

From: Beggs, Tauren R - DNR
Sent: Tuesday, December 5, 2023 8:41 AM
To: Byers, Harris
Subject: RE: Interim Construction Documentation Report – Removal of Apparent Oxide Box Waste Fill Materials from the Phase 2 Redevelopment Area of the River Point District

Hi Harris,

I track all the documents in the 02-36-585491 case until a new BRRTS case is eventually created and the applicable documents can be added to the new BRRTS case.

Regards,

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 (preferred contact method during work at home)

From: Byers, Harris <Harris.Byers@stantec.com>
Sent: Friday, December 1, 2023 3:20 PM
To: Adam Tegen <ategen@manitowoc.org>; Knapke.Eric@epa.gov; Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Subject: Interim Construction Documentation Report – Removal of Apparent Oxide Box Waste Fill Materials from the Phase 2 Redevelopment Area of the River Point District

Team:

The attached letter summarizes removal of apparent oxide box waste source material from 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 a developer is identified – and then we can work to condense work into the new case number.

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





November 28, 2023
File: 193709832

Attention: Adam Tegen
Community Development Director
900 Quay Street
Manitowoc, WI 54220-4543

Dear Mr. Adam Tegen,

**Reference: Interim Construction Documentation Report – Removal of Apparent Oxide Box Waste
Fill Materials
Phase 2 Redevelopment Area of the River Point District
Manitowoc, Wisconsin
BRRTS ID: 02-36-585491 (LGU)
Stantec Project #: 193709832**

This interim construction documentation letter report describes the removal of 371.2 tons of apparent oxide box waste on October 30, 2023 as a remedial action in the Phase 2 Redevelopment Area of the River Point District in Manitowoc, Wisconsin (City). The locations of the River Point District (outlined in yellow), the Phase 2 Redevelopment Area (outlined in green), and the oxide box waste “Remediation Area” (outlined in black) are illustrated on **Figure 1** relative to regional topography and **Figure 2** relative to a 2020 orthophotograph.

This work was completed on behalf of the Community Development Authority of the City of Manitowoc (CDA; current owner and grantee) using funds provided through a United States Environmental Protection Agency Brownfield Cleanup Grant awarded to the CDA under Cooperative Agreement Number 4B00E03573. The corresponding Wisconsin Department of Natural Resources (WDNR) Bureau for Remediation and Redevelopment Tracking System (BRRTS) case number for the River Point District is BRRTS ID: 02-36-585491 (Local Governmental Unit; LGU). Once a developer is identified, a new BRRTS case will be established to facilitate non-industrial redevelopment of the Phase 2 Redevelopment Area.

BACKGROUND

The Stantec (2020a) Phase II Environmental Site Assessment described a property-wide black granular fill unit at the River Point District containing concentrations of heavy metals and polycyclic aromatic hydrocarbons (PAHs) greater than health-based soil quality standards. The granular fill unit was further delineated by Stantec in subsequent phases of investigation at the River Point District (e.g., 2020b, 2020c, 2021, 2023b).

Unique to the Remediation Area, while performing a test pit search for evidence of a former underground storage tank on Site 3, Stantec (2020b) encountered fill material with Prussian blue coloration consistent with ferrocyanide salts in oxide box waste at approximately 2.5 feet below ground surface (ft bgs). Shallow groundwater was encountered approximately three ft bgs in a test pit and had a similar blue color. Additional soil boring, monitoring wells, and test pits were installed by Stantec (2020c, 2023b) to further delineate the horizontal and vertical extends of the apparent oxide box waste used as fill at the River Point

Reference: Interim Construction Documentation Report – Removal of Apparent Oxide Box Waste Fill Materials; Phase 2 Redevelopment Area of the River Point District; Manitowoc, Wisconsin

District. Constituents detected in the apparent oxide box waste fill by Stantec (2020c, 2023b) are adapted on **Table 1** (columns shaded grey indicate the material was removed as part of this remedial action).

Apparent oxide box waste could serve as a direct contact risk and an ongoing source of impacts to groundwater. Therefore, the Stantec (2022) Analysis of Brownfield Cleanup Alternatives and the Stantec (2023c) Remedial Action Plan (RAP) recommended the excavation and offsite disposal of this material to facilitate non-industrial redevelopment.

REMEDIAL ACTION DOCUMENTATION

Excavation and Offsite Disposal of Apparent Oxide Box Waste Fill Materials. A Stantec Registered Land Surveyor staked the locations of the two excavations proposed in the Stantec (2023c) RAP. Apparent oxide box waste fill material was excavated Vinton Construction Co. (Vinton) on October 30, 2023. As proposed in the Stantec (2023c) RAP, excavations extended vertically to a maximum depth of 8 feet below ground surface, which is approximately 2 to 3 feet below the shallow groundwater table. The excavations extended outward until visual and olfactory indications of oxide box waste was no longer apparent. The extents of excavations are illustrated on **Figure 3**. Photographic documentation following removal of the material from the northern excavation is provided in **Attachment A** (Photo Nos. 2 and 3). Photographic documentation following removal of the material from the southern excavation is provided in **Attachment A** (Photo No. 4).

All excavated material was live-loaded into dump trucks and transported to the Waste Management licensed solid waste landfill in Whitelaw, Wisconsin for disposal. Landfill tickets provided in **Attachment B** confirm this remedial activity removed 371.2 tons of apparent waste material from the Phase 2 Redevelopment Area.

The excavations were backfilled with appropriate imported fill material previously characterized by Stantec (2023a) to match the surrounding grade (**Appendix A**, Photo Nos. 1 and 5-7). The excavations were seeded in cool season turf grass.

Post-Excavation Soil Sampling - Methods. Stantec personnel collected soil/fill samples from the sidewalls of the excavations to confirm soil quality following removal of the oxide box waste.

Soil samples were logged and screened in the field by Stantec personnel. Soil samples selected for analysis were placed directly into laboratory-supplied containers, preserved as appropriate, and immediately placed in a cooler on ice for shipping to Eurofins Environment Testing North Central, LLC (Chicago, Illinois), under a chain of custody for analysis. Soil samples were analyzed for PAHs (EPA 8270D). The laboratory report is provided as **Appendix C**. Detected constituents are compared to residual contaminant levels (RCLs) found in chapter NR720 of the Wisconsin Administrative Code on **Table 1**.

Post-Excavation Soil Sampling – Results. As summarized on **Table 1**, concentrations of constituents in the black granular fill remaining along the excavation sidewalls (sample ID's labeled "Fill") exceed one or more RCLs, which is consistent with Site Investigation work completed recently by Stantec (2023b). However, remaining concentrations of PAHs in the black granular fill are orders of magnitude less than PAHs detected in the apparent oxide box waste fill (e.g., TP-18 on **Table 1**) suggesting successful removal of the apparent oxide box waste source material.

Reference: Interim Construction Documentation Report – Removal of Apparent Oxide Box Waste Fill Materials; Phase 2 Redevelopment Area of the River Point District; Manitowoc, Wisconsin

Of final note, the concentrations of PAHs in the native underlying soils (sample ID's labeled "Nat" on **Table 1**) are less than the most conservative RCLs, confirming PAHs in the overlying black granular fill have not migrated to underlying native soils. This conclusion remains consistent with Site Investigation work completed recently by Stantec (2023b).

CONCLUSION

This remediation activity removed 371.2 tons of apparent oxide box waste previously used as fill in the Phase 2 Redevelopment Area of the River Point District in Manitowoc. The excavations were backfilled to match current grade with appropriate imported materials and the area seeded with cool season turf grass.

Stantec recommends maintaining the turf grass as an interim vegetated barrier until a developer is identified to facilitate non-industrial redevelopment of the Phase 2 Redevelopment Area. Once a developer is identified, a Remedial Action Plan and Material Management Plan specific to the proposed reuse will be developed and a new BRRTS case will be established to facilitate redevelopment.

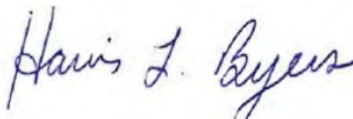
We recommend submitting a copy of this letter to WDNR for project documentation.

Regards,

STANTEC CONSULTING SERVICES INC



Madeline Edwards
Contaminant Hydrogeologist
Madeline.Edwards@stantec.com
Phone: 262-336-4747



Harris L. Byers, Ph.D.
Sr. Brownfields Project Manager
Harris.Byers@Stantec.com
Phone: 414-581-6476



Stu Gross, P.G.,
BC1937 Practice Lead/Senior
Project Manager
stu.gross@stantec.com

Enclosures

Figures
Table
Attachment A – Photographic Documentation
Attachment B – Waste Disposal Documentation
Attachment C – Laboratory Report

REFERENCES

- Stantec, 2020a, Phase II Environmental Site Assessment, Riverpoint District; Manitowoc, Wisconsin, March 23, 2020.
- Stantec, 2020b, Construction Documentation Report for Demolition and Removal of Structural Impediments, River Point District – Site 3, December 11, 2020.
- Stantec, 2020c, Phase II Environmental Site Assessment, River Point District; Manitowoc, Wisconsin, Site 3, December 18, 2020.
- Stantec, 2021, NR 716 Site Investigation Report, River Point District Phase 1 Construction Area, July 19, 2021.

November 28, 2023

Adam Tegen

Page 4 of 4

Reference: Interim Construction Documentation Report – Removal of Apparent Oxide Box Waste Fill Materials; Phase 2 Redevelopment Area of the River Point District; Manitowoc, Wisconsin

Stantec, 2022, Analysis of Brownfield Cleanup Alternatives, Phase 2 Redevelopment Area, River Point District, Manitowoc, Wisconsin (Rev 4), October 18, 2022.

Stantec, 2023a, Characterization of Soil at 333 Reed Avenue; Manitowoc, Wisconsin, May 19, 2023.

Stantec, 2023b, Site Investigation Report, River Point District Phase 2 Redevelopment Area, June 2, 2023.

Stantec, 2023c, Remedial Action Plan for Removal of Apparent Oxide Box Waste Fill Materials, Phase 2 Redevelopment, River Point District, June 8, 2023.

