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October 19, 2020

Ms. Me'le'sa Greene
Wisconsin Department of Natural Resources
2300 N Dr. Martin Luther King Jr. Dr.
Milwaukee, WI 53212

Subject: Phase 2.5 Investigation
N. Humboldt Blvd., E. North Ave. to E. Keefe Ave.
City of Milwaukee, Milwaukee County, Wisconsin
WisDOT Project ID #2667-03-01
TRC Project #382056.0000.0000

Dear Ms. Greene,

Enclosed find a copy of the Phase 2.5 Hazardous Materials Assessment report and Special Provisions for the management of contaminated soil during roadway construction for various sites along N. Humboldt Blvd., from E. North Ave. to E. Keefe Ave. in the City of Milwaukee, Milwaukee County, Wisconsin. CVOC-contaminated soil is expected to be encountered at one location within the proposed construction corridor.

TRC recommends that the WDNR review this report and the attached Special Provisions as the Excavation Management Plan (EMP) for the project. If acceptable, the WDNR should respond with a concurrence letter for the EMP. The WisDOT and TRC respectfully request a response from the WDNR for the EMP by November 13, 2020.

If you have questions or comments, please call me at 262-901-2126.

Sincerely,
TRC Environmental Corporation

Bryan Bergmann, P.G.
Project Manager

cc: Andy Malsom – WisDOT (pdf via email)
Shar TeBeest – WisDOT (pdf via email)
Dan Haak – TRC

Phase 2.5 Investigation

N. Humboldt Blvd.,
E. North Ave. to E. Keefe Ave.
City of Milwaukee, Milwaukee County, Wisconsin

October 2020

WisDOT Project #2667-03-01

Prepared For:

Wisconsin Department of Transportation
141 NW Barstow St.
Waukesha, WI 53187

Prepared By:

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150 N. Patrick Blvd., Suite 180
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Dan Haak, P.E.
TRC Quality Assurance

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COMMONLY USED ABBREVIATIONS AND ACRONYMS

AST	aboveground storage tank
bgs	below ground surface
BRRTS	Bureau for Remediation and Redevelopment Tracking System
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CTH	County Trunk Highway
CY	cubic yards
DATCP	Department of Agriculture, Trade and Consumer Protection
DRO	diesel range organics
FDM	Facilities Development Manual
EMP	Excavation Management Plan
ERP	Environmental Repair Program
ES	Enforcement Standards
ESA	Environmental Site Assessment
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report
GIS Registry	WDNR Geographic Information System (GIS) Registry of Closed Remediation Sites
GRO	gasoline range organics
HAZWOPER	Code of Federal Registry Chapter 29 (29 CFR) Part 1910.120 Hazardous Waste Operations and Emergency Response
HMA	Hazardous Materials Assessment
IH	Interstate Highway
LQG	large quantity generator
LUST	leaking underground storage tank
NPL	National Priorities List
NR ###	Wisconsin Administrative Code (WAC) Natural Resources (NR) Chapter ###
PAHs	polynuclear aromatic hydrocarbons
PAL	Preventive Action Limits
PCBs	polychlorinated biphenyls
PCE	perchloroethylene/tetrachloroethylene
PID	photoionization detector
PVOCs	petroleum volatile organic compounds
RCLs	Residual Contaminant Levels in NR 720
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
R/W or ROW	right-of-way
sf	square feet
STH	State Trunk Highway
TCE	trichloroethylene
TRIS	Toxic Chemical Release Inventory System
USGS	United States Geological Survey
USH	United States Highway
UST	underground storage tank
VOCs	volatile organic compounds
WDNR	Wisconsin Department of Natural Resources
WisDOT	Wisconsin Department of Transportation
WGNHS	Wisconsin Geological and Natural History Survey
WI ERP	Wisconsin Environmental Repair Program database

Executive Summary

The WisDOT is preparing to reconstruct N. Humboldt Blvd., from E. North Ave. to E. Keefe Ave., in the City of Milwaukee, Milwaukee County. The project corridor is approximately 1.5 miles long. Improvements will consist of reconstruction of curb and gutter, storm sewer, and sidewalk. Additional improvements consist of street lighting, traffic signals, pavement marking, and signage. There will be no real estate acquisition for the project. The PS&E date is August 1, 2020. The LET date is January 12, 2021.

The City of Milwaukee Department of Public Works completed a Phase 1 HMA for the project in March 2019. The WisDOT requested that TRC conduct a Phase 2.5 Investigation at 5 sites along the project corridor.

On March 23 and 24, 2020, 22 soil borings were advanced to depths ranging from 4 to 16 feet bgs.

The results of the Phase 2.5 Investigation were as follows:

- CVOC-contaminated soil is present in GP-22 at a depth of approximately 1' to 6' bgs.

Special Provisions should be included in the construction documents advising the contractor of these findings, and the requirements to manage CVOC-contaminated soil at the following location:

- Station 47+35 to 47+75, from 30' left of the reference line to project limits left, from 1 to 6 feet bgs. The estimated volume of contaminated soil to be excavated at this location is 325 CY (approximately 552 tons using a conversion factor of 1.7 tons per cubic yard).

This report and attached Special Provisions are the Excavation Management Plan, and should be reviewed by the WDNR for concurrence. The WisDOT's environmental consultant shall be present during excavation in the area of known contamination to field-screen and document the excavation activities.

1.0 Background

The WisDOT and the City of Milwaukee are preparing to reconstruct N. Humboldt Blvd., from E. North Ave. to E. Keefe Ave. in the City of Milwaukee, Milwaukee County, Wisconsin. The PS&E date is August 1, 2020. The LET date is January 12, 2021.

The project will consist of reconstruction of 1.5 miles of roadway, including curb and gutter, storm sewer, and sidewalk. Other improvements include street lighting, traffic signals, pavement marking, and signing. There will be no real estate acquisition for the project.

The City of Milwaukee Department of Department Works completed a Phase 1 for the project in March 2019.

The WisDOT requested that TRC complete a Phase 2.5 investigation near the intersections of N. Humboldt Blvd. & E. North Ave. and N. Humboldt Blvd. & E. Chambers St.

A summary of the environmental concerns along the project corridor (from south to north) are provided below.

1. **Coffaros Service Station, 1030 E. North Ave., WDNR BRRTS No. 03-41-001598, Closed LUST.** The site is an active gasoline station. The site had the following USTs: one 550-gallon fuel oil UST, one 550-gallon kerosene UST, one 550-gallon waste oil UST, one 2,000-gallon unleaded gasoline UST, two 6,000-gallon unleaded gasoline USTs, and one 8,000-gallon unleaded gasoline UST. The USTs were removed in June 1991. Groundwater was not encountered during the tank removals. The site was closed in 1992. The site currently has one 8,000-gallon unleaded gasoline and one 12,000-gallon unleaded gasoline UST that are currently in use.

2. **Clark Oil/Silverman, Pindyck, 2300 N. Humboldt Blvd., WDNR BRRTS No. 03-41-000514, Closed LUST**. The site was formerly used by a gasoline station. The site is currently vacant. The site had one 6,000-gallon leaded gasoline UST and one 6,000-gallon unleaded gasoline UST. Information about the site's environmental history was limited. According to BRRTS on the web, the site was opened in 1989 and closed in 1997.

3. **Alterra Coffee, 2941-2955 N. Humboldt Blvd., WDNR BRRTS No. 03-41-484156, Open LUST.** The site had two 4,600-gallon fuel oil USTs. The tanks were removed in 2003. A site investigation was conducted. Soil contamination was present in the vicinity of the tanks and extended east to N. Humboldt Ave. Free product was present in the vicinity of the tanks (MW-1), but also in MW-3 (located near the N. Humboldt Blvd. right-of-way). Groundwater is present at the site at approximately 10 to 12 feet bgs and flow is to the east toward N. Humboldt Blvd. and the Milwaukee River. The site is an Open LUST site.

