	2500	2350		ug/Kg		94	70 - 122
Bromoform	2500	1960		ug/Kg		78	56 - 132
Bromomethane	2500	1600		ug/Kg		64	40 - 152
Carbon tetrachloride	2500	2180		ug/Kg		87	59 - 133
Chlorobenzene	2500	2350		ug/Kg		94	70 - 120
Chlorobromomethane	2500	2130		ug/Kg		85	65 - 122
Chlorodibromomethane	2500	2050		ug/Kg		82	68 - 125
Chloroethane	2500	1510		ug/Kg		60	48 - 136
Chloroform	2500	2130		ug/Kg		85	70 - 120
Chloromethane	2500	1420		ug/Kg		57	56 - 152
cis-1,2-Dichloroethene	2500	2200		ug/Kg		88	70 - 125
cis-1,3-Dichloropropene	2500	2070		ug/Kg		83	64 - 127
Dibromomethane	2500	2210		ug/Kg		88	70 - 120
Dichlorobromomethane	2500	2100		ug/Kg		84	69 - 120
Dichlorodifluoromethane	2500	856	*-	ug/Kg		34	40 - 159
Ethylbenzene	2500	2160		ug/Kg		86	70 - 123
Ethylene Dibromide	2500	2280		ug/Kg		91	70 - 125
Hexachlorobutadiene	2500	2320		ug/Kg		93	51 - 150
Isopropylbenzene	2500	2170		ug/Kg		87	70 - 126
Methyl tert-butyl ether	2500	1780		ug/Kg		71	55 - 123
Methylene Chloride	2500	2020		ug/Kg		81	69 - 125
Naphthalene	2500	2000		ug/Kg		80	53 - 144
n-Butylbenzene	2500	2310		ug/Kg		92	68 - 125
N-Propylbenzene	2500	2360		ug/Kg		95	69 - 127
sec-Butylbenzene	2500	2340		ug/Kg		94	70 - 123
Styrene	2500	2140		ug/Kg		86	70 - 120
tert-Butylbenzene	2500	2370		ug/Kg		95	70 - 121
Tetrachloroethene	2500	2300		ug/Kg		92	70 - 128
Toluene	2500	2310		ug/Kg		93	70 - 125
trans-1,2-Dichloroethene	2500	2240		ug/Kg		90	70 - 125
trans-1,3-Dichloropropene	2500	1940		ug/Kg		78	62 - 128
Trichloroethene	2500	2300		ug/Kg		92	70 - 125
Trichlorofluoromethane	2500	2010		ug/Kg		80	55 - 128
Vinyl chloride	2500	1620		ug/Kg		65	64 - 126
Xylenes, Total	5000	4770		ug/Kg		95	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 126*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*
Dibromofluoromethane (Surr)	*84*		*75 - 120*
Toluene-d8 (Surr)	*94*		*75 - 120*

Lab Sample ID: 500-254508-1 MS
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: TP-62 0-2
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	<43		3250	3150		ug/Kg	☼	97	70 - 125