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 the City and the CDA and 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 the City and the CDA in accordance with Stantec's contract with the City and the CDA. While this letter 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 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

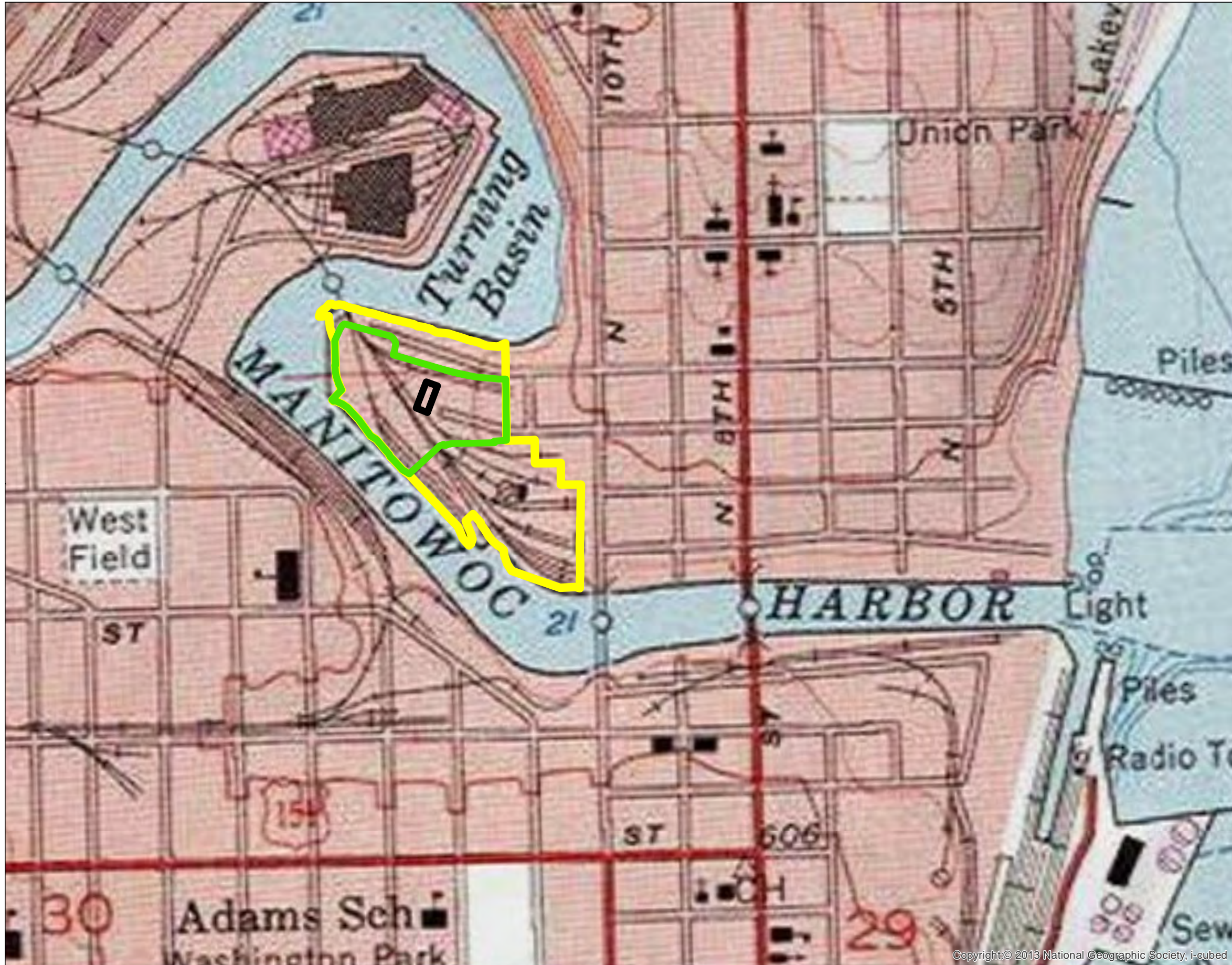





Figure No.
1
 Title
Remediation Area and Regional Topography
 Client/Project
 Apparent Oxide Box Waste Source Area
 River Point District
 City of Manitowoc
 0 395 790 Feet
 Prepared by HLB on 5/31/2023

Legend

-  River Point District
-  Remediation Area
-  Phase 2 Redevelopment Area

NOTE:
 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 2. Orthophotograph: Manitowoc County, 2020





Figure No.
2
 Title
**Remediation Area and
 2020 Orthophotograph**
 Client/Project
 Apparent Oxide Box Waste Source Area
 River Point District
 City of Manitowoc
 0 125 250 Feet Prepared by HLB on 5/8/2023

Legend

- River Point District
- Remediation Area
- Phase 2 Redevelopment Area

NOTE:
 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 2. Orthophotograph: Manitowoc County, 2020



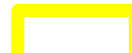

Figure No.
3
Title
Removal Excavations

Client/Project
Apparent Oxide Box Waste Source Area
River Point District
City of Manitowoc

0 70 140 Feet
Prepared by HLB on 3/25/2020




Legend



 River Point District
 Phase 2 Redevelopment Area

 Excavations

Sample Locations

 Soil Boring / Monitoring Well
 Soil Boring
 Soil Boring / Temp Well





Test Pits

 Test Pits

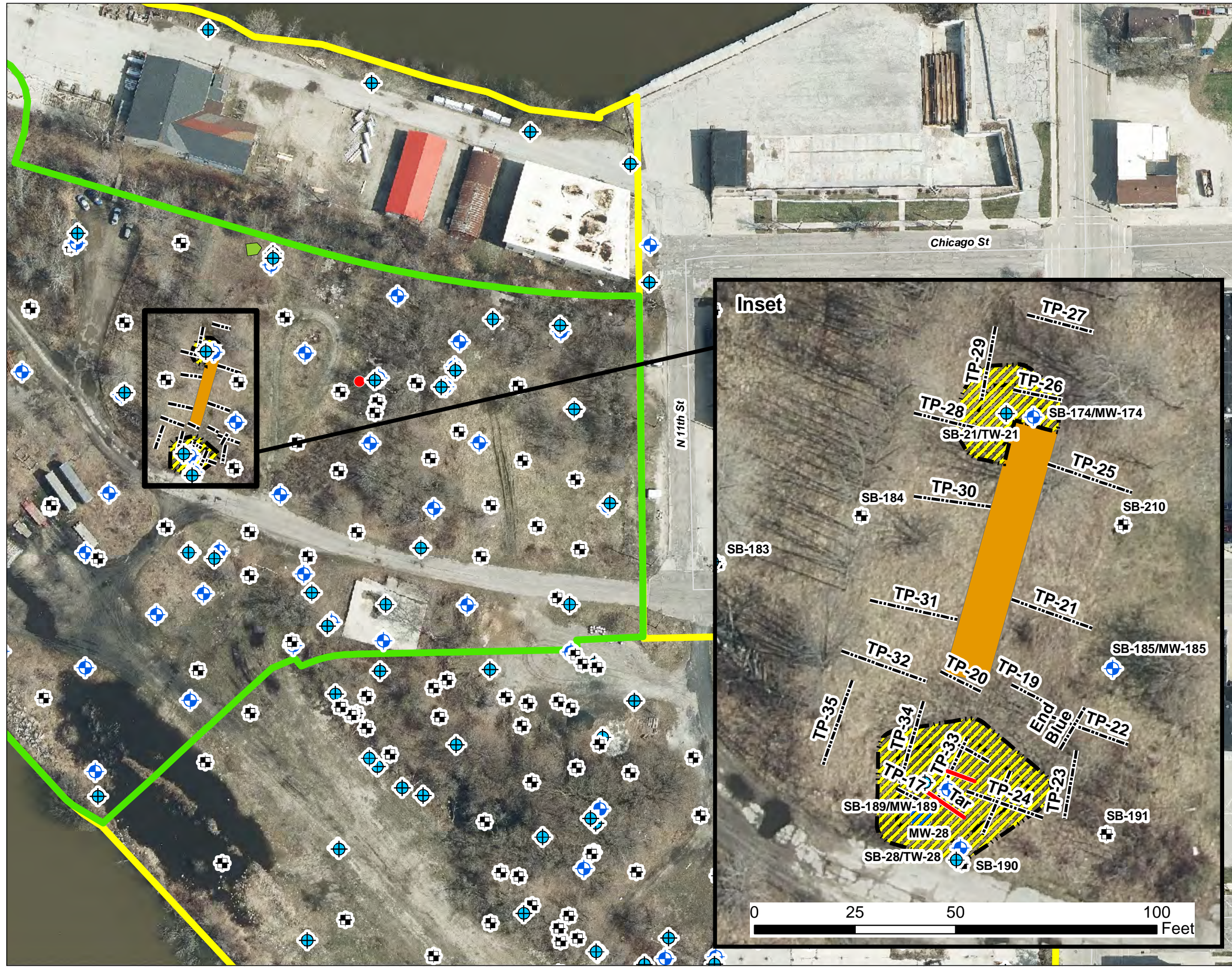
Test Pits with Apparent Tar

 Tar

Remaining Features

 Concrete Debris
 Concrete Slab
 Unknown Pipe
 Water Valve

Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
2. Orthophotograph: Manitowoc County, 2020



TABLE




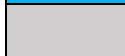
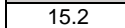
Table 1
Soil Quality in the Apparent Oxide Box Waste Source Area
Phase 2 Redevelopment Area
River Point District
Manitowoc, Wisconsin