4. **Jacquez Service, 2963 N. Humboldt Blvd., WDNR BRRTS No. 03-41-004824, Closed LUST.** The site was formerly occupied by a gasoline station and is now occupied by a coffee shop. The site had one 6,000-gallon unleaded gasoline UST, one 12,000-gallon unleaded gasoline UST, one 12,000-gallon leaded gasoline, one

1,000-gallon waste oil UST, one 1,000-gallon kerosene UST, one 1,000-gallon fuel oil UST, and one 3,000-gallon fuel oil UST. A site investigation was conducted in 2001 and 2002. The site has soil and groundwater contamination in the southeast portion of the property near N. Humboldt Blvd. Groundwater is present at the site at approximately 7 to 8 feet bgs and flow is to the east toward N. Humboldt Blvd. and the Milwaukee River. The site was closed in 2003 with continuing obligations for residual soil and groundwater contamination.

5. **Adelman Cleaners Laundry Mat – Former/Vacant Lot, 3009 N. Humboldt Blvd., WDNR BRRTS No. 03-41-111395 & 02-41-531327, Closed LUST & Closed ERP**. The site is a former dry cleaner and is now vacant. In 1995, one 4,000-gallon fuel oil UST and two 2,500-gallon fuel oil USTs were removed from the site. The LUST site was closed in 2010. In 2004, chlorinated VOCs (CVCOs) were documented at the site. A site investigation was conducted. Soil and groundwater contaminated with CVOCs was present in the northeast portion of the site and likely extended into the N. Humboldt Blvd. right-of-way. The site was closed in 2010 with continuing obligations for contaminated soil and groundwater.

Information from the Phase 1 and WDNR BRRTS database for the above sites is included in Appendix A.

2.0 Sampling Activities

TRC performed the Phase 2.5 Investigation field activities on March 23 and March 24, 2020. Twenty-two Geoprobe borings (GP-01 through GP-22) were advanced to depths ranging from 4 feet to 16 feet bgs. Soil probe locations are shown on Figures 3 and 4.

During the soil probe activities, soil was continuously sampled, classified, and field-screened for volatile organic compounds (VOCs) using a photoionization detector (PID). Soil near Adelman Cleaners Laundry Mat was additionally field-screened for chlorinated volatile organic compounds (CVOCs) using a flame ionization detector (FID). PID and FID results were all <1 Instrument Unit (IU). In general, the soil profile consisted of topsoil or concrete overlying silty clay or silt. Groundwater was not encountered.

Soils were generally sampled for PVOCs, with the addition of lead at Clark Oil and Jacquez Service. Soils near the Adelman Cleaners were sampled for VOCs. Additional waste characterization analyses were also performed at each site.

Upon completion, soil probe holes were abandoned with bentonite. Soil boring logs and borehole abandonment forms are provided in Appendix B.

Photographs taken during fieldwork activities are included in Appendix C.

3.0 Soil and Groundwater Sampling Results and Evaluation

Soil sample laboratory results are summarized in Tables 1 and 2. The laboratory analytical reports, which include analytical methods used, are included in Appendix D.

Soil sample results for the Phase 2.5 were as follows:

Intersection of E. North Ave. and N. Humboldt Blvd.

- PVOCs plus naphthalene were not detected in any of the soil samples.
- Metal concentrations were all below NR 720 RCLs, except for nickel in sample GP-08 (10'-12'). The concentration was 33 mg/kg, which exceeds the NR 720 background threshold value of 31 mg/kg. This concentration should be treated as a background value since the concentration is only slightly above the background threshold value and there is not a nearby source for the nickel contamination.

Intersection of E. Chambers St. and N. Humboldt Blvd.

- In sample GP-22 (2'-4') tetrachloroethene (PCE) was detected at a concentration of 890 µg/kg, which exceeds the NR 720 groundwater pathway RCL of 4.5 µg/kg.
- VOCs were not detected in the remaining samples.
- A monitoring well was observed on the west side of the median of N. Humboldt Blvd. near station 45+00, approximately 7' left of reference line. The monitoring well is associated with the Alterra Coffee site and will likely have to be abandoned by the site's environmental consultant, GZA, according to the BRRTS database.

TRC did not perform Cumulative Hazard Index and Cancer Risk calculations because the NR 720 RCL exceedance for PCE already indicates risk, and the remaining samples did not have significant detections, if any.

4.0 Findings, Conclusions, and Recommendations

The results of the Phase 2.5 Investigation indicate the following:

- CVOC-contaminated soil is present in GP-22 at a depth of approximately 1' to 6' bgs.

Special Provisions should be included in the construction documents advising the contractor of these findings, and the requirements to manage CVOC-contaminated soil at the following location:

- Station 47+35 to 47+75, from 30' left of reference line to project limits left, from 1 to 6 feet bgs. The estimated volume of contaminated soil to be excavated at this location is 325 CY (approximately 552 tons using a conversion factor of 1.7 tons per cubic yard).

A Notice to Contractor – Possible Contamination Beyond Construction Limits should be included in the construction documents advising the contractor that contaminated soil and groundwater may be present beyond the project limits near the locations that were investigated as part of this Phase 2.5. The contractor should control construction operations at these locations to ensure that they do not extend beyond excavation limits indicated in the plans.

Draft Special Provisions are included in Appendix E.

4.1 Request for WDNR Reviews

TRC has prepared draft Special Provisions for the management of Solid Waste (CVOC-contaminated soil) during construction and a Notice to Contractor which can be found in Appendix E. TRC recommends that the WDNR review this report and the attached Special Provisions as the Excavation Management Plan (EMP) for the project. If acceptable, the WDNR should respond with a concurrence letter for the EMP.

Table 1: Soil Sampling Results Summary - Intersection of E. North Ave. & N. Humboldt Blvd.
N. Humboldt Blvd., E. North Ave. to E. Keefe Ave.
Milwaukee, Milwaukee County, Wisconsin
WisDOT ID: 2667-03-01, TRC Project ID: 382056.0000.0000

Analytes[1]	Soil RCL NR 720[4]				Soil Sample ID, Depth (feet bgs), Soil Type, Sample Date															
					GP-01	GP-02		GP-03			GP-04		GP-05		GP-06	GP-07			GP-08	
					2' - 4'	2' - 4'	10' - 12'	2' - 4'	10' - 12'	12' - 16'	2' - 4'	6' - 8'	2' - 4'	10' - 12'	2' - 4'	2' - 4'	6' - 8'	2' - 4'	10' - 12'
	Groundwater Pathway[2]	Non-Industrial Direct Contact[3]	Industrial Direct Contact[3]	Background Threshold Value[5]	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	FILL	SILTY CLAY	FILL	SILTY CLAY	SILTY CLAY	FILL	SILTY CLAY	SILTY CLAY	SILTY CLAY
					SAMPLES COLLECTED ON MARCH 23, 2020															
PID Readings	-	-	-	-	< 1	< 1	< 1	31.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
GRO (mg/kg)	-	-	-	-	--	--	< 0.64	--	--	--	--	--	--	--	--	--	--	--	--	< 0.70
DRO (mg/kg)	-	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.9
VOCs (µg/kg)																				
1,2,4-Trimethylbenzene	1,378.7[6]	219,000	219,000	-	< 23	< 24	< 23	< 24	< 23	< 24	< 22	< 25	< 23	< 24	< 22	< 20	< 23	< 26	< 25
1,3,5-Trimethylbenzene	1,378.7[6]	182,000	182,000	-	< 24	< 25	< 24	< 25	< 25	< 26	< 24	< 26	< 24	< 25	< 24	< 21	< 24	< 27	< 27
Benzene	5.1	1,600	7,070	-	< 9.2	< 9.7	< 9.4	< 9.7	< 9.5	< 9.9	< 9.1	< 10	< 9.3	< 9.7	< 9.2	< 8.1	< 9.3	< 10	< 10
Ethylbenzene	1,570	8,020	35,400	-	< 12	< 12	< 12	< 12	< 12	< 12	< 11	< 13	< 12	< 12	< 11	< 10	< 12	< 13	< 13
Methyl-tert-butyl-ether	27	63,800	282,000	-	< 25	< 26	< 25	< 26	< 26	< 27	< 25	< 27	< 25	< 26	< 25	< 22	< 25	< 28	< 28
Naphthalene	658.2	5,520	24,100	-	< 21	< 22	< 22	< 22	< 22	< 23	< 21	< 23	< 21	< 22	< 21	< 18	< 21	< 24	< 23
Toluene	1,107.2	818,000	818,000	-	< 9.3	< 9.8	< 9.5	< 9.7	< 9.6	< 10	< 9.1	< 10	< 9.4	< 9.8	< 9.2	< 8.1	< 9.4	< 11	< 10
Xylenes, Total	3,960	260,000	260,000	-	< 14	< 15	< 14	< 15	< 14	< 15	< 14	< 15	< 14	< 15	< 14	< 12	< 14	< 16	< 15
Remaining VOCs	-	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND
Metals (mg/kg)																				
Arsenic	0.584	0.677	3	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.9
Barium	164.8	15,300	100,000	364	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	62
Cadmium	0.752	71.1	985	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17 J B
Chromium	360,000	-	-	44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27
Copper	91.6	3,130	46,700	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30
Lead	27	400	800	52	7.9	8.4	6.7	6.4	7.1	7.7	--	--	--	--	--	--	--	--	--	7.8
Nickel	13.0612	1,550	22,500	31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*33*
Selenium	0.52	391	5,840	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.66
Silver	0.8491	391	5,840	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.24 J
Zinc	-	23,500	100,000	150	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52
Mercury	0.208	3.13	3.13	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0077 J
SVOCs (µg/kg)																				
SVOCs	-	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND
PCBs (µg/kg)																				
PCBs, Totals	9.4	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND