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

Lab Sample ID: 500-254508-1 MS
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: TP-62 0-2
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	<29		3250	2890		ug/Kg	☼	89	70 - 125
1,1,2,2-Tetrachloroethane	<42		3250	3210		ug/Kg	☼	99	62 - 140
1,1,2-Trichloroethane	<48		3250	2810		ug/Kg	☼	86	71 - 130
1,1-Dichloroethane	<24		3250	3060		ug/Kg	☼	94	70 - 125
1,1-Dichloroethene	<31		3250	3140		ug/Kg	☼	97	67 - 122
1,1-Dichloropropene	<22		3250	2790		ug/Kg	☼	86	70 - 121
1,2,3-Trichlorobenzene	<23		3250	2970		ug/Kg	☼	91	51 - 145
1,2,3-Trichloropropane	<97		3250	2880		ug/Kg	☼	88	50 - 133
1,2,4-Trichlorobenzene	<20		3250	2870		ug/Kg	☼	88	57 - 137
1,2,4-Trimethylbenzene	<20		3250	2980		ug/Kg	☼	92	70 - 123
1,2-Dibromo-3-Chloropropane	<260		3250	2700		ug/Kg	☼	83	56 - 123
1,2-Dichlorobenzene	<31		3250	3070		ug/Kg	☼	94	70 - 125
1,2-Dichloroethane	<38		3250	2840		ug/Kg	☼	87	68 - 127
1,2-Dichloropropane	<24		3250	3060		ug/Kg	☼	94	67 - 130
1,3,5-Trimethylbenzene	<19		3250	2960		ug/Kg	☼	91	70 - 123
1,3-Dichlorobenzene	<26		3250	3000		ug/Kg	☼	92	70 - 125
1,3-Dichloropropane	<36		3250	3170		ug/Kg	☼	97	62 - 136
1,4-Dichlorobenzene	<30		3250	3000		ug/Kg	☼	92	70 - 120
2,2-Dichloropropane	<31		3250	2510		ug/Kg	☼	77	58 - 139
2-Chlorotoluene	<23		3250	3060		ug/Kg	☼	94	70 - 125
4-Chlorotoluene	<22		3250	3070		ug/Kg	☼	94	68 - 124
4-Isopropyltoluene	<19		3250	2670		ug/Kg	☼	82	70 - 125
Benzene	<8.0		3250	3150		ug/Kg	☼	97	70 - 120
Bromobenzene	<39		3250	3130		ug/Kg	☼	96	70 - 122
Bromoform	<63		3250	2620		ug/Kg	☼	80	56 - 132
Bromomethane	<120		3250	2580		ug/Kg	☼	79	40 - 152
Carbon tetrachloride	<27		3250	2930		ug/Kg	☼	90	59 - 133
Chlorobenzene	<27		3250	3140		ug/Kg	☼	97	70 - 120
Chlorobromomethane	<33		3250	2900		ug/Kg	☼	89	65 - 122
Chlorodibromomethane	<54		3250	2760		ug/Kg	☼	85	68 - 125
Chloroethane	<31		3250	2330		ug/Kg	☼	72	48 - 136
Chloroform	<60		3250	2820		ug/Kg	☼	87	70 - 120
Chloromethane	<51		3250	2660		ug/Kg	☼	82	56 - 152
cis-1,2-Dichloroethene	<27		3250	2930		ug/Kg	☼	90	70 - 125
cis-1,3-Dichloropropene	<34		3250	2780		ug/Kg	☼	86	64 - 127
Dibromomethane	<38		3250	2870		ug/Kg	☼	88	70 - 120
Dichlorobromomethane	<37		3250	2740		ug/Kg	☼	84	69 - 120
Dichlorodifluoromethane	<110	*-	3250	2350		ug/Kg	☼	72	40 - 159
Ethylbenzene	<11		3250	2820		ug/Kg	☼	87	70 - 123
Ethylene Dibromide	<37		3250	3100		ug/Kg	☼	95	70 - 125
Hexachlorobutadiene	<35		3250	2980		ug/Kg	☼	92	51 - 150
Isopropylbenzene	<19		3250	2840		ug/Kg	☼	87	70 - 126
Methyl tert-butyl ether	<28		3250	2470		ug/Kg	☼	76	55 - 123
Methylene Chloride	<140		3250	2800		ug/Kg	☼	86	69 - 125
Naphthalene	<29		3250	2690		ug/Kg	☼	83	53 - 144
n-Butylbenzene	<21		3250	2970		ug/Kg	☼	91	68 - 125
N-Propylbenzene	<21		3250	3070		ug/Kg	☼	94	69 - 127
sec-Butylbenzene	<18		3250	2970		ug/Kg	☼	91	70 - 123
Styrene	<20		3250	2870		ug/Kg	☼	88	70 - 120

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

Lab Sample ID: 500-254508-1 MS
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: TP-62 0-2
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
tert-Butylbenzene	<17		3250	3000		ug/Kg	☼	92	70 - 121
Tetrachloroethene	<25		3250	3080		ug/Kg	☼	95	70 - 128
Toluene	<14		3250	3090		ug/Kg	☼	95	70 - 125
trans-1,2-Dichloroethene	<29		3250	3070		ug/Kg	☼	94	70 - 125
trans-1,3-Dichloropropene	<41		3250	2640		ug/Kg	☼	81	62 - 128
Trichloroethene	<9.7		3250	3060		ug/Kg	☼	94	70 - 125
Trichlorofluoromethane	<29		3250	2950		ug/Kg	☼	91	55 - 128
Vinyl chloride	<31		3250	2810		ug/Kg	☼	86	64 - 126
Xylenes, Total	<15		6510	6310		ug/Kg	☼	97	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 126*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*
Dibromofluoromethane (Surr)	*84*		*75 - 120*
Toluene-d8 (Surr)	*95*		*75 - 120*