Detected Constituents in Soil	Units	Wisconsin RCL Industrial	Wisconsin RCL Non-Industrial	Wisconsin RCL Groundwater	Sample Location, Date, and Sample Depth (Soil Removed During 2023 Cleanup Action)								Sample ID and Date of Samples Collected from the Sidewalls of the Northern Excavation					Sample ID and Date of Samples Collected from the Sidewalls of the Southern Excavation								
					SB-21		SB-27		TP-17	TP-18		SB-174	SB-189	Exc-1-S-Fill	Exc-1-S-Nat	Exc-1-E-Fill	Exc-1-E-Nat	Exc-1-N-Nat	Exc-2-NW-Fill	Exc-2-NW-Nat	Exc-2-S-Fill	Exc-2-S-Nat	Exc-2-NE-Fill	Exc-2-NE-Nat		
					9/9/2020	9/9/2020	9/9/2020	9/9/2020	8/14/2020	06/08/2021	06/08/2021	11/18/2022	11/18/2022	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023	
Surface		3 - 5 ft		Surface		0 - 2 ft		3 ft	2.5 ft	3 ft	2.5 - 5 ft	0 - 2 ft	Exc-1-S-Fill	Exc-1-S-Nat	Exc-1-E-Fill	Exc-1-E-Nat	Exc-1-N-Nat	Exc-2-NW-Fill	Exc-2-NW-Nat	Exc-2-S-Fill	Exc-2-S-Nat	Exc-2-NE-Fill	Exc-2-NE-Nat			
RCRA Metals																										
Arsenic	mg/kg	3.00	0.68	0.58	-	9	-	5	1.1	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium	mg/kg	100,000	15,300	165	-	110	-	71	22	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium	mg/kg	985	71	0.75	-	0.98	-	0.21	0.067 J	-	< 0.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium	mg/kg	n/v	n/v	360000	-	10	-	9.5	8.9	-	4.4 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead	mg/kg	800	400	27	-	300	-	55	5.7	-	170	67	110	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury	mg/kg	3.13	3.13	0.21	-	0.31	-	0.15	<0.0067	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Silver	mg/kg	5840	391	0.85	-	<0.15	-	<0.13	<0.65	-	< 1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polycyclic Aromatic Hydrocarbons																										
Acenaphthene	µg/kg	72,700	17,600	n/v	-	45	780	-	1300	640000	< 1600	<16	650 J	930	<1.9	3800	<2.0	<2.0	38	<1.8	230	3.1 J	510	<1.9	<1.9	
Acenaphthylene	µg/kg	3,010,000	239,000	n/v	-	120	5800	-	350 J	2500000	33000	13	1700	940	<2.0	1900	<2.1	<2.1	46	<1.9	260	3.1 J	870	<2.0	<2.0	
Anthracene	µg/kg	45,200,000	3,590,000	n/v	-	130	5800	-	250 J	2100000	84000	<15	1700	83	<2.4	410	<2.5	<2.5	5.9 J	<2.3	110 J	<2.4	200 J	<2.5	<2.5	
Benzo(a)anthracene	µg/kg	n/v	n/v	n/v	-	550	14000	-	<57	2400000	420000	39	6000	89	<1.9	1400	<1.9	<1.9	11	<1.7	830	9.6	1800	<1.9	<1.9	
Benzo(a)pyrene	µg/kg	100,000,000	17,900,000	196,949	-	670	17000	-	<82	2200000	320000	56	7600	160	<2.2	1600	<2.2	<2.3	40	<2.0	710	10	1300	<2.2	<2.2	
Benzo(b)fluoranthene	µg/kg	20,800	1,140	n/v	-	1100	17000	-	<91	2300000	410000	70	8600	550	<3.8	7100	<3.9	<4.0	320	<3.6	1800	33	1700	<3.8	<3.8	
Benzo(g,h,i)perylene	µg/kg	2,110	115	470	-	430	6400	-	<140	650000	130000	33	2700	570	<3.7	9800	<3.7	<3.8	390	<3.4	2100	46	2500	<3.7	<3.7	
Benzo(k)fluoranthene	µg/kg	21,100	1,150	478	-	320	7000	-	<120	1100000	240000	30	3700	610	<2.1	9500	<2.1	<2.2	510	<1.9	1800	60	4500	<2.1	<2.1	
Chrysene	µg/kg	n/v	n/v	n/v	-	630	13000	-	<120	1900000	370000	56	6400	590	<1.8	12000	<1.9	<1.9	510	<1.7	1600	60	7700	<1.8	<1.8	
Dibenzo(a,h)anthracene	µg/kg	211,000	11,500	n/v	-	110	1900	-	<82	240000	51000	<17	880	170	<2.5	3800	<2.6	<2.7	140	<2.4	780	15	1600	<2.6	<2.6	
Fluoranthene	µg/kg	2,110,000	115,000	144	-	1300	25000	-	100 J	5800000	730000	75	9700	650	<4.7	9200	<4.8	<4.9	350	<4.4	1800	38	2100	<4.7	<4.7	
Fluorene	µg/kg	2,110	115	n/v	-	150	4000	-	2200	2000000	5000 J	<12	1100	99	<5.4	2200	<5.5	<5.7	100	<5.0	280	13	1300	<5.4	<5.4	
Indeno(1,2,3-cd)pyrene	µg/kg	30,100,000	2,390,000	88,878	-	420	6400	-	<110	690000	160000	35	2900	900	<2.2	15000	<2.3	<2.3	480	<2.1	3000	53	2600	<2.2	<2.2	
Methylnaphthalene, 1-	µg/kg	30,100,000	2,390,000	14,830	-	310	2300	-	19000	1900000	< 2200	25	410 J	190	<1.7	1400	<1.7	<1.7	6.4 J	<1.5	360	4.0 J	640	<1.7	<1.7	
Methylnaphthalene, 2-	µg/kg	21,100	1,150	n/v	-	270	2800	-	28000	2700000	3600 J	32	970 J	460	<4.2	8800	<4.3	<4.4	390	<3.9	1300	46	6000	<4.2	<4.2	
Naphthalene	µg/kg	24,100	5,520	658	-	170	7500	-	4900	11000000	19000	25	1100	590	<1.6	2000	<1.7	<1.7	40	<1.5	810	7.7 J	2100	<1.7	<1.7	
Phenanthrene	µg/kg	n/v	n/v	n/v	-	790	20000	-	3900	7800000	320000	47	5000	1200	<2.3	11000	<2.3	<2.4	170	<2.1	2100	29	2900	<2.3	<2.3	
Pyrene	µg/kg	22,600,000	1,790,000	54,546	-	1200	32000	-	320 J	4100000	620000	80	9600	930	2.1 J	16000	<2.0	<2.1	480	<1.9	3200	55	2600	<2.0	<2.0	
Semi-Volatile Organic Compounds																										
Benzoic acid	µg/kg	100,000,000	100,000,000	n/v	-	<440	-	<2000	-	< DL	< DL	-	<7,500	-	-	-	-	-	-	-	-	-	-	-	-	
Bis(2-Chloroethyl)ether	µg/kg	1,290	286	n/v	-	<67	-	<300	-	< DL	< DL	-	<1,100	-	-	-	-	-	-	-	-	-	-	-	-	
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	164,000	38,800	2,880	-	<81	-	<360	-	< DL	< DL	-	<1,400	-	-	-	-	-	-	-	-	-	-	-	-	
Carbazole	µg/kg	n/v	n/v	n/v	-	160 J	n/v	4100	-	2000000	24000	n/v	<1,900	-	-	-	-	-	-	-	-	-	-	-	-	
Cresol, m & p- (Methylphenol, 3&4-)	µg/kg	n/v	n/v	n/v	-	<74	-	1800	-	1800000	< 15000	-	<1,300	-	-	-	-	-	-	-	-	-	-	-	-	
Cresol, o- (Methylphenol, 2-)	µg/kg	41,000,000	3,160,000	n/v	-	<71	-	650 J	-	880000	< 14000	-	<1,200	-	-	-	-	-	-	-	-	-	-	-	-	
Dibenzofuran	µg/kg	1,040,000	73,000	n/v	-	140 J	-	2200	-	1600000	< 11000	-	1,300 J	-	-	-	-	-	-	-	-	-	-	-	-	
Dimethylphenol, 2,4-	µg/kg	16,400,000	1,260,000	n/v	-	310 J	-	<750	-	720000	< 34000	-	<2,900	-	-	-	-	-	-	-	-	-	-	-	-	
N-Nitrosodi-n-Propylamine	µg/kg	328	78	n/v	-	<54	-	360 J	-	< DL	< DL	-	<920	-	-	-	-	-	-	-	-	-	-	-	-	
Phenol	µg/kg	100,000,000	19,000,000	2,295	-	<99	-	1500	-	1900000	< 20000	-	<1,700	-	-	-	-	-	-	-	-	-	-	-	-	
Volatile Organic Compounds																										
Benzene	µg/kg	7,070	1,600	5.1	-	-	-	-	1600	-	120	<12	40	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/kg	35,400	8,020	1,570	-	-	-	-	8500	-	< 26	6000	34	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	µg/kg	24,100	5,520	658	-	-	-	-	17000	-	2100	66 J	430	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/kg	867,000	867,000	220	-	-	-	-	<57	-	110 J	<32	<26	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/kg	818,000	818,000	1,107	-	-	-	-	150	-	120	59	140	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	µg/kg	219,000	219,000	1,380	-	-	-	-	50000	-	< DL	14000	100	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	260,000	260,000	3,960	-	-	-	-	20000	-	88	50000	330	-	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry																										
Cyanide, Total	mg/kg	n/v	n/v	n/v	1,400	8	1000	120	-	3.5	-	1.4	130	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Table 1
Soil Quality in the Apparent Oxide Box Waste Source Area
Phase 2 Redevelopment Area
River Point District
Manitowoc, Wisconsin

Notes:

mg/kg	Milligram per Kilogram
µg/kg	Microgram per Kilogram
RCL	Residual contaminant level for noted pathway per WDNR, 2018, RCL spreadsheet for use with macro-enabled Excel program, December 2018 Update, available at https://dnr.wi.gov/topic/Brownfields/documents/tech/RCLs.xlsm .
	Concentration exceeds the RCL for direct contact at non-industrial properties
	Concentration exceeds the RCL for direct contact at industrial properties
	Concentration exceeds the RCL for the soil to groundwater exposure pathway
	Cells shaded grey represent soil excavated and transported offsite for disposal at a licensed solid waste landfill in Fall 2023.
	15.2 Measured concentration did not exceed the indicated standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
J	Results is less than the RL but greater than or qual to the MDI and the concentration is an approximate value
n/v	RCL is not established
-	Parameter not analyzed.
<DL	Concentration less than the laboratory detection limit
RCRA	Resource Conservation and Recovery Act

Sample Nomenclature for Samples Collected from the Sidewalls of the Excavations

Exc-1-	Sidewall Sample from the Northern Excavation
Exc-2-	Sidewall Sample from the Southern Excavation
N-	Northern Sidewall
E-	Eastern Sidewall
S-	Southern Sidewall
NW-	Northwestern Sidewall
NE-	Northeastern Sidewall
Fill	Sample collected from the black granular fill horizon
Nat	Sample collected from beneath the black granular fill horizon

Attachment A
Photographic Documentation

Client:	City of Manitowoc	Project:	193709832
Site Name:	Phase 2 Redevelopment Area at the River Point District	Site Location:	Manitowoc, Wisconsin
Photograph ID: 1			
Photo Location: Phase 2 Redevelopment Area; River Point District			
Direction: West			
Survey Date: 11/16/2023			
Comments: Backfilling Excavation 1 with clean imported fill.			
Photograph ID: 2			
Photo Location: Phase 2 Redevelopment Area; River Point District			
Direction: North			
Survey Date: 11/16/2023			
Comments: Excavation 1 post-excavation, prior to backfill.			