Created By: E. Maxwell 4/6/2020
Checked By: A. Sobbe 4/7/2020

Notes:

1 PID = Photoionization Detector
2 GRO = Gasoline Range Organics analyzed using the WDNR WI-GRO method.
3 DRO = Diesel Range Organics analyzed using the WDNR WI-DRO method.
4 VOCs = Volatile Organic Compounds analyzed using EPA Method 8260B.
5 SVOCs = Semi-Volatile Organic Compounds analyzed using EPA Method 8270.
6 PCBs = Polychlorinated Biphenyls analyzed using EPA Method 8082A.
7 mg/kg = milligrams per kilogram (ppm).
8 µg/kg = micrograms per kilogram (ppb).
9 Samples were collected by TRC and analyzed by Test America (Wisconsin Certification ID 999580010).
10 - = Standard not established or not applicable.
11 -- = Sample not analyzed for this parameter.
12 ND = Not detected
13 J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
14 B = Compound was found in the blank and sample.
15 Results in *Italics* indicate a detection (or potential detection if J-flagged) exceeding both the background threshold value and the Groundwater Pathway NR 720 RCL in the upper 4 feet of soil.
16 Results in **BOLD** indicate a detection (or potential detection if J-flagged) exceeding both the background threshold value and the Non-Industrial or Industrial NR 720 RCL.
17 Cumulative Hazard Index and Cancer Risk Calculations were not calculated because individual NR 720 RCL exceedances already indicate risk.

Footnotes:

(1) Only analytes that were detected in at least one sample are shown in the table.
(2) Value is the generic RCL for the groundwater pathway.
(3) Value is the generic RCL for exposure by direct contact.
(4) Calculated from http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search using default exposure assumptions listed in NR 720.12(3).
(5) Background threshold value (BTV) was taken from the Wisconsin DNR's NR 720 RCL spreadsheet.
(6) Groundwater pathway RCL is for combined 1,2,4- and 1,3,5-trimethylbenzene.

Table 2: Soil Sampling Results Summary - Intersection of E. Chambers St. & N. Humboldt Blvd.
N. Humboldt Blvd., E. North Ave. to E. Keefe Ave.
Milwaukee, Milwaukee County, Wisconsin
WisDOT ID: 2667-03-01, TRC Project ID: 382056.0000.0000

Analytes[1]	Soil RCL NR 720[4]				Soil Sample ID, Depth (feet bgs), Soil Type, Sample Date														
					GP-09	GP-09	GP-10	GP-10	GP-11	GP-11	GP-12	GP-13	GP-19	GP-19	GP-20	GP-21	GP-22	GP-22	Trip Blank
					2' - 4'	6' - 8'	2' - 4'	6' - 8'	2' - 4'	6' - 8'	2' - 4'	2' - 4'	2' - 4'	6' - 8'	2' - 4'	2' - 4'	2' - 4'	6' - 8'	
	Groundwater Pathway[2]	Non-Industrial Direct Contact[3]	Industrial Direct Contact[3]	Background Threshold Value[5]	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILT	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SANDY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	SILT	
					SAMPLES COLLECTED ON MARCH 24, 2020														
PID/FID Readings	-	-	-	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1/<1	< 1/<1	< 1/<1	< 1/<1	< 1/<1	< 1/<1	--
GRO (mg/kg)	-	-	-	-	--	--	--	3.3	--	--	--	--	--	--	--	--	--	--	--
DRO (mg/kg)	-	-	-	-	--	--	--	--	--	--	1.0 J	<1.6	--	--	--	4.5	--	< 1.6	--
VOCs (µg/kg)																			
1,2,4-Trimethylbenzene	1,378.7[6]	219,000	219,000	-	< 28	< 24	< 23	< 24	< 32	< 23	< 27	< 26	< 26	< 22	< 25	< 25	< 26	< 25	< 18
1,3,5-Trimethylbenzene	1,378.7[6]	182,000	182,000	-	< 30	< 25	< 25	< 25	< 34	< 25	< 28	< 28	< 28	< 23	< 26	< 27	< 28	< 27	< 19
Benzene	5.1	1,600	7,070	-	< 12	< 9.6	< 9.5	< 9.8	< 13	< 9.4	< 11	< 11	< 11	< 8.9	< 10	< 10	< 11	< 10	< 7.3
Ethylbenzene	1,570	8,020	35,400	-	< 15	< 12	< 12	< 12	< 17	< 12	< 14	< 13	< 13	< 11	< 13	< 13	< 13	< 13	< 9.2
Methyl-tert-butyl-ether	27	63,800	282,000	-	< 31 *	< 26	<26 *	< 26	< 36 *	< 25	< 29 *	< 29 *	< 29 *	< 24 *	< 27 *	< 28 *	< 29 *	< 28 *	< 20
Naphthalene	658.2	5,520	24,100	-	< 27	< 22	< 22	< 22	< 30	< 22	< 25	< 24	< 25	< 20	< 23	< 23	< 24	< 24	< 17
Tetrachloroethene	4.5	33,000	145,000	-	< 29	< 24	--	< 25	--	--	--	--	< 27	< 22	< 25	< 26	*890*	< 26	< 19
Toluene	1,107.2	818,000	818,000	-	< 12	< 9.7	< 9.6	< 9.9	< 13	< 9.5	< 11	< 11	< 11	< 8.9	< 10	< 10	< 11	< 10	< 7.4
Xylenes, Total	3,960	260,000	260,000	-	<18	< 14	< 14	< 15	< 20	< 14	< 16	< 16	< 16	< 13	< 15	< 15	< 16	< 15	< 11
Remaining VOCs	-	-	-	-	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND
Metals (mg/kg)																			
Arsenic	0.584	0.677	3	8	--	--	--	7.1	--	--	--	--	--	--	--	--	--	--	--
Barium	164.8	15,300	100,000	364	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.752	71.1	985	1	--	--	--	0.15 J	--	--	--	--	--	--	--	--	--	--	--
Chromium	360,000	-	-	44	--	--	--	13	--	--	--	--	--	--	--	--	--	--	--
Copper	91.6	3,130	46,700	35	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--
Lead	27	400	800	52	39	15	15	12	14	12	--	--	--	--	--	--	--	--	--
Nickel	13.0612	1,550	22,500	31	--	--	--	27	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.52	391	5,840	-	--	--	--	< 0.65	--	--	--	--	--	--	--	--	--	--	--
Silver	0.8491	391	5,840	-	--	--	--	0.22 J	--	--	--	--	--	--	--	--	--	--	--
Zinc	-	23,500	100,000	150	--	--	--	41	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.208	3.13	3.13	-	--	--	--	0.011 J	--	--	--	--	--	--	--	--	--	--	--
SVOCs (µg/kg)																			
Chrysene	144.2	115,000	2,110,000	-	--	--	--	22 J	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	88,877.8	2,390,000	30,100,000	-	--	--	--	8.2 J	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	-	-	-	-	--	--	--	18 J	--	--	--	--	--	--	--	--	--	--	--
Remaining SVOCs	-	-	-	-	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
PCBs (µg/kg)																			
PCBs, Totals	9.4	-	-	-	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--