Lab Sample ID: 500-254508-1 MSD
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: TP-62 0-2
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<43		3250	3200		ug/Kg	☼	98	70 - 125	2	30
1,1,1-Trichloroethane	<29		3250	3000		ug/Kg	☼	92	70 - 125	4	30
1,1,2,2-Tetrachloroethane	<42		3250	3280		ug/Kg	☼	101	62 - 140	2	30
1,1,2-Trichloroethane	<48		3250	2840		ug/Kg	☼	87	71 - 130	1	30
1,1-Dichloroethane	<24		3250	3120		ug/Kg	☼	96	70 - 125	2	30
1,1-Dichloroethene	<31		3250	3190		ug/Kg	☼	98	67 - 122	1	30
1,1-Dichloropropene	<22		3250	2880		ug/Kg	☼	88	70 - 121	3	30
1,2,3-Trichlorobenzene	<23		3250	3200		ug/Kg	☼	98	51 - 145	7	30
1,2,3-Trichloropropane	<97		3250	3060		ug/Kg	☼	94	50 - 133	6	30
1,2,4-Trichlorobenzene	<20		3250	3020		ug/Kg	☼	93	57 - 137	5	30
1,2,4-Trimethylbenzene	<20		3250	3130		ug/Kg	☼	96	70 - 123	5	30
1,2-Dibromo-3-Chloropropane	<260		3250	2730		ug/Kg	☼	84	56 - 123	1	30
1,2-Dichlorobenzene	<31		3250	3180		ug/Kg	☼	98	70 - 125	3	30
1,2-Dichloroethane	<38		3250	2910		ug/Kg	☼	89	68 - 127	2	30
1,2-Dichloropropane	<24		3250	3170		ug/Kg	☼	98	67 - 130	4	30
1,3,5-Trimethylbenzene	<19		3250	3150		ug/Kg	☼	97	70 - 123	6	30
1,3-Dichlorobenzene	<26		3250	3160		ug/Kg	☼	97	70 - 125	5	30
1,3-Dichloropropane	<36		3250	3270		ug/Kg	☼	100	62 - 136	3	30
1,4-Dichlorobenzene	<30		3250	3090		ug/Kg	☼	95	70 - 120	3	30
2,2-Dichloropropane	<31		3250	2610		ug/Kg	☼	80	58 - 139	4	30
2-Chlorotoluene	<23		3250	3190		ug/Kg	☼	98	70 - 125	4	30
4-Chlorotoluene	<22		3250	3190		ug/Kg	☼	98	68 - 124	4	30
4-Isopropyltoluene	<19		3250	2890		ug/Kg	☼	89	70 - 125	8	30
Benzene	<8.0		3250	3240		ug/Kg	☼	100	70 - 120	3	30
Bromobenzene	<39		3250	3170		ug/Kg	☼	97	70 - 122	1	30
Bromoform	<63		3250	2710		ug/Kg	☼	83	56 - 132	3	30
Bromomethane	<120		3250	2460		ug/Kg	☼	76	40 - 152	5	30

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

Lab Sample ID: 500-254508-1 MSD
Matrix: Solid
Analysis Batch: 780014

Client Sample ID: TP-62 0-2
Prep Type: Total/NA
Prep Batch: 779792

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon tetrachloride	<27		3250	3040		ug/Kg	☼	93	59 - 133	4	30
Chlorobenzene	<27		3250	3210		ug/Kg	☼	99	70 - 120	2	30
Chlorobromomethane	<33		3250	2930		ug/Kg	☼	90	65 - 122	1	30
Chlorodibromomethane	<54		3250	2770		ug/Kg	☼	85	68 - 125	0	30
Chloroethane	<31		3250	2170		ug/Kg	☼	67	48 - 136	7	30
Chloroform	<60		3250	2930		ug/Kg	☼	90	70 - 120	4	30
Chloromethane	<51		3250	2520		ug/Kg	☼	77	56 - 152	5	30
cis-1,2-Dichloroethene	<27		3250	3050		ug/Kg	☼	94	70 - 125	4	30
cis-1,3-Dichloropropene	<34		3250	2810		ug/Kg	☼	86	64 - 127	1	30
Dibromomethane	<38		3250	2990		ug/Kg	☼	92	70 - 120	4	30
Dichlorobromomethane	<37		3250	2860		ug/Kg	☼	88	69 - 120	4	30
Dichlorodifluoromethane	<110	*-	3250	2240		ug/Kg	☼	69	40 - 159	5	30
Ethylbenzene	<11		3250	2910		ug/Kg	☼	89	70 - 123	3	30
Ethylene Dibromide	<37		3250	3130		ug/Kg	☼	96	70 - 125	1	30
Hexachlorobutadiene	<35		3250	3170		ug/Kg	☼	97	51 - 150	6	30
Isopropylbenzene	<19		3250	2970		ug/Kg	☼	91	70 - 126	5	30
Methyl tert-butyl ether	<28		3250	2550		ug/Kg	☼	78	55 - 123	3	30
Methylene Chloride	<140		3250	2800		ug/Kg	☼	86	69 - 125	0	30
Naphthalene	<29		3250	2820		ug/Kg	☼	87	53 - 144	5	30
n-Butylbenzene	<21		3250	3200		ug/Kg	☼	98	68 - 125	8	30
N-Propylbenzene	<21		3250	3230		ug/Kg	☼	99	69 - 127	5	30
sec-Butylbenzene	<18		3250	3200		ug/Kg	☼	98	70 - 123	8	30
Styrene	<20		3250	2900		ug/Kg	☼	89	70 - 120	1	30
tert-Butylbenzene	<17		3250	3180		ug/Kg	☼	98	70 - 121	6	30
Tetrachloroethene	<25		3250	3150		ug/Kg	☼	97	70 - 128	2	30
Toluene	<14		3250	3120		ug/Kg	☼	96	70 - 125	1	30
trans-1,2-Dichloroethene	<29		3250	3090		ug/Kg	☼	95	70 - 125	1	30
trans-1,3-Dichloropropene	<41		3250	2680		ug/Kg	☼	82	62 - 128	2	30
Trichloroethene	<9.7		3250	3150		ug/Kg	☼	97	70 - 125	3	30
Trichlorofluoromethane	<29		3250	2840		ug/Kg	☼	87	55 - 128	4	30
Vinyl chloride	<31		3250	2660		ug/Kg	☼	82	64 - 126	6	30
Xylenes, Total	<15		6510	6420		ug/Kg	☼	99	70 - 125	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 126*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*
Dibromofluoromethane (Surr)	*83*		*75 - 120*
Toluene-d8 (Surr)	*93*		*75 - 120*