Client:	City of Manitowoc	Project:	193709832
Site Name:	Phase 2 Redevelopment Area at the River Point District	Site Location:	Manitowoc, Wisconsin

Photograph ID: 3	
Photo Location: Phase 2 Redevelopment Area; River Point District	
Direction: Northeast	
Survey Date: 11/16/2023	
Comments: Excavation 1 post-excavation, prior to backfill.	


Photograph ID: 4	
Photo Location: Phase 2 Redevelopment Area; River Point District	
Direction: North	
Survey Date: 11/28/2023	
Comments: Excavation 2 post-excavation, prior to backfill.	

Client:	City of Manitowoc	Project:	193709832
Site Name:	Phase 2 Redevelopment Area at the River Point District	Site Location:	Manitowoc, Wisconsin

Photograph ID: 5	
Photo Location: Phase 2 Redevelopment Area; River Point District	
Direction: West	
Survey Date: 11/28/2023	
Comments: Excavation 2 post-backfill with clean imported fill.	

Photograph ID: 6	
Photo Location: Phase 2 Redevelopment Area; River Point District	
Direction: Northwest	
Survey Date: 11/28/2023	
Comments: Excavation 2 post-backfill with clean imported fill.	

Client:	City of Manitowoc	Project:	193709832
Site Name:	Phase 2 Redevelopment Area at the River Point District	Site Location:	Manitowoc, Wisconsin

<p>Photograph ID: 7</p>	
<p>Photo Location: Phase 2 Redevelopment Area; River Point District</p>	
<p>Direction: East</p>	
<p>Survey Date: 11/28/2023</p>	
<p>Comments: Excavation 1 post-backfill with clean imported fill.</p>	

Attachment B
Waste Disposal Documentation



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237220

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier TISLER
 Ticket Date 10/30/2023 Vehicle# 50 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	56900 lb
In	10/30/2023 09:05:07	Scale2	KN		Tare	27040 lb
Out	10/30/2023 09:24:53	Scale2	KN		Net	29860 lb
					Tons	14.93

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.93	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237221

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 61 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	57620 lb
In	10/30/2023 09:06:11	Scale2	KN		Tare	29560 lb
Out	10/30/2023 09:25:28	Scale2	KN		Net	28060 lb
					Tons	14.03

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.03	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237223

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier MJT TRUCKING
 Ticket Date 10/30/2023 Vehicle# 9 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	59500 lb
In	10/30/2023 09:11:48	Scale2	KN		Tare	29520 lb
Out	10/30/2023 09:28:50	Scale2	KN		Net	29980 lb
					Tons	14.99

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.99	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237228

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier KARLS KARLS
 Ticket Date 10/30/2023 Vehicle# C-04 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	61460 lb
In	10/30/2023 09:16:41	Scale2	KN		Tare	28820 lb
Out	10/30/2023 09:27:42	Scale2	KN		Net	32640 lb
					Tons	16.32

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	16.32	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237226

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier KARLS KARLS
 Ticket Date 10/30/2023 Vehicle# C-06 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	56660 lb
In	10/30/2023 09:14:22	Scale2	KN		Tare	27220 lb
Out	10/30/2023 09:29:20	Scale2	KN		Net	29440 lb
					Tons	14.72

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.72	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237224

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 95 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	65980 lb
In	10/30/2023 09:12:23	Scale2	KN		Tare	30700 lb
Out	10/30/2023 09:35:00	Scale2	KN		Net	35280 lb
					Tons	17.64

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	17.64	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237245

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 61 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	58760 lb
In	10/30/2023 10:20:46	Scale2	KN		Tare	29520 lb
Out	10/30/2023 10:28:26	Scale2	KN		Net	29240 lb
					Tons	14.62

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.62	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237246

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier TISLER
 Ticket Date 10/30/2023 Vehicle# 50 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	62600 lb
In	10/30/2023 10:21:35	Scale2	KN		Tare	27060 lb
Out	10/30/2023 10:29:05	Scale2	KN		Net	35540 lb
					Tons	17.77

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	17.77	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237247

Customer Name	MANITOWOCCITYOF MANITOWOC CIT	Carrier	KARLS KARLS	Volume
Ticket Date	10/30/2023	Vehicle#	C-04	
Payment Type	Credit Account	Container		
Manual Ticket#		Driver		
Hauling Ticket#		Check#		
Route		Billing #	0001083	
State Waste Code	A-24-33	Gen EPA ID		
Manifest	*			
Destination	SOUTH			
PO				
Profile	139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)			
Generator	136-MANITOWOCCITY900 MANITOWOC CITY OF			

	Time	Scale	Operator	Inbound	Gross	57380 lb
In	10/30/2023 10:27:15	Scale2	KN		Tare	28860 lb
Out	10/30/2023 10:36:51	Scale2	KN		Net	28520 lb
					Tons	14.26

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.26	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237253

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier MJT TRUCKING
 Ticket Date 10/30/2023 Vehicle# 9 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	66680 lb
In	10/30/2023 10:49:28	Scale2	KN		Tare	29520 lb
Out	10/30/2023 11:01:08	Scale2	KN		Net	37160 lb
					Tons	18.58

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	18.58	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237255

Customer Name	MANITOWOCCITYOF MANITOWOC CIT	Carrier	KARLS KARLS	Volume
Ticket Date	10/30/2023	Vehicle#	C-06	
Payment Type	Credit Account	Container		
Manual Ticket#		Driver		
Hauling Ticket#		Check#		
Route		Billing #	0001083	
State Waste Code	A-24-33	Gen EPA ID		
Manifest	*			
Destination	SOUTH			
PO				
Profile	139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)			
Generator	136-MANITOWOCCITY900 MANITOWOC CITY OF			

	Time	Scale	Operator	Inbound	Gross	62280 lb
In	10/30/2023 10:54:43	Scale2	KN		Tare	27180 lb
Out	10/30/2023 11:06:40	Scale2	KN		Net	35100 lb
					Tons	17.55

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	17.55	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237256

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 95 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	62860 lb
In	10/30/2023 10:55:21	Scale2	KN		Tare	30640 lb
Out	10/30/2023 11:07:49	Scale2	KN		Net	32220 lb
					Tons	16.11

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	16.11	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237262

Customer Name	MANITOWOCCITYOF MANITOWOC CIT	Carrier	TISLER	Volume
Ticket Date	10/30/2023	Vehicle#	50	
Payment Type	Credit Account	Container		
Manual Ticket#		Driver		
Hauling Ticket#		Check#		
Route		Billing #	0001083	
State Waste Code	A-24-33	Gen EPA ID		
Manifest	*			
Destination	SOUTH			
PO				
Profile	139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)			
Generator	136-MANITOWOCCITY900 MANITOWOC CITY OF			

	Time	Scale	Operator	Inbound	Gross	
In	10/30/2023 11:21:49	Scale2	KN		Tare	61980 lb
Out	10/30/2023 11:28:57	Scale2	KN		Net	26980 lb
					Tons	35000 lb
						17.50

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	17.50	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237264

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 61 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	64220 lb
In	10/30/2023 11:23:28	Scale2	KN		Tare	29600 lb
Out	10/30/2023 11:35:27	Scale2	KN		Net	34620 lb
					Tons	17.31

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	17.31	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237266

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier KARLS KARLS
 Ticket Date 10/30/2023 Vehicle# C-04 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	59720 lb
In	10/30/2023 11:29:43	Scale2	KN		Tare	28820 lb
Out	10/30/2023 11:40:36	Scale2	KN		Net	30900 lb
					Tons	15.45

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	15.45	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237275

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier MJT TRUCKING
 Ticket Date 10/30/2023 Vehicle# 9 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	60400 lb
In	10/30/2023 12:03:00	Scale2	KN		Tare	29460 lb
Out	10/30/2023 12:13:02	Scale2	KN		Net	30940 lb
					Tons	15.47

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	15.47	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237277

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier KARLS KARLS
 Ticket Date 10/30/2023 Vehicle# C-06 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	63760 lb
In	10/30/2023 12:07:28	Scale2	KN		Tare	27120 lb
Out	10/30/2023 12:19:15	Scale2	KN		Net	36640 lb
					Tons	18.32

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	18.32	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237283

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 95 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	
In	10/30/2023 12:16:51	Scale2	KN		Tare	61040 lb
Out	10/30/2023 12:28:55	Scale2	KN		Net	30620 lb
					Tons	30420 lb
						15.21

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	15.21	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237289

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier BEST
 Ticket Date 10/30/2023 Vehicle# 61 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	58960 lb
In	10/30/2023 12:28:01	Scale2	KN		Tare	29580 lb
Out	10/30/2023 12:35:53	Scale2	KN		Net	29380 lb
					Tons	14.69

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	14.69	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237286

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier TISLER
 Ticket Date 10/30/2023 Vehicle# 50 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	54380 lb
In	10/30/2023 12:21:48	Scale2	KN		Tare	27020 lb
Out	10/30/2023 12:40:40	Scale2	KN		Net	27360 lb
					Tons	13.68

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	13.68	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237291

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier KARLS KARLS
 Ticket Date 10/30/2023 Vehicle# C-04 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	59900 lb
In	10/30/2023 12:37:28	Scale2	KN		Tare	28840 lb
Out	10/30/2023 12:45:48	Scale2	KN		Net	31060 lb
					Tons	15.53

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	15.53	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237301

Customer Name	MANITOWOCCITYOF MANITOWOC CIT	Carrier	MJT TRUCKING	Volume
Ticket Date	10/30/2023	Vehicle#	9	
Payment Type	Credit Account	Container		
Manual Ticket#		Driver		
Hauling Ticket#		Check#		
Route		Billing #	0001083	
State Waste Code	A-24-33	Gen EPA ID		
Manifest	*			
Destination	SOUTH			
PO				
Profile	139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)			
Generator	136-MANITOWOCCITY900 MANITOWOC CITY OF			

	Time	Scale	Operator	Inbound	Gross	64520 lb
In	10/30/2023 13:20:08	Scale2	KN		Tare	29400 lb
Out	10/30/2023 13:30:30	Scale2	KN		Net	35120 lb
					Tons	17.56

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	17.56	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE



Ridgeview RDF
 6207 Hempton Lake Road
 Whitelaw, WI, 54247
 Ph:

Reprint
 Ticket# 1237308

Customer Name MANITOWOCCITYOF MANITOWOC CIT Carrier KARLS KARLS
 Ticket Date 10/30/2023 Vehicle# C-06 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0001083
 State Waste Code A-24-33 Gen EPA ID
 Manifest *
 Destination SOUTH
 PO
 Profile 139380WI (HISTORIC FILL POSSIBLE OXIDE BOX WASTE)
 Generator 136-MANITOWOCCITY900 MANITOWOC CITY OF

	Time	Scale	Operator	Inbound	Gross	65060 lb
In	10/30/2023 13:27:20	Scale2	KN		Tare	27080 lb
Out	10/30/2023 13:36:10	Scale2	KN		Net	37980 lb
					Tons	18.99

Comments

Hours of Operation: M-F 7:00-4:00 Saturday 7:00-12:00

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Dredged Sedi Soil-	100	18.99	Tons				
2 ENERGY-Energy Surc	100		%				
3 WWM-P-Waste Water	100		%				

Total Tax
 Total Ticket

DRIVER'S SIGNATURE

Attachment C
Laboratory Report



ANALYTICAL REPORT

PREPARED FOR

Attn: Stu Gross
Stantec Consulting Corporation
12080 Corporate Parkway
Mequon, Wisconsin 53092

Generated 11/13/2023 8:14:47 AM

JOB DESCRIPTION

CN Excavations - Sidewall Samples 193709832

JOB NUMBER

500-241873-1

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
11/13/2023 8:14:47 AM

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



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Case Narrative

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Job ID: 500-241873-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-241873-1

Receipt

The samples were received on 11/1/2023 9:40 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 4.8° C.