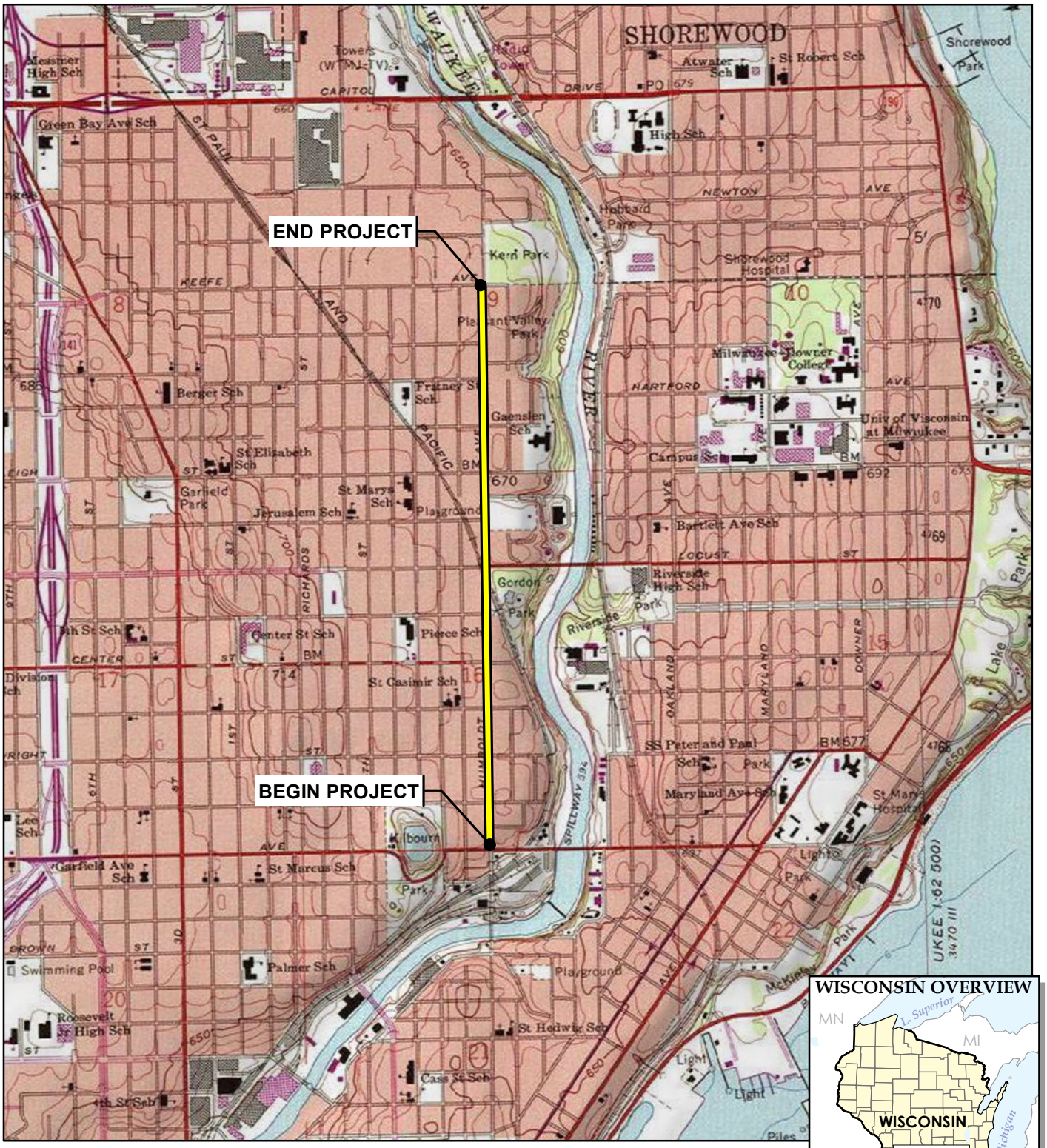
Created By: E. Maxwell 4/7/2020
Checked By: A. Sobbe 4/8/2020

Notes:

1 PID = Photoionization Detector
2 FID = Flame Ionization Detector
3 GRO = Gasoline Range Organics analyzed using the WDNR WI-GRO method.
4 DRO = Diesel Range Organics analyzed using the WDNR WI-DRO method.
5 VOCs = Volatile Organic Compounds analyzed using EPA Method 8260B.
6 SVOCs = Semi-Volatile Organic Compounds analyzed using EPA Method 8270.
7 PCBs = Polychlorinated Biphenyls analyzed using EPA Method 8082A.
8 mg/kg = milligrams per kilogram (ppm).
9 µg/kg = micrograms per kilogram (ppb).
10 Samples were collected by TRC and analyzed by Test America (Wisconsin Certification ID 999580010).
11 - = Standard not established or not applicable.
12 -- = Sample not analyzed for this parameter.
13 ND = Not detected
14 J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
15 * = LCS or LCSD is outside acceptance limits.
16 Results in *Italics* indicate a detection (or potential detection if J-flagged) exceeding both the background threshold value and the Groundwater Pathway NR 720 RCL in the upper 4 feet of soil.
17 Results in **BOLD** indicate a detection (or potential detection if J-flagged) exceeding both the background threshold value and the Non-Industrial or Industrial NR 720 RCL.
18 Cumulative Hazard Index and Cancer Risk Calculations were not calculated because individual NR 720 RCL exceedances already indicate risk.

Footnotes:

(1) Only analytes that were detected in at least one sample are shown in the table.
(2) Value is the generic RCL for the groundwater pathway.
(3) Value is the generic RCL for exposure by direct contact.
(4) Calculated from http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search using default exposure assumptions listed in NR 720.12(3).
(5) Background threshold value (BTV) was taken from the Wisconsin DNR's NR 720 RCL spreadsheet.
(6) Groundwater pathway RCL is for combined 1,2,4- and 1,3,5-trimethylbenzene.