Lab Sample ID: MB 500-780014/7
Matrix: Solid
Analysis Batch: 780014

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	<0.67		1.0	0.67	ug/Kg			08/06/24 11:36	1
1,1,1-Trichloroethane	<0.45		1.0	0.45	ug/Kg			08/06/24 11:36	1
1,1,2,2-Tetrachloroethane	<0.65		1.0	0.65	ug/Kg			08/06/24 11:36	1
1,1,2-Trichloroethane	<0.73		1.0	0.73	ug/Kg			08/06/24 11:36	1

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

Lab Sample ID: MB 500-780014/7
Matrix: Solid
Analysis Batch: 780014

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.36		1.0	0.36	ug/Kg			08/06/24 11:36	1
1,1-Dichloroethene	<0.48		1.0	0.48	ug/Kg			08/06/24 11:36	1
1,1-Dichloropropene	<0.33		1.0	0.33	ug/Kg			08/06/24 11:36	1
1,2,3-Trichlorobenzene	<0.35		1.0	0.35	ug/Kg			08/06/24 11:36	1
1,2,3-Trichloropropane	<1.5		2.0	1.5	ug/Kg			08/06/24 11:36	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/Kg			08/06/24 11:36	1
1,2,4-Trimethylbenzene	<0.30		1.0	0.30	ug/Kg			08/06/24 11:36	1
1,2-Dibromo-3-Chloropropane	<4.1		5.0	4.1	ug/Kg			08/06/24 11:36	1
1,2-Dichlorobenzene	<0.48		1.0	0.48	ug/Kg			08/06/24 11:36	1
1,2-Dichloroethane	<0.58		1.0	0.58	ug/Kg			08/06/24 11:36	1
1,2-Dichloropropane	<0.37		1.0	0.37	ug/Kg			08/06/24 11:36	1
1,3,5-Trimethylbenzene	<0.29		1.0	0.29	ug/Kg			08/06/24 11:36	1
1,3-Dichlorobenzene	<0.41		1.0	0.41	ug/Kg			08/06/24 11:36	1
1,3-Dichloropropane	<0.56		1.0	0.56	ug/Kg			08/06/24 11:36	1
1,4-Dichlorobenzene	<0.45		1.0	0.45	ug/Kg			08/06/24 11:36	1
2,2-Dichloropropane	<0.48		5.0	0.48	ug/Kg			08/06/24 11:36	1
2-Chlorotoluene	<0.36		1.0	0.36	ug/Kg			08/06/24 11:36	1
4-Chlorotoluene	<0.34		1.0	0.34	ug/Kg			08/06/24 11:36	1
4-Isopropyltoluene	<0.29		1.0	0.29	ug/Kg			08/06/24 11:36	1
Benzene	<0.12		0.25	0.12	ug/Kg			08/06/24 11:36	1
Bromobenzene	<0.60		1.0	0.60	ug/Kg			08/06/24 11:36	1
Bromoform	<0.96		1.0	0.96	ug/Kg			08/06/24 11:36	1
Bromomethane	<1.8		3.0	1.8	ug/Kg			08/06/24 11:36	1
Carbon tetrachloride	<0.41		1.0	0.41	ug/Kg			08/06/24 11:36	1
Chlorobenzene	<0.41		1.0	0.41	ug/Kg			08/06/24 11:36	1
Chlorobromomethane	<0.50		1.0	0.50	ug/Kg			08/06/24 11:36	1
Chlorodibromomethane	<0.83		1.0	0.83	ug/Kg			08/06/24 11:36	1
Chloroethane	<0.47		5.0	0.47	ug/Kg			08/06/24 11:36	1
Chloroform	<0.92		2.0	0.92	ug/Kg			08/06/24 11:36	1
Chloromethane	<0.79		5.0	0.79	ug/Kg			08/06/24 11:36	1
cis-1,2-Dichloroethene	<0.42		1.0	0.42	ug/Kg			08/06/24 11:36	1
cis-1,3-Dichloropropene	<0.52		1.0	0.52	ug/Kg			08/06/24 11:36	1
Dibromomethane	<0.58		1.0	0.58	ug/Kg			08/06/24 11:36	1
Dichlorobromomethane	<0.57		1.0	0.57	ug/Kg			08/06/24 11:36	1
Dichlorodifluoromethane	<1.8		3.0	1.8	ug/Kg			08/06/24 11:36	1
Ethylbenzene	<0.17		0.25	0.17	ug/Kg			08/06/24 11:36	1
Ethylene Dibromide	<0.56		1.0	0.56	ug/Kg			08/06/24 11:36	1
Hexachlorobutadiene	<0.54		1.0	0.54	ug/Kg			08/06/24 11:36	1
Isopropyl ether	<0.38		1.0	0.38	ug/Kg			08/06/24 11:36	1
Isopropylbenzene	<0.29		1.0	0.29	ug/Kg			08/06/24 11:36	1
Methyl tert-butyl ether	<0.43		1.0	0.43	ug/Kg			08/06/24 11:36	1
Methylene Chloride	<2.1		5.0	2.1	ug/Kg			08/06/24 11:36	1
Naphthalene	0.730	J	1.0	0.44	ug/Kg			08/06/24 11:36	1
n-Butylbenzene	<0.33		1.0	0.33	ug/Kg			08/06/24 11:36	1
N-Propylbenzene	<0.32		1.0	0.32	ug/Kg			08/06/24 11:36	1
sec-Butylbenzene	<0.27		1.0	0.27	ug/Kg			08/06/24 11:36	1
Styrene	<0.31		1.0	0.31	ug/Kg			08/06/24 11:36	1
tert-Butylbenzene	<0.26		1.0	0.26	ug/Kg			08/06/24 11:36	1
Tetrachloroethene	<0.39		1.0	0.39	ug/Kg			08/06/24 11:36	1