Receipt Exceptions

Chain of custody (COC) ID for sample 4 has Exc-1-E-Fill. Container label has Exc-1-N-Fill. Logged in per COC.

GC/MS Semi VOA

Method 8270E LL: The following sample was diluted due to the nature of the sample matrix (sample extract was too viscous to be analyzed at any less of a dilution): Exc-2-S-Fill (500-241873-8). Elevated reporting limits (RLs) are provided.

Method 8270E LL: The following sample was diluted due to the nature of the sample matrix (sample extract was extremely viscous): Exc-2-NE-Fill (500-241873-10). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270E LL: The following samples were diluted to bring the concentration of target analytes within the calibration range: Exc-1-S-Fill (500-241873-1) and Exc-1-E-Fill (500-241873-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or 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: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-S-Fill

Lab Sample ID: 500-241873-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	930		48	11	ug/Kg	5	✳	EPA 8270E LL	Total/NA
2-Methylnaphthalene	940		48	11	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Acenaphthene	83		48	14	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Acenaphthylene	89		48	10	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Anthracene	160		48	12	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Benzo[a]anthracene	550		48	21	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Benzo[a]pyrene	570		48	21	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	610		48	12	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	590		48	10	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	170		48	14	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Chrysene	650		48	26	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	99		48	30	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Fluoranthene	900		48	13	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Fluorene	190		48	9.3	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	460		48	24	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Naphthalene	590		48	9.3	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Phenanthrene	1200		48	13	ug/Kg	5	✳	EPA 8270E LL	Total/NA
Pyrene	930		48	11	ug/Kg	5	✳	EPA 8270E LL	Total/NA

Client Sample ID: Exc-1-S-Nat

Lab Sample ID: 500-241873-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	2.1	J	8.5	2.0	ug/Kg	1	✳	EPA 8270E LL	Total/NA

Client Sample ID: Exc-1-E-Nat

Lab Sample ID: 500-241873-3

No Detections.

Client Sample ID: Exc-1-E-Fill

Lab Sample ID: 500-241873-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	3800		180	40	ug/Kg	15	✳	EPA 8270E LL	Total/NA
2-Methylnaphthalene	1900		180	42	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Acenaphthene	410		180	50	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Acenaphthylene	1400		180	38	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Anthracene	1600		180	45	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Benzo[a]anthracene	7100		180	79	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Benzo[a]pyrene	9800		180	76	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	9500		180	43	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	12000		180	38	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	3800		180	53	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Chrysene	9200		180	97	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	2200		180	110	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Fluoranthene	15000		180	46	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Fluorene	1400		180	34	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	8800		180	87	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Naphthalene	2000		180	34	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Phenanthrene	11000		180	47	ug/Kg	15	✳	EPA 8270E LL	Total/NA
Pyrene	16000		180	42	ug/Kg	15	✳	EPA 8270E LL	Total/NA

Client Sample ID: Exc-1-N-Nat

Lab Sample ID: 500-241873-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NW-Fill

Lab Sample ID: 500-241873-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	38		8.3	1.9	ug/Kg	1	☼	EPA 8270E LL	Total/NA
2-Methylnaphthalene	46		8.3	2.0	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Acenaphthene	5.9	J	8.3	2.4	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Acenaphthylene	11		8.3	1.8	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Anthracene	40		8.3	2.2	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Benzo[a]anthracene	320		8.3	3.7	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Benzo[a]pyrene	390		8.3	3.6	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	510		8.3	2.0	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	510		8.3	1.8	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	140		8.3	2.5	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Chrysene	350		8.3	4.6	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	100		8.3	5.3	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Fluoranthene	480		8.3	2.2	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Fluorene	6.4	J	8.3	1.6	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	390		8.3	4.1	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Naphthalene	40		8.3	1.6	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Phenanthrene	170		8.3	2.2	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Pyrene	480		8.3	2.0	ug/Kg	1	☼	EPA 8270E LL	Total/NA

Client Sample ID: Exc-2-NW-Nat

Lab Sample ID: 500-241873-7

No Detections.

Client Sample ID: Exc-2-S-Fill

Lab Sample ID: 500-241873-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	230		160	36	ug/Kg	20	☼	EPA 8270E LL	Total/NA
2-Methylnaphthalene	260		160	38	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Acenaphthene	110	J	160	46	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Acenaphthylene	830		160	35	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Anthracene	710		160	41	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Benzo[a]anthracene	1800		160	71	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Benzo[a]pyrene	2100		160	69	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	1800		160	39	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	1600		160	34	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	780		160	47	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Chrysene	1800		160	88	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	280		160	100	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Fluoranthene	3000		160	42	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Fluorene	360		160	31	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	1300		160	79	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Naphthalene	810		160	31	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Phenanthrene	2100		160	42	ug/Kg	20	☼	EPA 8270E LL	Total/NA
Pyrene	3200		160	38	ug/Kg	20	☼	EPA 8270E LL	Total/NA

Client Sample ID: Exc-2-S-Nat

Lab Sample ID: 500-241873-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	3.1	J	8.4	1.9	ug/Kg	1	☼	EPA 8270E LL	Total/NA
2-Methylnaphthalene	3.1	J	8.4	2.0	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Acenaphthylene	9.6		8.4	1.8	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Anthracene	10		8.4	2.2	ug/Kg	1	☼	EPA 8270E LL	Total/NA
Benzo[a]anthracene	33		8.4	3.8	ug/Kg	1	☼	EPA 8270E LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-S-Nat (Continued)

Lab Sample ID: 500-241873-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	46		8.4	3.6	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	60		8.4	2.1	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	60		8.4	1.8	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	15		8.4	2.5	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Chrysene	38		8.4	4.7	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	13		8.4	5.4	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Fluoranthene	53		8.4	2.2	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Fluorene	4.0	J	8.4	1.6	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	46		8.4	4.2	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Naphthalene	7.7	J	8.4	1.6	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Phenanthrene	29		8.4	2.2	ug/Kg	1	✳	EPA 8270E LL	Total/NA
Pyrene	55		8.4	2.0	ug/Kg	1	✳	EPA 8270E LL	Total/NA

Client Sample ID: Exc-2-NE-Fill

Lab Sample ID: 500-241873-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	510		320	73	ug/Kg	30	✳	EPA 8270E LL	Total/NA
2-Methylnaphthalene	870		320	77	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Acenaphthene	200	J	320	93	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Acenaphthylene	1800		320	70	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Anthracene	1300		320	83	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Benzo[a]anthracene	1700		320	150	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Benzo[a]pyrene	2500		320	140	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	4500		320	79	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	7700		320	69	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	1600		320	96	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Chrysene	2100		320	180	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	1300		320	210	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Fluoranthene	2600		320	85	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Fluorene	640		320	63	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	6000		320	160	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Naphthalene	2100		320	63	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Phenanthrene	2900		320	86	ug/Kg	30	✳	EPA 8270E LL	Total/NA
Pyrene	2600		320	76	ug/Kg	30	✳	EPA 8270E LL	Total/NA

Client Sample ID: Exc-2-NE-Nat

Lab Sample ID: 500-241873-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Method	Method Description	Protocol	Laboratory
EPA 8270E LL	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
Moisture	Percent Moisture	EPA	EET CHI
3541	Automated Soxhlet Extraction (Low Level)	SW846	EET PIT

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

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



Sample Summary

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241873-1	Exc-1-S-Fill	Solid	10/30/23 10:10	11/01/23 09:40
500-241873-2	Exc-1-S-Nat	Solid	10/30/23 10:12	11/01/23 09:40
500-241873-3	Exc-1-E-Nat	Solid	10/30/23 10:05	11/01/23 09:40
500-241873-4	Exc-1-E-Fill	Solid	10/30/23 10:08	11/01/23 09:40
500-241873-5	Exc-1-N-Nat	Solid	10/30/23 10:15	11/01/23 09:40
500-241873-6	Exc-2-NW-Fill	Solid	10/30/23 13:35	11/01/23 09:40
500-241873-7	Exc-2-NW-Nat	Solid	10/30/23 13:37	11/01/23 09:40
500-241873-8	Exc-2-S-Fill	Solid	10/30/23 13:30	11/01/23 09:40
500-241873-9	Exc-2-S-Nat	Solid	10/30/23 13:32	11/01/23 09:40
500-241873-10	Exc-2-NE-Fill	Solid	10/30/23 13:25	11/01/23 09:40
500-241873-11	Exc-2-NE-Nat	Solid	10/30/23 13:27	11/01/23 09:40

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

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-S-Fill

Lab Sample ID: 500-241873-1

Date Collected: 10/30/23 10:10

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 69.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	930		48	11	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
2-Methylnaphthalene	940		48	11	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Acenaphthene	83		48	14	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Acenaphthylene	89		48	10	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Anthracene	160		48	12	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Benzo[a]anthracene	550		48	21	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Benzo[a]pyrene	570		48	21	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Benzo[b]fluoranthene	610		48	12	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Benzo[g,h,i]perylene	590		48	10	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Benzo[k]fluoranthene	170		48	14	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Chrysene	650		48	26	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Dibenz(a,h)anthracene	99		48	30	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Fluoranthene	900		48	13	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Fluorene	190		48	9.3	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Indeno[1,2,3-cd]pyrene	460		48	24	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Naphthalene	590		48	9.3	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Phenanthrene	1200		48	13	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Pyrene	930		48	11	ug/Kg	☼	11/09/23 08:30	11/10/23 19:26	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	92		34 - 109				11/09/23 08:30	11/10/23 19:26	5
2-Fluorobiphenyl	78		35 - 105				11/09/23 08:30	11/10/23 19:26	5
Terphenyl-d14 (Surr)	76		20 - 117				11/09/23 08:30	11/10/23 19:26	5