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000 FEET

TRC

150 North Patrick Blvd., Suite 180
Brookfield, WI 53045
Phone: 262.879.1212
www.trcsolutions.com

TRC - GIS

PROJECT:

WISDOT ID # 2667-03-01
N. HUMBOLDT BLVD., E. NORTH AVE TO E. KEEFE AVE.
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

TITLE:

SITE LOCATION MAP

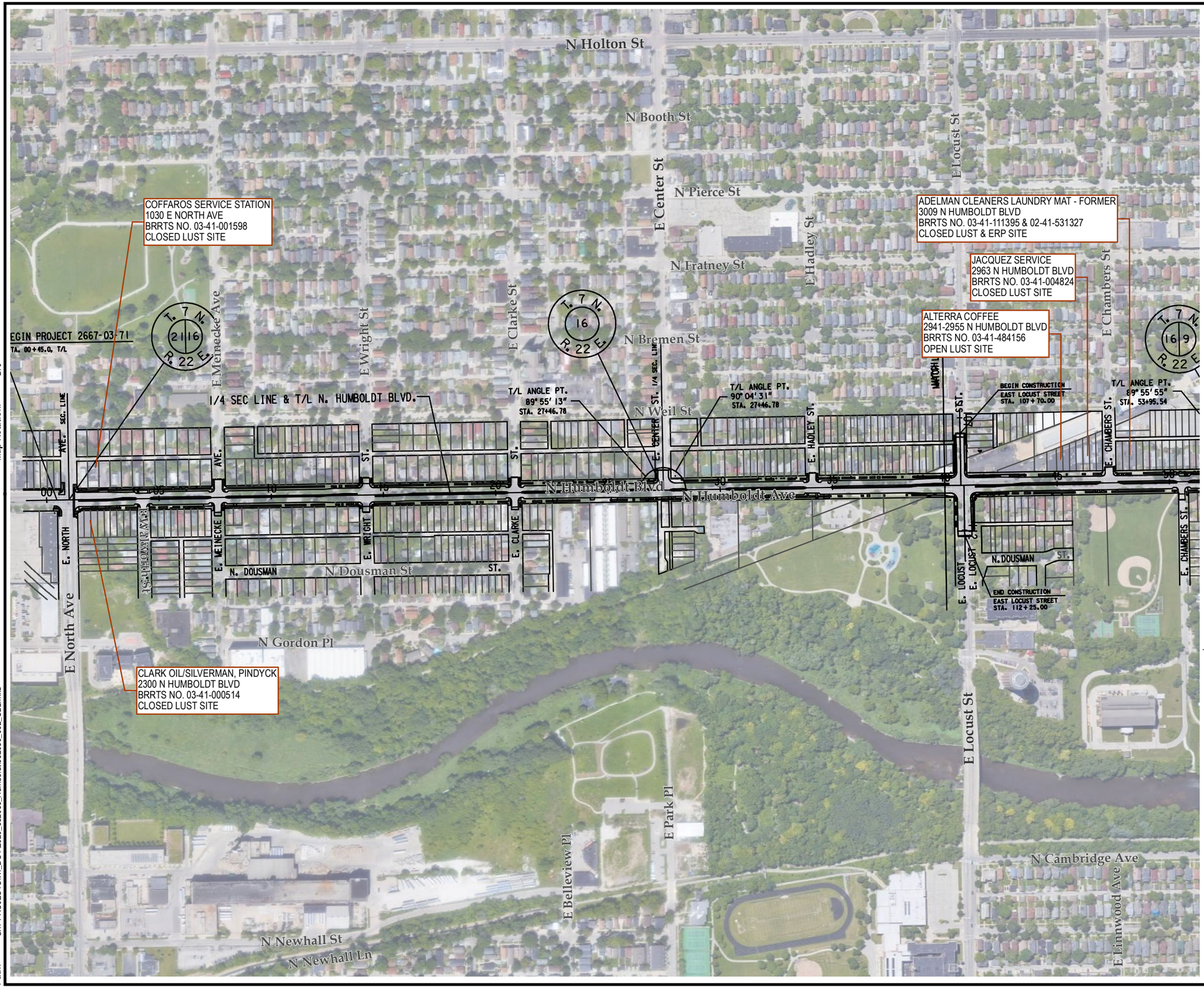
DRAWN BY:	A. ADAIR
CHECKED BY:	B. BERGMANN
APPROVED BY:	D. HAAK
DATE:	APRIL 2020
PROJ. NO.:	382056
FILE:	382056_001_SLM.mxd

FIGURE 1

S:\1-PROJECTS\WI_DOT\2020_382056_Humboldt\382056_001_SLM.mxd -- Saved By: AADAIR on 4/15/2020, 08:47:48 AM

TRC - GIS

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)
Map Rotation: 270



NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, (7/7/2018).
2. MAP PROJECTION AND GRID COORDINATES ARE NAD 83 STATE PLANE WISCONSIN SOUTH (US-SURVEY FEET).
3. CONSTRUCTION PLANS PROVIDED BY WISDOT, LOCATIONS ARE APPROXIMATE.

0 420 840 Feet

1 " = 420 '

1:5,040

PROJECT:

WISDOT ID # 2667-03-01
N. HUMBOLDT BLVD., E. NORTH AVE TO E. KEEFE AVE.
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

TITLE:

PROJECT CORRIDOR

DRAWN BY:	A. ADAIR	PROJ. NO.:	382056
CHECKED BY:	B. BERGMANN		
APPROVED BY:	D. HAAK		**FIGURE 2**
DATE:	APRIL 2020		

TRC
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www.trcsolutions.com

FILE NO.: 382056_002_SBL.mxd

Plot Date: 4/15/2020, 08:49:26 AM by AADAIR -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\WI_DOT\2020_382056_Humboldt\382056_002_SBL.mxd

TRC - GIS

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)
Map Rotation: 270

Plot Date: 4/24/2020, 11:00:50 AM by AADAIR -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\WI_DOT\2020_382056_Humboldt\382056_003_SBL.mxd

GP-04 (2'-4')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-04 (6'-8')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-05 (2'-4')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-05 (10'-12')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-08 (2'-4')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-08 (10'-12')
PID = <1 IU
VOCS = ND
SVOCS = ND
NICKEL = 33 mg/Kg
REMAINING METALS = < NR 720 RCLS

COFFAROS SERVICE STATION
1030 E NORTH AVE
BRRTS NO. 03-41-001598
CLOSED LUST SITE

GP-07 (2'-4')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-07 (6'-8')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-06 (2'-4')
PID = <1 IU
PVOCS + NAPHTHALENE = ND

GP-03 (2'-4')
PID = 31.5 IU
PVOCS + NAPHTHALENE = ND
LEAD = 6.7 mg/Kg

GP-03 (10'-12')
PID = <1 IU
PVOCS + NAPHTHALENE = ND
LEAD = 7.1 mg/Kg

GP-03 (12'-16')
PID = <1 IU
PVOCS + NAPHTHALENE = ND
LEAD = 7.7 mg/Kg

GP-02 (2'-4')
PID = < IU
PVOCS + NAPHTHALENE = ND
LEAD = 8.4 mg/Kg

GP-02 (10'-12')
PID = <1 IU
PVOCS + NAPHTHALENE = ND
LEAD = 6.7 mg/Kg

GP-01 (2'-4')
PID = < IU
PVOCS + NAPHTHALENE = ND
LEAD = 7.9 mg/Kg

CLARK OIL/SILVERMAN, PINDYCK
2300 N HUMBOLDT BLVD
BRRTS NO. 03-41-000514
CLOSED LUST SITE

BEGIN PROJECT
STA. 00+45.0 T/L

N. Humboldt Blvd

E. NORTH AVE.

HUMBOLDT BOULEVARD

LEGEND

GEOPROBE

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, (7/7/2018).
2. MAP PROJECTION AND GRID COORDINATES ARE NAD 83 STATE PLANE WISCONSIN SOUTH (US-SURVEY FEET).
3. CONSTRUCTION PLANS PROVIDED BY WISDOT, LOCATIONS ARE APPROXIMATE.