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

Lab Sample ID: MB 500-780014/7
Matrix: Solid
Analysis Batch: 780014

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.21		0.25	0.21	ug/Kg			08/06/24 11:36	1
trans-1,2-Dichloroethene	<0.44		1.0	0.44	ug/Kg			08/06/24 11:36	1
trans-1,3-Dichloropropene	<0.63		1.0	0.63	ug/Kg			08/06/24 11:36	1
Trichloroethene	<0.15		0.50	0.15	ug/Kg			08/06/24 11:36	1
Trichlorofluoromethane	<0.44		1.0	0.44	ug/Kg			08/06/24 11:36	1
Vinyl chloride	<0.47		1.0	0.47	ug/Kg			08/06/24 11:36	1
Xylenes, Total	<0.24		0.50	0.24	ug/Kg			08/06/24 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*75 - 126*		*08/06/24 11:36*	*1*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*		*08/06/24 11:36*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 120*		*08/06/24 11:36*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*08/06/24 11:36*	*1*

Lab Sample ID: LCS 500-780014/5
Matrix: Solid
Analysis Batch: 780014

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	48.7		ug/Kg		97	70 - 125
1,1,1-Trichloroethane	50.0	43.5		ug/Kg		87	70 - 125
1,1,2,2-Tetrachloroethane	50.0	50.4		ug/Kg		101	62 - 140
1,1,2-Trichloroethane	50.0	42.9		ug/Kg		86	71 - 130
1,1-Dichloroethane	50.0	44.7		ug/Kg		89	70 - 125
1,1-Dichloroethene	50.0	44.9		ug/Kg		90	67 - 122
1,1-Dichloropropene	50.0	41.2		ug/Kg		82	70 - 121
1,2,3-Trichlorobenzene	50.0	47.7		ug/Kg		95	51 - 145
1,2,3-Trichloropropane	50.0	45.8		ug/Kg		92	50 - 133
1,2,4-Trichlorobenzene	50.0	47.9		ug/Kg		96	57 - 137
1,2,4-Trimethylbenzene	50.0	47.5		ug/Kg		95	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	40.9		ug/Kg		82	56 - 123
1,2-Dichlorobenzene	50.0	48.3		ug/Kg		97	70 - 125
1,2-Dichloroethane	50.0	42.5		ug/Kg		85	68 - 127
1,2-Dichloropropane	50.0	46.0		ug/Kg		92	67 - 130
1,3,5-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 123
1,3-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 125
1,3-Dichloropropane	50.0	48.1		ug/Kg		96	62 - 136
1,4-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 120
2,2-Dichloropropane	50.0	38.0		ug/Kg		76	58 - 139
2-Chlorotoluene	50.0	49.5		ug/Kg		99	70 - 125
4-Chlorotoluene	50.0	49.1		ug/Kg		98	68 - 124
4-Isopropyltoluene	50.0	44.3		ug/Kg		89	70 - 125
Benzene	50.0	46.2		ug/Kg		92	70 - 120
Bromobenzene	50.0	48.2		ug/Kg		96	70 - 122
Bromoform	50.0	40.7		ug/Kg		81	56 - 132
Bromomethane	50.0	58.8		ug/Kg		118	40 - 152
Carbon tetrachloride	50.0	43.8		ug/Kg		88	59 - 133
Chlorobenzene	50.0	47.5		ug/Kg		95	70 - 120