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-S-Nat

Lab Sample ID: 500-241873-2

Date Collected: 10/30/23 10:12

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 76.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<1.9		8.5	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
2-Methylnaphthalene	<2.0		8.5	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Acenaphthene	<2.4		8.5	2.4	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Acenaphthylene	<1.9		8.5	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Anthracene	<2.2		8.5	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Benzo[a]anthracene	<3.8		8.5	3.8	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Benzo[a]pyrene	<3.7		8.5	3.7	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Benzo[b]fluoranthene	<2.1		8.5	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Benzo[g,h,i]perylene	<1.8		8.5	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Benzo[k]fluoranthene	<2.5		8.5	2.5	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Chrysene	<4.7		8.5	4.7	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Dibenz(a,h)anthracene	<5.4		8.5	5.4	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Fluoranthene	<2.2		8.5	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Fluorene	<1.7		8.5	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Indeno[1,2,3-cd]pyrene	<4.2		8.5	4.2	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Naphthalene	<1.6		8.5	1.6	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Phenanthrene	<2.3		8.5	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1
Pyrene	2.1	J	8.5	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	60		34 - 109	11/09/23 08:30	11/09/23 18:21	1
2-Fluorobiphenyl	60		35 - 105	11/09/23 08:30	11/09/23 18:21	1
Terphenyl-d14 (Surr)	65		20 - 117	11/09/23 08:30	11/09/23 18:21	1

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-E-Nat

Lab Sample ID: 500-241873-3

Date Collected: 10/30/23 10:05

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<2.0		8.7	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
2-Methylnaphthalene	<2.1		8.7	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Acenaphthene	<2.5		8.7	2.5	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Acenaphthylene	<1.9		8.7	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Anthracene	<2.2		8.7	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Benzo[a]anthracene	<3.9		8.7	3.9	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Benzo[a]pyrene	<3.7		8.7	3.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Benzo[b]fluoranthene	<2.1		8.7	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Benzo[g,h,i]perylene	<1.9		8.7	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Benzo[k]fluoranthene	<2.6		8.7	2.6	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Chrysene	<4.8		8.7	4.8	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Dibenz(a,h)anthracene	<5.5		8.7	5.5	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Fluoranthene	<2.3		8.7	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Fluorene	<1.7		8.7	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Indeno[1,2,3-cd]pyrene	<4.3		8.7	4.3	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Naphthalene	<1.7		8.7	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Phenanthrene	<2.3		8.7	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1
Pyrene	<2.0		8.7	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 17:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	60		34 - 109	11/09/23 08:30	11/09/23 17:59	1
2-Fluorobiphenyl	63		35 - 105	11/09/23 08:30	11/09/23 17:59	1
Terphenyl-d14 (Surr)	66		20 - 117	11/09/23 08:30	11/09/23 17:59	1

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-E-Fill

Lab Sample ID: 500-241873-4

Date Collected: 10/30/23 10:08

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 56.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	3800		180	40	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
2-Methylnaphthalene	1900		180	42	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Acenaphthene	410		180	50	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Acenaphthylene	1400		180	38	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Anthracene	1600		180	45	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Benzo[a]anthracene	7100		180	79	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Benzo[a]pyrene	9800		180	76	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Benzo[b]fluoranthene	9500		180	43	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Benzo[g,h,i]perylene	12000		180	38	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Benzo[k]fluoranthene	3800		180	53	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Chrysene	9200		180	97	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Dibenz(a,h)anthracene	2200		180	110	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Fluoranthene	15000		180	46	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Fluorene	1400		180	34	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Indeno[1,2,3-cd]pyrene	8800		180	87	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Naphthalene	2000		180	34	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Phenanthrene	11000		180	47	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15
Pyrene	16000		180	42	ug/Kg	☼	11/09/23 08:30	11/10/23 19:48	15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	90		34 - 109	11/09/23 08:30	11/10/23 19:48	15
2-Fluorobiphenyl	83		35 - 105	11/09/23 08:30	11/10/23 19:48	15
Terphenyl-d14 (Surr)	83		20 - 117	11/09/23 08:30	11/10/23 19:48	15

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-N-Nat

Lab Sample ID: 500-241873-5

Date Collected: 10/30/23 10:15

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<2.0		8.9	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
2-Methylnaphthalene	<2.1		8.9	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Acenaphthene	<2.5		8.9	2.5	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Acenaphthylene	<1.9		8.9	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Anthracene	<2.3		8.9	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Benzo[a]anthracene	<4.0		8.9	4.0	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Benzo[a]pyrene	<3.8		8.9	3.8	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Benzo[b]fluoranthene	<2.2		8.9	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Benzo[g,h,i]perylene	<1.9		8.9	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Benzo[k]fluoranthene	<2.7		8.9	2.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Chrysene	<4.9		8.9	4.9	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Dibenz(a,h)anthracene	<5.7		8.9	5.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Fluoranthene	<2.3		8.9	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Fluorene	<1.7		8.9	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Indeno[1,2,3-cd]pyrene	<4.4		8.9	4.4	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Naphthalene	<1.7		8.9	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Phenanthrene	<2.4		8.9	2.4	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1
Pyrene	<2.1		8.9	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	64		34 - 109	11/09/23 08:30	11/09/23 17:15	1
2-Fluorobiphenyl	62		35 - 105	11/09/23 08:30	11/09/23 17:15	1
Terphenyl-d14 (Surr)	65		20 - 117	11/09/23 08:30	11/09/23 17:15	1

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NW-Fill

Lab Sample ID: 500-241873-6

Date Collected: 10/30/23 13:35

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	38		8.3	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
2-Methylnaphthalene	46		8.3	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Acenaphthene	5.9	J	8.3	2.4	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Acenaphthylene	11		8.3	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Anthracene	40		8.3	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Benzo[a]anthracene	320		8.3	3.7	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Benzo[a]pyrene	390		8.3	3.6	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Benzo[b]fluoranthene	510		8.3	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Benzo[g,h,i]perylene	510		8.3	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Benzo[k]fluoranthene	140		8.3	2.5	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Chrysene	350		8.3	4.6	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Dibenz(a,h)anthracene	100		8.3	5.3	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Fluoranthene	480		8.3	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Fluorene	6.4	J	8.3	1.6	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Indeno[1,2,3-cd]pyrene	390		8.3	4.1	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Naphthalene	40		8.3	1.6	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Phenanthrene	170		8.3	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1
Pyrene	480		8.3	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	61		34 - 109	11/09/23 08:30	11/09/23 16:53	1
2-Fluorobiphenyl	57		35 - 105	11/09/23 08:30	11/09/23 16:53	1
Terphenyl-d14 (Surr)	55		20 - 117	11/09/23 08:30	11/09/23 16:53	1

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NW-Nat

Lab Sample ID: 500-241873-7

Date Collected: 10/30/23 13:37

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<1.8		7.9	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
2-Methylnaphthalene	<1.9		7.9	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Acenaphthene	<2.3		7.9	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Acenaphthylene	<1.7		7.9	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Anthracene	<2.0		7.9	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Benzo[a]anthracene	<3.6		7.9	3.6	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Benzo[a]pyrene	<3.4		7.9	3.4	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Benzo[b]fluoranthene	<1.9		7.9	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Benzo[g,h,i]perylene	<1.7		7.9	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Benzo[k]fluoranthene	<2.4		7.9	2.4	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Chrysene	<4.4		7.9	4.4	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Dibenz(a,h)anthracene	<5.0		7.9	5.0	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Fluoranthene	<2.1		7.9	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Fluorene	<1.5		7.9	1.5	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Indeno[1,2,3-cd]pyrene	<3.9		7.9	3.9	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Naphthalene	<1.5		7.9	1.5	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Phenanthrene	<2.1		7.9	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1
Pyrene	<1.9		7.9	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 16:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	57		34 - 109	11/09/23 08:30	11/09/23 16:31	1
2-Fluorobiphenyl	54		35 - 105	11/09/23 08:30	11/09/23 16:31	1
Terphenyl-d14 (Surr)	60		20 - 117	11/09/23 08:30	11/09/23 16:31	1

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-S-Fill

Lab Sample ID: 500-241873-8

Date Collected: 10/30/23 13:30

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	230		160	36	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
2-Methylnaphthalene	260		160	38	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Acenaphthene	110	J	160	46	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Acenaphthylene	830		160	35	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Anthracene	710		160	41	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Benzo[a]anthracene	1800		160	71	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Benzo[a]pyrene	2100		160	69	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Benzo[b]fluoranthene	1800		160	39	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Benzo[g,h,i]perylene	1600		160	34	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Benzo[k]fluoranthene	780		160	47	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Chrysene	1800		160	88	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Dibenz(a,h)anthracene	280		160	100	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Fluoranthene	3000		160	42	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Fluorene	360		160	31	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Indeno[1,2,3-cd]pyrene	1300		160	79	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Naphthalene	810		160	31	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Phenanthrene	2100		160	42	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20
Pyrene	3200		160	38	ug/Kg	☼	11/09/23 08:30	11/09/23 16:08	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	62		34 - 109	11/09/23 08:30	11/09/23 16:08	20
2-Fluorobiphenyl	64		35 - 105	11/09/23 08:30	11/09/23 16:08	20
Terphenyl-d14 (Surr)	67		20 - 117	11/09/23 08:30	11/09/23 16:08	20

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-S-Nat

Lab Sample ID: 500-241873-9

Date Collected: 10/30/23 13:32

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 79.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	3.1	J	8.4	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
2-Methylnaphthalene	3.1	J	8.4	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Acenaphthene	<2.4		8.4	2.4	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Acenaphthylene	9.6		8.4	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Anthracene	10		8.4	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Benzo[a]anthracene	33		8.4	3.8	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Benzo[a]pyrene	46		8.4	3.6	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Benzo[b]fluoranthene	60		8.4	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Benzo[g,h,i]perylene	60		8.4	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Benzo[k]fluoranthene	15		8.4	2.5	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Chrysene	38		8.4	4.7	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Dibenz(a,h)anthracene	13		8.4	5.4	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Fluoranthene	53		8.4	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Fluorene	4.0	J	8.4	1.6	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Indeno[1,2,3-cd]pyrene	46		8.4	4.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Naphthalene	7.7	J	8.4	1.6	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Phenanthrene	29		8.4	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1
Pyrene	55		8.4	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	57		34 - 109	11/09/23 08:30	11/09/23 15:46	1
2-Fluorobiphenyl	59		35 - 105	11/09/23 08:30	11/09/23 15:46	1
Terphenyl-d14 (Surr)	65		20 - 117	11/09/23 08:30	11/09/23 15:46	1