0 40 80 Feet

1 " = 40 '
1:480

PROJECT:
WISDOT ID # 2667-03-01
N. HUMBOLDT BLVD., E. NORTH AVE TO E. KEEFE AVE.
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

TITLE:
SOIL BORING LOCATIONS
STATION 00+00 TO 03+50

DRAWN BY:	A. ADAIR	PROJ. NO.:	382056
CHECKED BY:	B. BERGMANN		
APPROVED BY:	D. HAAK		
DATE:	APRIL 2020		

FIGURE 3

TRC
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Brookfield, WI 53045
Phone: 262.879.1212
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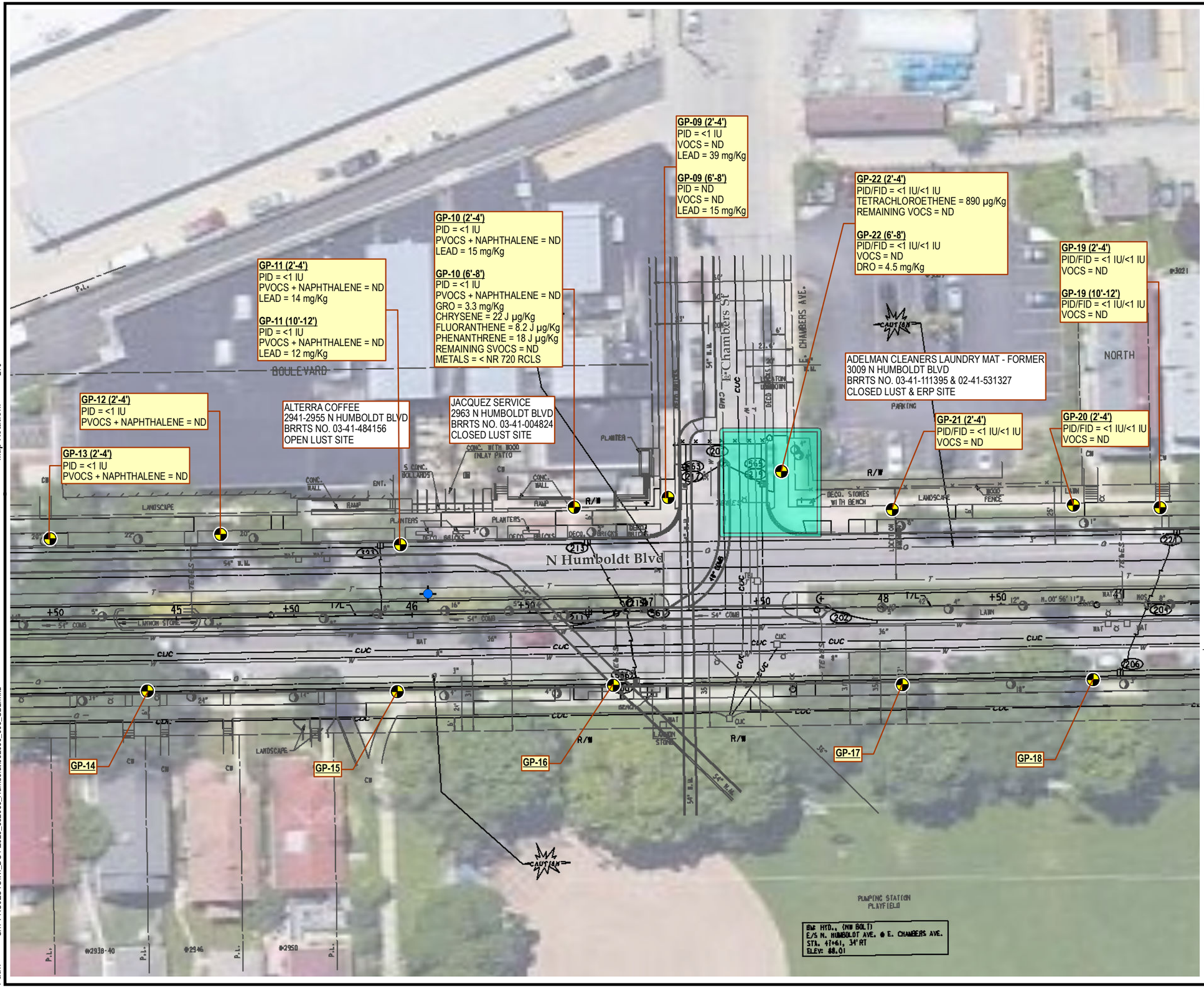
FILE NO.: 382056_003_SBL.mxd



LEGEND

- GEOPROBE
- MONITORING WELL
- CVOC-CONTAMINATED SOIL FROM 1'-6' BGS

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO & PARTNERS, (7/7/2018).
2. MAP PROJECTION AND GRID COORDINATES ARE NAD 83 STATE PLANE WISCONSIN SOUTH (US-SURVEY FEET).
3. CONSTRUCTION PLANS PROVIDED BY WISDOT, LOCATIONS ARE APPROXIMATE.

0 40 80 Feet

1 " = 40 '

1:480

PROJECT:

WISDOT ID # 2667-03-01
N. HUMBOLDT BLVD., E. NORTH AVE TO E. KEEFE AVE.
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

TITLE:

SOIL BORING LOCATIONS STATION 44+50 TO 49+00

DRAWN BY:	A. ADAIR	PROJ. NO.:	382056
CHECKED BY:	B. BERGMANN		
APPROVED BY:	D. HAAK		
DATE:	APRIL 2020		

FIGURE 4

TRC
150 North Patrick Blvd., Suite 180
Brookfield, WI 53045
Phone: 262.879.1212
www.trcsolutions.com

FILE NO.: 382056_003_SBL.mxd

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)
Map Rotation: 270

Plot Date: 4/24/2020, 11:00:50 AM by AADAIR -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\WI_DOT\2020_382056_Humboldt\382056_003_SBL.mxd

TRC - GIS

Appendix A: Phase 1 Excerpts and WDNR Information

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name or FID below to view Location Details page for this Activity. Other Activities, if present, may be accessed from Location Details.

< Basic Search

03-41-000514 CLARK OIL/SILVERMAN, PINDYCK

CLOSED LUST

Location Name (Click Location Name or FID to View Location Details)			County	WDNR Region
CLARK OIL/SILVERMAN, PINDYCK			MILWAUKEE	SOUTHEAST
Address			Municipality	
2300 N HUMBOLDT AVE			MILWAUKEE	
PLSS Description	Latitude	Longitude	Google Maps	RR Sites Map
SW 1/4 of the SE 1/4 of Sec 16, T07N, R22E	43.060455	-87.8975056	CLICK TO VIEW	CLICK TO VIEW
Additional Location Description			Size (Acres)	Facility ID
			UNKNOWN	241556810

Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action
DNR RR	53212-3510-00		1990-01-02	1997-05-12	2013-07-02

Characteristics

PECFA Tracked?	EPA NPL Site?	EPA Superfund?	PECFA Funds Eligible?	Above Ground Tank?	Drycleaner?	Co-Contamination?	WI DOT Site?	COs Apply?
Yes	No	No	Yes	No	No	No	No	No

Actions

Place Cursor Over Action Code to View Description

Date	Code	Name	Comment
1989-12-27	70	Emergency Response Start	
1990-01-02	1	Notification of Hazardous Substance Discharge	
1990-04-12	99	Miscellaneous	SIGNED PECFA FORM 4, PARTIAL PAYMENT
1990-10-09	99	Miscellaneous	PHONE CALL, VAPOR WELLS ARE IN
1996-06-12	76	Activity Transferred to DSPS (formerly Commerce)	
1997-05-12	11	Activity Closed	*** NR726 Closure from Commerce Data Interchange ***
2013-07-02	89	DSPS (formerly Commerce) Transferred Back to DNR	PECFA PROGRAM TRANSFER 2013-2015 STATE BUDGET

PECFA Claims Paid or Pending Payment

Payments made from the Petroleum Environmental Cleanup Fund Award

PECFA Site Name:	Clark Oil (Former)		
Maximum Reimbursement:	$1,000,000	Total Amount Paid:	$115,319.87

Occ No	Claim No	Audit Date	Paid Date	Amt Submitted	Amt Ineligible	Amt Paid
A	1	1987-08-01	1990-04-23	$66,723.23	$5,000.00	$61,723.23
A	2	1993-07-14	1995-05-04	$44,435.92	$10,529.44	$32,211.16
A	3	1997-07-	1999-09-22	$22,190.16	$.00	$21,385.48

		24				

Substances

Substance	Type	Est Amt Released	Units
Gasoline - Unleaded and Leaded	Petroleum		
Gasoline - Unleaded and Leaded	Petroleum		

Who

Role	Name/Address
Responsible Party	JANE SILVERMAN MARY ELLEN PINDYKE 777 E WISCONSIN MILWAUKEE, WI 53202

For Additional Information, Please Contact

JENNIFER DORMAN 414-263-8683 jennifer.dorman@wisconsin.gov

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Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name or FID below to view Location Details page for this Activity. Other Activities, if present, may be accessed from Location Details.