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

Lab Sample ID: LCS 500-780014/5
Matrix: Solid
Analysis Batch: 780014

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobromomethane	50.0	43.3		ug/Kg		87	65 - 122
Chlorodibromomethane	50.0	42.2		ug/Kg		84	68 - 125
Chloroethane	50.0	42.3		ug/Kg		85	48 - 136
Chloroform	50.0	43.1		ug/Kg		86	70 - 120
Chloromethane	50.0	41.3		ug/Kg		83	56 - 152
cis-1,2-Dichloroethene	50.0	43.8		ug/Kg		88	70 - 125
cis-1,3-Dichloropropene	50.0	42.2		ug/Kg		84	64 - 127
Dibromomethane	50.0	45.3		ug/Kg		91	70 - 120
Dichlorobromomethane	50.0	43.4		ug/Kg		87	69 - 120
Dichlorodifluoromethane	50.0	36.0		ug/Kg		72	40 - 159
Ethylbenzene	50.0	42.9		ug/Kg		86	70 - 123
Ethylene Dibromide	50.0	47.8		ug/Kg		96	70 - 125
Hexachlorobutadiene	50.0	47.0		ug/Kg		94	51 - 150
Isopropylbenzene	50.0	45.0		ug/Kg		90	70 - 126
Methyl tert-butyl ether	50.0	37.2		ug/Kg		74	55 - 123
Methylene Chloride	50.0	41.1		ug/Kg		82	69 - 125
Naphthalene	50.0	41.3		ug/Kg		83	53 - 144
n-Butylbenzene	50.0	49.5		ug/Kg		99	68 - 125
N-Propylbenzene	50.0	49.2		ug/Kg		98	69 - 127
sec-Butylbenzene	50.0	48.3		ug/Kg		97	70 - 123
Styrene	50.0	43.2		ug/Kg		86	70 - 120
tert-Butylbenzene	50.0	48.3		ug/Kg		97	70 - 121
Tetrachloroethene	50.0	46.6		ug/Kg		93	70 - 128
Toluene	50.0	45.1		ug/Kg		90	70 - 125
trans-1,2-Dichloroethene	50.0	44.4		ug/Kg		89	70 - 125
trans-1,3-Dichloropropene	50.0	40.8		ug/Kg		82	62 - 128
Trichloroethene	50.0	45.9		ug/Kg		92	70 - 125
Trichlorofluoromethane	50.0	46.2		ug/Kg		92	55 - 128
Vinyl chloride	50.0	40.9		ug/Kg		82	64 - 126
Xylenes, Total	100	95.9		ug/Kg		96	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 126*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*
Dibromofluoromethane (Surr)	*85*		*75 - 120*
Toluene-d8 (Surr)	*92*		*75 - 120*

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

Lab Sample ID: MB 500-779983/1-A
Matrix: Solid
Analysis Batch: 780025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<5.9		67	5.9	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
2-Methylnaphthalene	<6.7		67	6.7	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Acenaphthene	<6.8		33	6.8	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Acenaphthylene	<5.6		33	5.6	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Anthracene	<6.8		33	6.8	ug/Kg		08/05/24 17:00	08/06/24 11:15	1

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

Lab Sample ID: MB 500-779983/1-A
Matrix: Solid
Analysis Batch: 780025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<7.0		33	7.0	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Benzo[a]pyrene	<32		33	32	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Benzo[b]fluoranthene	<32		33	32	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Benzo[g,h,i]perylene	<7.2		33	7.2	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Benzo[k]fluoranthene	<13		33	13	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Chrysene	<8.8		33	8.8	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Dibenz(a,h)anthracene	<33		33	33	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Fluoranthene	<7.7		33	7.7	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Fluorene	<9.8		33	9.8	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Indeno[1,2,3-cd]pyrene	<32		33	32	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Naphthalene	<6.0		33	6.0	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Phenanthrene	<7.2		33	7.2	ug/Kg		08/05/24 17:00	08/06/24 11:15	1
Pyrene	<9.1		33	9.1	ug/Kg		08/05/24 17:00	08/06/24 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*37 - 147*	*08/05/24 17:00*	*08/06/24 11:15*	*1*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*08/05/24 17:00*	*08/06/24 11:15*	*1*
Terphenyl-d14 (Surr)	*98*		*42 - 157*	*08/05/24 17:00*	*08/06/24 11:15*	*1*