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NE-Fill

Lab Sample ID: 500-241873-10

Date Collected: 10/30/23 13:25

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 62.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	510		320	73	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
2-Methylnaphthalene	870		320	77	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Acenaphthene	200	J	320	93	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Acenaphthylene	1800		320	70	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Anthracene	1300		320	83	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Benzo[a]anthracene	1700		320	150	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Benzo[a]pyrene	2500		320	140	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Benzo[b]fluoranthene	4500		320	79	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Benzo[g,h,i]perylene	7700		320	69	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Benzo[k]fluoranthene	1600		320	96	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Chrysene	2100		320	180	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Dibenz(a,h)anthracene	1300		320	210	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Fluoranthene	2600		320	85	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Fluorene	640		320	63	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Indeno[1,2,3-cd]pyrene	6000		320	160	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Naphthalene	2100		320	63	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Phenanthrene	2900		320	86	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30
Pyrene	2600		320	76	ug/Kg	☼	11/09/23 08:30	11/09/23 15:24	30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	0	S1-	34 - 109	11/09/23 08:30	11/09/23 15:24	30
2-Fluorobiphenyl	0	S1-	35 - 105	11/09/23 08:30	11/09/23 15:24	30
Terphenyl-d14 (Surr)	0	S1-	20 - 117	11/09/23 08:30	11/09/23 15:24	30

Client Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NE-Nat

Lab Sample ID: 500-241873-11

Date Collected: 10/30/23 13:27

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 76.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<1.9		8.6	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
2-Methylnaphthalene	<2.0		8.6	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Acenaphthene	<2.5		8.6	2.5	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Acenaphthylene	<1.9		8.6	1.9	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Anthracene	<2.2		8.6	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Benzo[a]anthracene	<3.8		8.6	3.8	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Benzo[a]pyrene	<3.7		8.6	3.7	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Benzo[b]fluoranthene	<2.1		8.6	2.1	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Benzo[g,h,i]perylene	<1.8		8.6	1.8	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Benzo[k]fluoranthene	<2.6		8.6	2.6	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Chrysene	<4.7		8.6	4.7	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Dibenz(a,h)anthracene	<5.4		8.6	5.4	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Fluoranthene	<2.2		8.6	2.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Fluorene	<1.7		8.6	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Indeno[1,2,3-cd]pyrene	<4.2		8.6	4.2	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Naphthalene	<1.7		8.6	1.7	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Phenanthrene	<2.3		8.6	2.3	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1
Pyrene	<2.0		8.6	2.0	ug/Kg	☼	11/09/23 08:30	11/09/23 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	58		34 - 109	11/09/23 08:30	11/09/23 15:02	1
2-Fluorobiphenyl	59		35 - 105	11/09/23 08:30	11/09/23 15:02	1
Terphenyl-d14 (Surr)	59		20 - 117	11/09/23 08:30	11/09/23 15:02	1

Definitions/Glossary

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Qualifiers

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.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

GC/MS Semi VOA

Analysis Batch: 451397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241873-2	Exc-1-S-Nat	Total/NA	Solid	EPA 8270E LL	451435
500-241873-3	Exc-1-E-Nat	Total/NA	Solid	EPA 8270E LL	451435
500-241873-5	Exc-1-N-Nat	Total/NA	Solid	EPA 8270E LL	451435
500-241873-6	Exc-2-NW-Fill	Total/NA	Solid	EPA 8270E LL	451435
500-241873-7	Exc-2-NW-Nat	Total/NA	Solid	EPA 8270E LL	451435
500-241873-8	Exc-2-S-Fill	Total/NA	Solid	EPA 8270E LL	451435
500-241873-9	Exc-2-S-Nat	Total/NA	Solid	EPA 8270E LL	451435
500-241873-10	Exc-2-NE-Fill	Total/NA	Solid	EPA 8270E LL	451435
500-241873-11	Exc-2-NE-Nat	Total/NA	Solid	EPA 8270E LL	451435

Prep Batch: 451435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241873-1	Exc-1-S-Fill	Total/NA	Solid	3541	
500-241873-2	Exc-1-S-Nat	Total/NA	Solid	3541	
500-241873-3	Exc-1-E-Nat	Total/NA	Solid	3541	
500-241873-4	Exc-1-E-Fill	Total/NA	Solid	3541	
500-241873-5	Exc-1-N-Nat	Total/NA	Solid	3541	
500-241873-6	Exc-2-NW-Fill	Total/NA	Solid	3541	
500-241873-7	Exc-2-NW-Nat	Total/NA	Solid	3541	
500-241873-8	Exc-2-S-Fill	Total/NA	Solid	3541	
500-241873-9	Exc-2-S-Nat	Total/NA	Solid	3541	
500-241873-10	Exc-2-NE-Fill	Total/NA	Solid	3541	
500-241873-11	Exc-2-NE-Nat	Total/NA	Solid	3541	
MB 180-451435/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-451435/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-451435/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Analysis Batch: 451492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-451435/1-A	Method Blank	Total/NA	Solid	EPA 8270E LL	451435
LCS 180-451435/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E LL	451435
LCSD 180-451435/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E LL	451435

Analysis Batch: 451557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241873-1	Exc-1-S-Fill	Total/NA	Solid	EPA 8270E LL	451435
500-241873-4	Exc-1-E-Fill	Total/NA	Solid	EPA 8270E LL	451435

General Chemistry

Analysis Batch: 740748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241873-1	Exc-1-S-Fill	Total/NA	Solid	Moisture	
500-241873-2	Exc-1-S-Nat	Total/NA	Solid	Moisture	
500-241873-3	Exc-1-E-Nat	Total/NA	Solid	Moisture	
500-241873-4	Exc-1-E-Fill	Total/NA	Solid	Moisture	
500-241873-5	Exc-1-N-Nat	Total/NA	Solid	Moisture	
500-241873-6	Exc-2-NW-Fill	Total/NA	Solid	Moisture	
500-241873-7	Exc-2-NW-Nat	Total/NA	Solid	Moisture	
500-241873-8	Exc-2-S-Fill	Total/NA	Solid	Moisture	
500-241873-9	Exc-2-S-Nat	Total/NA	Solid	Moisture	

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QC Association Summary

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

General Chemistry (Continued)

Analysis Batch: 740748 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241873-10	Exc-2-NE-Fill	Total/NA	Solid	Moisture	
500-241873-11	Exc-2-NE-Nat	Total/NA	Solid	Moisture	

1

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Surrogate Summary

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		NBZ (34-109)	FBP (35-105)	TPHL (20-117)
500-241873-1	Exc-1-S-Fill	92	78	76
500-241873-2	Exc-1-S-Nat	60	60	65
500-241873-3	Exc-1-E-Nat	60	63	66
500-241873-4	Exc-1-E-Fill	90	83	83
500-241873-5	Exc-1-N-Nat	64	62	65
500-241873-6	Exc-2-NW-Fill	61	57	55
500-241873-7	Exc-2-NW-Nat	57	54	60
500-241873-8	Exc-2-S-Fill	62	64	67
500-241873-9	Exc-2-S-Nat	57	59	65
500-241873-10	Exc-2-NE-Fill	0 S1-	0 S1-	0 S1-
500-241873-11	Exc-2-NE-Nat	58	59	59
LCS 180-451435/2-A	Lab Control Sample	80	71	66
LCSD 180-451435/3-A	Lab Control Sample Dup	85	78	67
MB 180-451435/1-A	Method Blank	76	65	65

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14 (Surr)

QC Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

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

Lab Sample ID: MB 180-451435/1-A
Matrix: Solid
Analysis Batch: 451492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 451435

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1-Methylnaphthalene	<1.5		6.7	1.5	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
2-Methylnaphthalene	<1.6		6.7	1.6	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Acenaphthene	<1.9		6.7	1.9	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Acenaphthylene	<1.5		6.7	1.5	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Anthracene	<1.7		6.7	1.7	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Benzo[a]anthracene	<3.0		6.7	3.0	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Benzo[a]pyrene	<2.9		6.7	2.9	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Benzo[b]fluoranthene	<1.6		6.7	1.6	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Benzo[g,h,i]perylene	<1.4		6.7	1.4	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Benzo[k]fluoranthene	<2.0		6.7	2.0	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Chrysene	<3.7		6.7	3.7	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Dibenz(a,h)anthracene	<4.3		6.7	4.3	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Fluoranthene	<1.8		6.7	1.8	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Fluorene	<1.3		6.7	1.3	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Indeno[1,2,3-cd]pyrene	<3.3		6.7	3.3	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Naphthalene	<1.3		6.7	1.3	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Phenanthrene	<1.8		6.7	1.8	ug/Kg		11/09/23 08:30	11/09/23 15:27	1
Pyrene	<1.6		6.7	1.6	ug/Kg		11/09/23 08:30	11/09/23 15:27	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5 (Surr)	76		34 - 109	11/09/23 08:30	11/09/23 15:27	1
2-Fluorobiphenyl	65		35 - 105	11/09/23 08:30	11/09/23 15:27	1
Terphenyl-d14 (Surr)	65		20 - 117	11/09/23 08:30	11/09/23 15:27	1

Lab Sample ID: LCS 180-451435/2-A
Matrix: Solid
Analysis Batch: 451492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 451435

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	667	468		ug/Kg		70	44 - 100
2-Methylnaphthalene	667	488		ug/Kg		73	44 - 100
Acenaphthene	667	471		ug/Kg		71	41 - 100
Acenaphthylene	667	511		ug/Kg		77	45 - 100
Anthracene	667	501		ug/Kg		75	47 - 100
Benzo[a]anthracene	667	489		ug/Kg		73	47 - 100
Benzo[a]pyrene	667	502		ug/Kg		75	45 - 101
Benzo[b]fluoranthene	667	452		ug/Kg		68	44 - 100
Benzo[g,h,i]perylene	667	453		ug/Kg		68	45 - 103
Benzo[k]fluoranthene	667	440		ug/Kg		66	43 - 100
Chrysene	667	469		ug/Kg		70	44 - 100
Dibenz(a,h)anthracene	667	506		ug/Kg		76	46 - 107
Fluoranthene	667	503		ug/Kg		76	49 - 102
Fluorene	667	488		ug/Kg		73	46 - 100
Indeno[1,2,3-cd]pyrene	667	481		ug/Kg		72	48 - 104
Naphthalene	667	478		ug/Kg		72	43 - 100
Phenanthrene	667	487		ug/Kg		73	46 - 100
Pyrene	667	489		ug/Kg		73	44 - 102