< Basic Search

03-41-001598 COFFAROS SERVICE STATION

CLOSED LUST

Location Name (Click Location Name or FID to View Location Details)			County	WDNR Region
COFFAROS SVC STATION			MILWAUKEE	SOUTHEAST
Address			**Municipality**	
1030 E NORTH AVE			MILWAUKEE	
PLSS Description	**Latitude**	**Longitude**	**Google Maps**	**RR Sites Map**
SE 1/4 of the SW 1/4 of Sec 16, T07N, R22E	43.0605966	-87.8983482	CLICK TO VIEW	CLICK TO VIEW
Additional Location Description			**Size (Acres)**	**Facility ID**
			UNKNOWN	241116150

Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action
DNR RR	53212-3491-30		1991-06-05	1992-12-09	1992-12-09

Characteristics

PECFA Tracked?	EPA NPL Site?	EPA Superfund?	PECFA Funds Eligible?	Above Ground Tank?	Drycleaner?	Co-Contamination?	WI DOT Site?	COs Apply?
Yes	No	No	Yes	No	No	No	No	No

Actions

Place Cursor Over Action Code to View Description

Date	Code	Name	Comment
1991-06-05	1	Notification of Hazardous Substance Discharge	
1991-06-06	2	Responsible Party (RP) letter sent	RP LETTER, MEDIUM
1992-12-09	11	Activity Closed	

Other Documents and Images Not Linked to Actions Above

Click File Name to Download or Open

The file below contains permanent records related to the site available at the time the paper Site File was scanned and uploaded. Records withheld by the department due to confidentiality, attorney-client privilege, and other sensitive records, as well as lab data, may not be included. Additional records associated with the site may or may not be accessible through an open records request.

Site File	0341001598_Site_File.pdf

PECFA Claims Paid or Pending Payment

Payments made from the Petroleum Environmental Cleanup Fund Award

PECFA Site Name:	Coffaro's Service Inc		
Maximum Reimbursement:	$1,000,000	**Total Amount Paid:**	$170,488.63

Occ No	Claim No	Audit Date	Paid Date	Amt Submitted	Amt Ineligible	Amt Paid
A	1	1993-03-04	1993-10-05	$184,830.94	$5,369.22	$170,488.63

Substances

Substance	Type	Est Amt Released	Units
Gasoline - Unleaded and Leaded	Petroleum		
Petroleum - Unknown Type	Petroleum		

Engine Waste Oil (WASTE OIL, WHITE GAS)	Petroleum		

Who

Role	Name/Address
Responsible Party	COFFARO'S SERVICE 1030 E NORTH AVE MILWAUKEE, WI 53212

For Additional Information, Please Contact

JENNIFER DORMAN 414-263-8683 jennifer.dorman@wisconsin.gov

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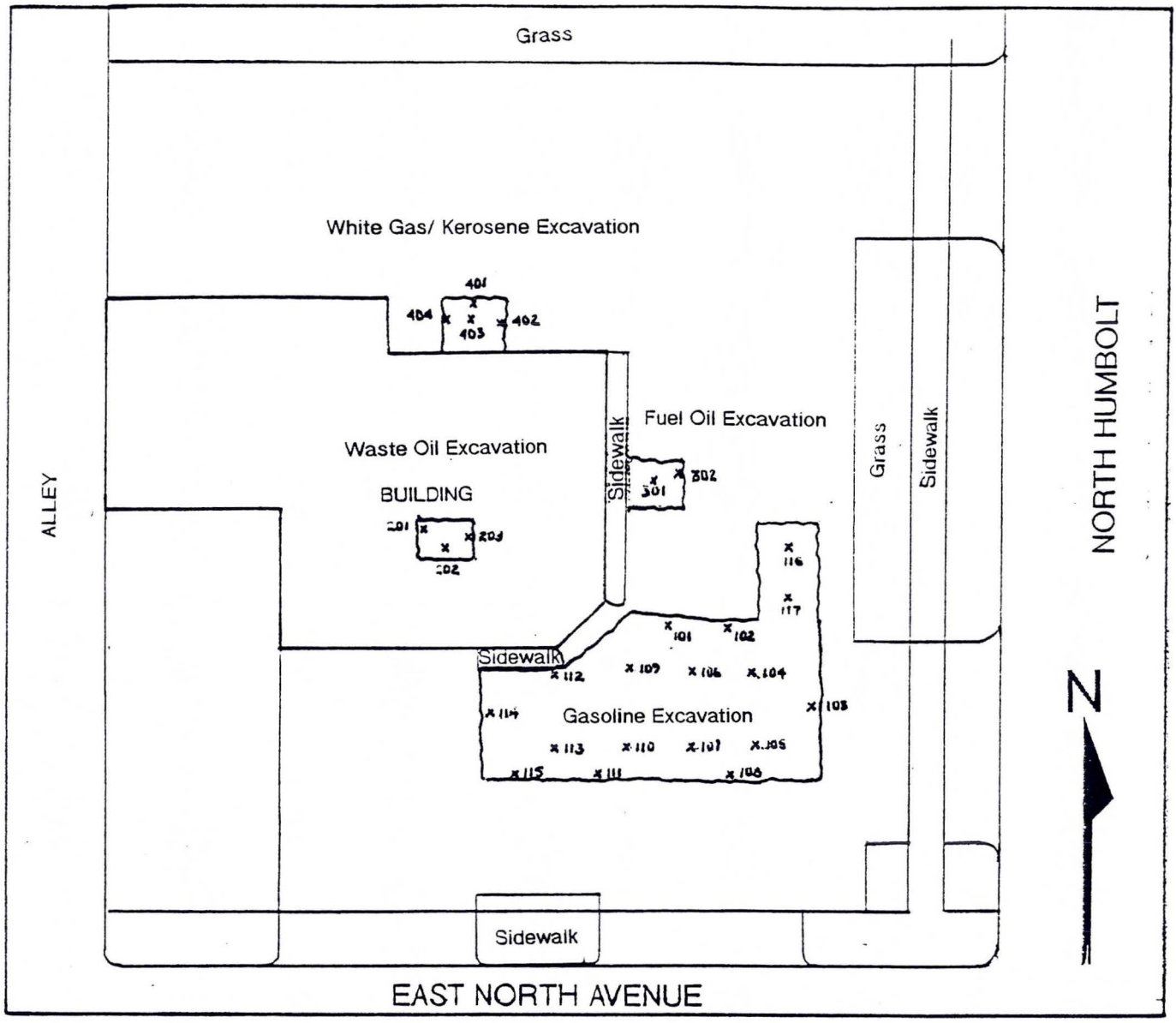
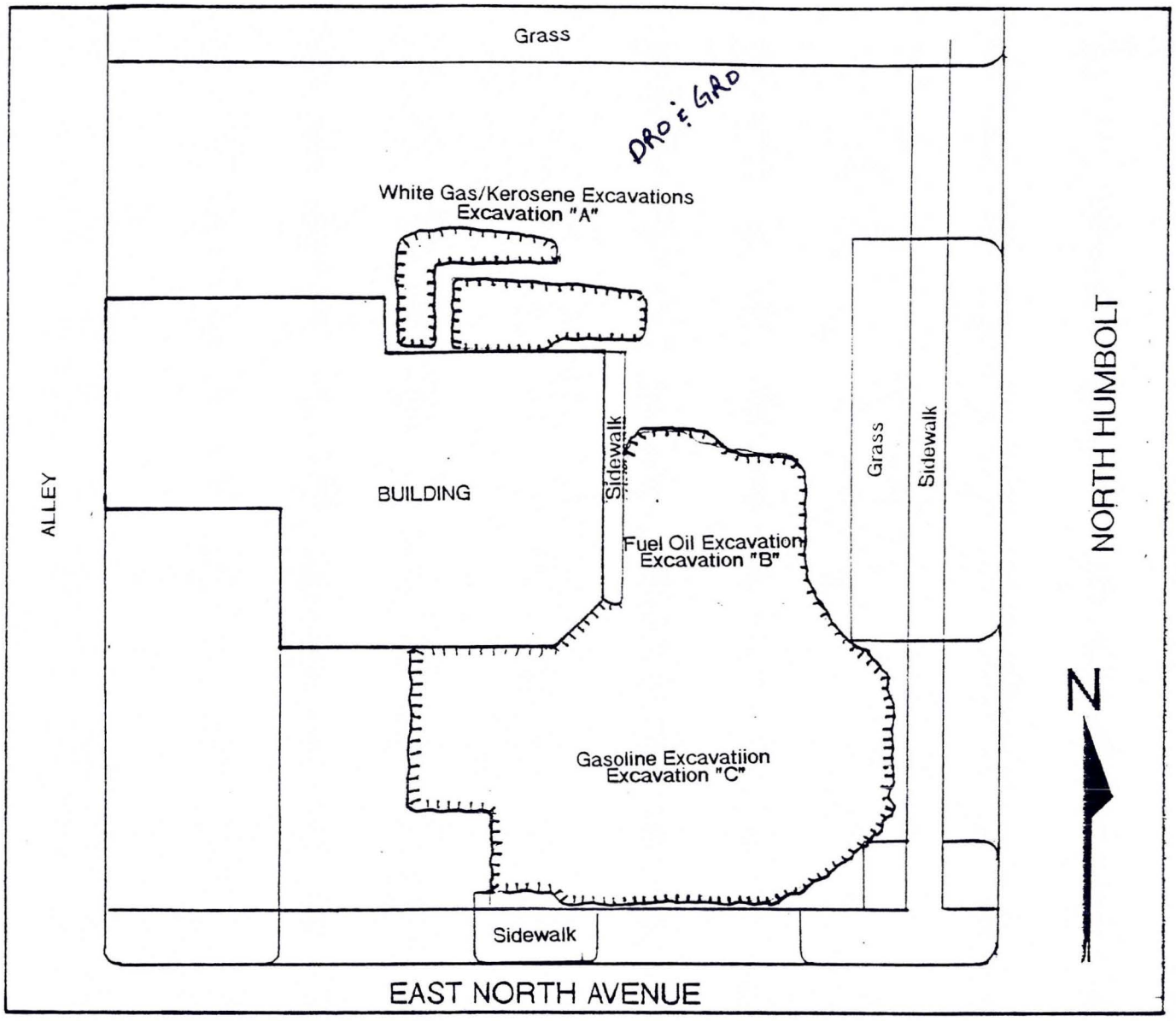