Lab Sample ID: LCS 500-779983/2-A
Matrix: Solid
Analysis Batch: 780025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	3330	2780		ug/Kg		84	58 - 101
2-Methylnaphthalene	3330	2450		ug/Kg		73	58 - 103
Acenaphthene	3330	2990		ug/Kg		90	63 - 109
Acenaphthylene	3330	3120		ug/Kg		94	61 - 115
Anthracene	3330	3040		ug/Kg		91	68 - 120
Benzo[a]anthracene	3330	3160		ug/Kg		95	70 - 121
Benzo[a]pyrene	3330	3570		ug/Kg		107	73 - 132
Benzo[b]fluoranthene	3330	3750		ug/Kg		112	68 - 123
Benzo[g,h,i]perylene	3330	3630		ug/Kg		109	65 - 126
Benzo[k]fluoranthene	3330	3370		ug/Kg		101	64 - 128
Chrysene	3330	3040		ug/Kg		91	70 - 123
Dibenz(a,h)anthracene	3330	3590		ug/Kg		108	66 - 125
Fluoranthene	3330	3080		ug/Kg		93	66 - 123
Fluorene	3330	3080		ug/Kg		92	62 - 113
Indeno[1,2,3-cd]pyrene	3330	3670		ug/Kg		110	66 - 131
Naphthalene	3330	2600		ug/Kg		78	54 - 98
Phenanthrene	3330	2990		ug/Kg		90	65 - 115
Pyrene	3330	3290		ug/Kg		99	71 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*77*		*37 - 147*
2-Fluorobiphenyl (Surr)	*88*		*43 - 145*
Terphenyl-d14 (Surr)	*96*		*42 - 157*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 500-780346/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 780568 — **Prep Batch: 780346**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.34		1.0	0.34	mg/Kg		08/07/24 17:09	08/08/24 13:05	1
Barium	<0.11		1.0	0.11	mg/Kg		08/07/24 17:09	08/08/24 13:05	1
Cadmium	<0.036		0.20	0.036	mg/Kg		08/07/24 17:09	08/08/24 13:05	1
Chromium	<0.50		1.0	0.50	mg/Kg		08/07/24 17:09	08/08/24 13:05	1
Lead	<0.23		0.50	0.23	mg/Kg		08/07/24 17:09	08/08/24 13:05	1
Selenium	<0.59		1.0	0.59	mg/Kg		08/07/24 17:09	08/08/24 13:05	1
Silver	<0.13		0.50	0.13	mg/Kg		08/07/24 17:09	08/08/24 13:05	1

Lab Sample ID: LCS 500-780346/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 780568 — **Prep Batch: 780346**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	200	164		mg/Kg		82	80 - 120
Cadmium	5.00	4.00		mg/Kg		80	80 - 120
Chromium	20.0	16.1		mg/Kg		80	80 - 120
Lead	10.0	8.17		mg/Kg		82	80 - 120
Silver	5.00	4.00		mg/Kg		80	80 - 120

Lab Sample ID: LCS 500-780346/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 780583 — **Prep Batch: 780346**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	10.0	9.16		mg/Kg		92	80 - 120
Selenium	10.0	8.59		mg/Kg		86	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-780316/12-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 780509 — **Prep Batch: 780316**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0069		0.017	0.0069	mg/Kg		08/07/24 15:50	08/08/24 10:36	1

Lab Sample ID: LCS 500-780316/13-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 780509 — **Prep Batch: 780316**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.180		mg/Kg		108	80 - 120

Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-62 0-2
Date Collected: 08/02/24 11:45
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	780096	DG	EET CHI	08/06/24 11:57

Client Sample ID: TP-62 0-2
Date Collected: 08/02/24 11:45
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-1
Matrix: Solid
Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			779792	WRE	EET CHI	08/02/24 11:45
Total/NA	Analysis	8260D		50	780014	W1T	EET CHI	08/06/24 17:38
Total/NA	Prep	3546			779983	LH	EET CHI	08/05/24 17:00
Total/NA	Analysis	8270E		1	780025	H7CM	EET CHI	08/06/24 15:49
Total/NA	Prep	3050B			780346	S1Z	EET CHI	08/07/24 17:09 - 08/07/24 22:10 [1]
Total/NA	Analysis	6010D		1	780568	SJ	EET CHI	08/08/24 13:13
Total/NA	Prep	7471B			780316	MJG	EET CHI	08/07/24 15:50
Total/NA	Analysis	7471B		1	780509	MJG	EET CHI	08/08/24 10:48