Eurofins Chicago

QC Sample Results

Client: Stantec Consulting Corporation
 Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

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

Lab Sample ID: LCS 180-451435/2-A
Matrix: Solid
Analysis Batch: 451492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 451435

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
Nitrobenzene-d5 (Surr)	80		34 - 109
2-Fluorobiphenyl	71		35 - 105
Terphenyl-d14 (Surr)	66		20 - 117

Lab Sample ID: LCSD 180-451435/3-A
Matrix: Solid
Analysis Batch: 451492

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 451435

<u>Analyte</u>	<u>Spike</u> <u>Added</u>	<u>LCSD</u> <u>Result</u>	<u>LCSD</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>Limit</u>
1-Methylnaphthalene	667	517		ug/Kg		78	44 - 100	10	27
2-Methylnaphthalene	667	519		ug/Kg		78	44 - 100	6	29
Acenaphthene	667	511		ug/Kg		77	41 - 100	8	22
Acenaphthylene	667	551		ug/Kg		83	45 - 100	7	23
Anthracene	667	535		ug/Kg		80	47 - 100	7	26
Benzo[a]anthracene	667	499		ug/Kg		75	47 - 100	2	24
Benzo[a]pyrene	667	540		ug/Kg		81	45 - 101	7	21
Benzo[b]fluoranthene	667	482		ug/Kg		72	44 - 100	6	26
Benzo[g,h,i]perylene	667	503		ug/Kg		75	45 - 103	10	22
Benzo[k]fluoranthene	667	497		ug/Kg		75	43 - 100	12	18
Chrysene	667	479		ug/Kg		72	44 - 100	2	26
Dibenz(a,h)anthracene	667	556		ug/Kg		83	46 - 107	9	24
Fluoranthene	667	548		ug/Kg		82	49 - 102	8	26
Fluorene	667	536		ug/Kg		80	46 - 100	9	22
Indeno[1,2,3-cd]pyrene	667	531		ug/Kg		80	48 - 104	10	22
Naphthalene	667	531		ug/Kg		80	43 - 100	10	28
Phenanthrene	667	521		ug/Kg		78	46 - 100	7	27
Pyrene	667	497		ug/Kg		75	44 - 102	2	27

<u>Surrogate</u>	<u>LCSD</u> <u>%Recovery</u>	<u>LCSD</u> <u>Qualifier</u>	<u>Limits</u>
Nitrobenzene-d5 (Surr)	85		34 - 109
2-Fluorobiphenyl	78		35 - 105
Terphenyl-d14 (Surr)	67		20 - 117

Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-S-Fill

Date Collected: 10/30/23 10:10

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-1-S-Fill

Date Collected: 10/30/23 10:10

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-1

Matrix: Solid

Percent Solids: 69.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		5	451557	VVP	EET PIT	11/10/23 19:26

Client Sample ID: Exc-1-S-Nat

Date Collected: 10/30/23 10:12

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-1-S-Nat

Date Collected: 10/30/23 10:12

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-2

Matrix: Solid

Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 18:21

Client Sample ID: Exc-1-E-Nat

Date Collected: 10/30/23 10:05

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-1-E-Nat

Date Collected: 10/30/23 10:05

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-3

Matrix: Solid

Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 17:59

Client Sample ID: Exc-1-E-Fill

Date Collected: 10/30/23 10:08

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

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Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-1-E-Fill

Date Collected: 10/30/23 10:08

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-4

Matrix: Solid

Percent Solids: 56.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		15	451557	VVP	EET PIT	11/10/23 19:48

Client Sample ID: Exc-1-N-Nat

Date Collected: 10/30/23 10:15

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-1-N-Nat

Date Collected: 10/30/23 10:15

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-5

Matrix: Solid

Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 17:15

Client Sample ID: Exc-2-NW-Fill

Date Collected: 10/30/23 13:35

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-2-NW-Fill

Date Collected: 10/30/23 13:35

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-6

Matrix: Solid

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 16:53

Client Sample ID: Exc-2-NW-Nat

Date Collected: 10/30/23 13:37

Date Received: 11/01/23 09:40

Lab Sample ID: 500-241873-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NW-Nat

Lab Sample ID: 500-241873-7

Date Collected: 10/30/23 13:37

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 16:31

Client Sample ID: Exc-2-S-Fill

Lab Sample ID: 500-241873-8

Date Collected: 10/30/23 13:30

Matrix: Solid

Date Received: 11/01/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-2-S-Fill

Lab Sample ID: 500-241873-8

Date Collected: 10/30/23 13:30

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		20	451397	VVP	EET PIT	11/09/23 16:08

Client Sample ID: Exc-2-S-Nat

Lab Sample ID: 500-241873-9

Date Collected: 10/30/23 13:32

Matrix: Solid

Date Received: 11/01/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-2-S-Nat

Lab Sample ID: 500-241873-9

Date Collected: 10/30/23 13:32

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 15:46

Client Sample ID: Exc-2-NE-Fill

Lab Sample ID: 500-241873-10

Date Collected: 10/30/23 13:25

Matrix: Solid

Date Received: 11/01/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Lab Chronicle

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

Client Sample ID: Exc-2-NE-Fill

Lab Sample ID: 500-241873-10

Date Collected: 10/30/23 13:25

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 62.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		30	451397	VVP	EET PIT	11/09/23 15:24

Client Sample ID: Exc-2-NE-Nat

Lab Sample ID: 500-241873-11

Date Collected: 10/30/23 13:27

Matrix: Solid

Date Received: 11/01/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	740748	LWN	EET CHI	11/06/23 14:07

Client Sample ID: Exc-2-NE-Nat

Lab Sample ID: 500-241873-11

Date Collected: 10/30/23 13:27

Matrix: Solid

Date Received: 11/01/23 09:40

Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			451435	VJC	EET PIT	11/09/23 08:30
Total/NA	Analysis	EPA 8270E LL		1	451397	VVP	EET PIT	11/09/23 15:02

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Stantec Consulting Corporation
Project/Site: CN Excavations - Sidewall Samples 193709832

Job ID: 500-241873-1

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

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998027800	08-31-24

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

Chain of Custody Record

Client Information		Sampler J Hatami		Lab PM <i>Sandie Fredrick</i>		Carrier Tracking No(s):		COC No									
Client Contact Jiyan Hatami		Phone: 262-278-9154		E-Mail <i>Sandie.Fredrick@stantec.com</i>		State of Origin WI		Page Page 1 of 2									
Company Stantec Consulting Corp		PWSID:		Analysis Requested						Job # <i>900-241873</i>							
Address 12080 Corporate Pkwy, Suite 200		Due Date Requested		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) PAH - 8270E						Total Number of Containers		Preservation Codes A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z - other (specify)					
City Mequon		TAT Requested (days) 10															
State, Zip WI, 53092		Compliance Project. Δ Yes Δ No															
Phone		PO #: 193709832															
Email <i>jiyan.hatami@stantec.com</i>		WO #:															
Project Name CN Excavations - Sidewall Samples		Project #:															
Site Manitowoc, WI		SSOW#:															
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		PAH - 8270E		Special Instructions/Note:	
<i>1</i> Exc-1-S-Fill		<i>10/30/23</i>		<i>1010</i>		G		Soil		N N X							
<i>2</i> Exc-1-S-Nat				<i>1012</i>						N N X							
Exc-1-E-Fill										N N X							
<i>3</i> Exc-1-E-Nat				<i>1005</i>						N N X							
<i>4</i> Exc-1-E-Fill				<i>1006</i>						N N X						<i>MS-Fill</i>	
Exc-1-N-Fill <i>Exc-1-N-Nat</i>				<i>1015</i>						N N X							
<i>5</i> Exc-2-NW-Fill				<i>1335</i>						N N X							
<i>6</i> Exc-2-NW-Nat				<i>1337</i>						N N X							
<i>7</i> Exc-2-S-Fill				<i>1330</i>						N N X							
<i>8</i> Exc-2-S-Nat				<i>1332</i>						N N X							
<i>9</i> Exc-2-NE-Fill				<i>1325</i>						N N X							
<i>10</i>																	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Deliverable Requested I, II, III, IV, Other (specify)						Special Instructions/QC Requirements <i>MSA # 40411</i>											
Empty Kit Relinquished by		Date		Time		Method of Shipment:											
Relinquished by: <i>J. Hatami</i>		Date/Time: <i>10/31/23, 1320</i>		Company: <i>Stantec</i>		Received by: <i>Sam Smith</i>		Date/Time: <i>11/1/23 0940</i>		Company: <i>ERTD</i>							
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 <i>5.4 → 4.8</i>													

ORIGIN ID:RRLA (920) 261-1660
STANTEC CONSULTING CORPORATION
WHITNEY CULL
12080 CORPORATE PARKWAY
SUITE 200
MEQUON, WI 53092
UNITED STATES US

SHIP DATE: 13SEP23
ACTWGT: 25.00 LB MAN
CAD: 0269688/CAFE3753

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

UNIVERSITY PARK IL 60484



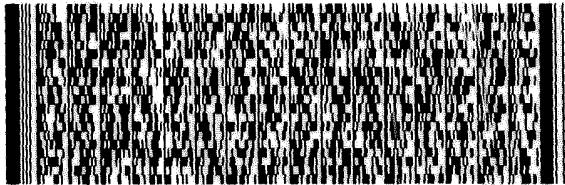
(708) 694-6200
TRU:
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500-241873 Waybi

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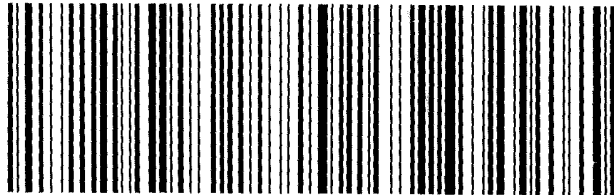
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Login Sample Receipt Checklist

Client: Stantec Consulting Corporation

Job Number: 500-241873-1

Login Number: 241873

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	4.8
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.	False	
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Stantec Consulting Corporation

Job Number: 500-241873-1

Login Number: 241873

List Number: 2

Creator: Mullins, Plumm A

List Source: Eurofins Pittsburgh

List Creation: 11/08/23 06:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
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?	N/A	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