Client Sample ID: TP-63 0-2
Date Collected: 08/02/24 11:50
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	780096	DG	EET CHI	08/06/24 11:57

Client Sample ID: TP-63 0-2
Date Collected: 08/02/24 11:50
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-2
Matrix: Solid
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			779792	WRE	EET CHI	08/02/24 11:50
Total/NA	Analysis	8260D		50	780014	W1T	EET CHI	08/06/24 18:03
Total/NA	Prep	3546			779983	LH	EET CHI	08/05/24 17:00
Total/NA	Analysis	8270E		1	780025	H7CM	EET CHI	08/06/24 16:14
Total/NA	Prep	3050B			780346	S1Z	EET CHI	08/07/24 17:09 - 08/07/24 22:10 [1]
Total/NA	Analysis	6010D		1	780568	SJ	EET CHI	08/08/24 13:17
Total/NA	Prep	7471B			780316	MJG	EET CHI	08/07/24 15:50
Total/NA	Analysis	7471B		1	780509	MJG	EET CHI	08/08/24 10:50

Client Sample ID: TP-64 0-2
Date Collected: 08/02/24 11:55
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	780096	DG	EET CHI	08/06/24 11:57

Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: ORCHARD LANE MANITOWOC - 193710447

Job ID: 500-254508-1

Client Sample ID: TP-64 0-2

Date Collected: 08/02/24 11:55
Date Received: 08/03/24 09:45

Lab Sample ID: 500-254508-3

Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			779792	WRE	EET CHI	08/02/24 11:55
Total/NA	Analysis	8260D		50	780014	W1T	EET CHI	08/06/24 18:29
Total/NA	Prep	3546			779983	LH	EET CHI	08/05/24 17:00
Total/NA	Analysis	8270E		1	780025	H7CM	EET CHI	08/06/24 16:39
Total/NA	Prep	3050B			780346	S1Z	EET CHI	08/07/24 17:09 - 08/07/24 22:10 [1]
Total/NA	Analysis	6010D		1	780568	SJ	EET CHI	08/08/24 13:21
Total/NA	Prep	7471B			780316	MJG	EET CHI	08/07/24 15:50
Total/NA	Analysis	7471B		1	780509	MJG	EET CHI	08/08/24 10:51

[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: 500-254508-1
Project/Site: ORCHARD LANE MANITOWOC - 193710447

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

Chain of Custody Record 727402

eurofins | Environment Testing America

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact		Project Manager: WHITNEY CULL	Site Contact: W. CULL	Date: 8/2/2024	COC No
Company Name	STANTEC	Tel/Email: (262) 219-4740	Lab Contact: S. FREDRICK	Carrier: FED EX	1 of 1 COCs
Address	12080 CORPORATE PKWY	Analysis Turnaround Time			Sampler: W. CULL
City/State/Zip	#200, MEQUON, WI 53092	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone		TAT if different from Below: 3DAY TAT			Walk-in Client
Fax		☐ 2 weeks			Lab Sampling
Project Name		☐ 1 week			
Site	ORCHARD LANE, MANITOWOC	☐ 2 days			Job / SDG No: 500-254508
P O #	193710442	☐ 1 day			

500-254508 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOC	PAH	RCRA	Sample Specific Notes
1	TP-62 0-2	8/2/24	1145	G	S	3	N	N	X	X	X	
2	TP-63 0-2	↓	1150	↓	↓	↓	↓	↓	X	X	X	
3	TP-64 0-2	↓	1155	↓	↓	↓	↓	↓	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

MSA # 40411 3DAY TAT

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd 2.3 Corr'd 2.0 | Therm ID No _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
W Cull	STANTEC	8/2/24, 1700			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
			Stephanie Hernandez	EETA	8/3/24 0945

WATTNET COLL
STANTEC CONSULTING CORP.
12080 CORPORATE PARKWAY
#200
MEQUON, WI 53092
UNITED STATES US

WGTWGT: 25.00 LB MAN
CAD: 0780307/CAFE3808

Part # 159469-434 MTW EXP 01/25

TO SAMPLE RECEIPT
EUROFINS CHICAGO
2417 BOND ST.

Cooler 1 of 1

UNIVERSITY PARK IL 60484

(708) 534-5200 REF:
INV:
PO: DEPT:

RMA

FedEx Express

J24102311220TUV

TRK# 0221 7414 0291 4232

RETURNS MON-SAT
PRIORITY OVERNIGHT

FedEx. 2.3+20

TRK# 0221 7414 0291 4232

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 JOTA

60484
IL-US
ORD

500-254508 Waybi

Login Sample Receipt Checklist

Client: Stantec Consulting Corporation

Job Number: 500-254508-1

Login Number: 254508
List Number: 1
Creator: Hernandez, Stephanie

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	2.0
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	