SIGMA ENVIRONMENTAL SERVICES INC.	FIGURE 3	
SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED
TANK CLOSURE SAMPLE LOCATIONS		
Coffaro's 1030 E. North Avenue Milwaukee Wisconsin		DRAWING NUMBER

West Allis Blueprint G 1967 MILW 547665



ΣSIGMA ENVIRONMENTAL SERVICES INC.	FIGURE 6	
SCALE:	APPROVED BY:	DRAWN BY
DATE:		REVISED
EXCAVATION LOCATIONS		
Coffaro's 1030 E. North Avenue Milwaukee, Wisconsin		DRAWING NUMBER

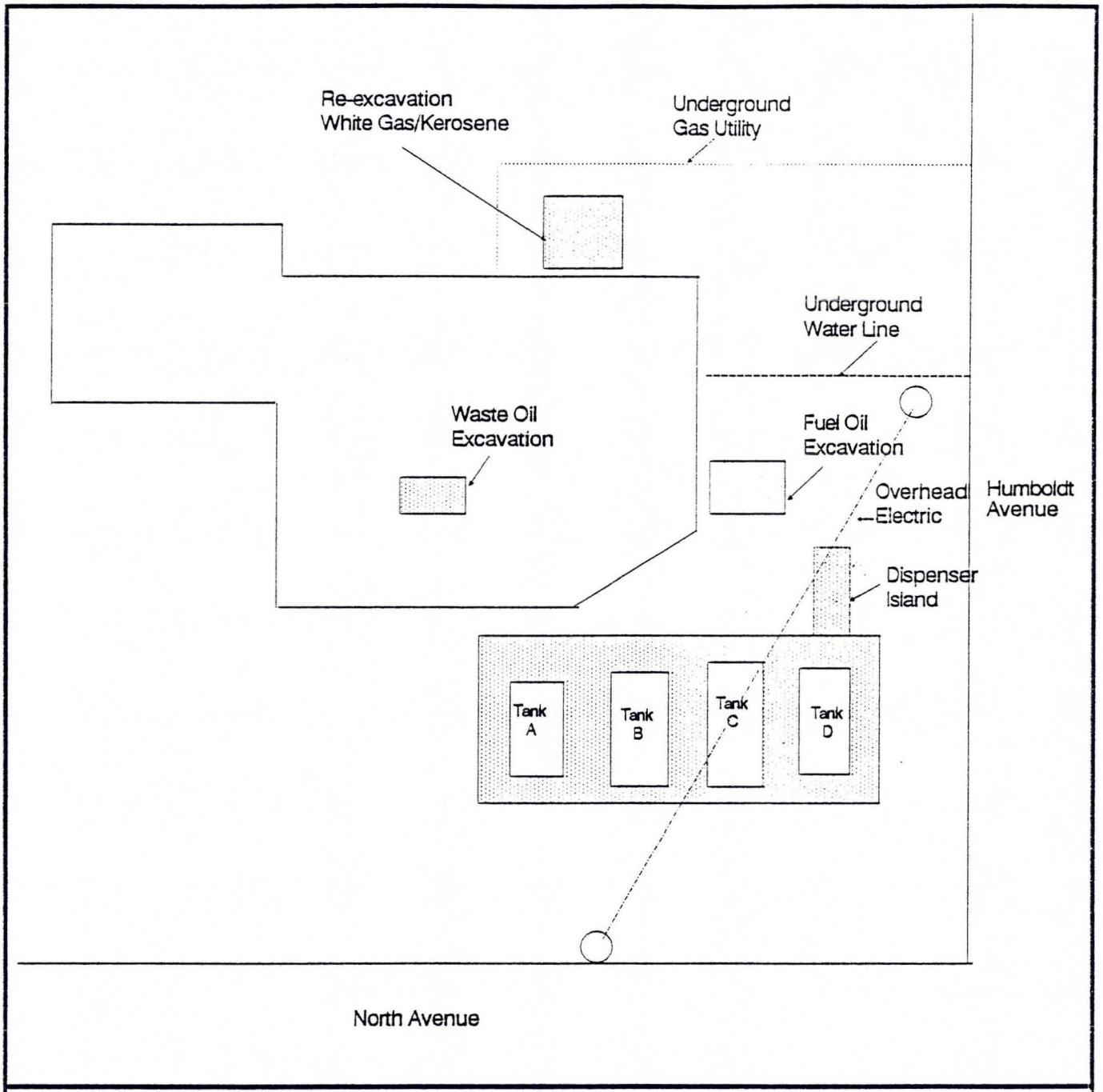


FIGURE 2

APPROXIMATE SCALE

0 20 40 FEET

SITE PLAN LOCATION MAP

Coffaro's Service Station
1030 East North Avenue
Milwaukee, Wisconsin

North

LEGEND

- Water Utility
- Gas Utility
- Electric

3.3 Site History/Background. According to a representative from Coffaro's Service Station, the actual ages of the tanks are unknown. The following is a list of tank contents and capacities:

CONTENTS	CAPACITY
Unknown Petroleum Product	2000 Gallons
Fuel Oil	550 Gallons
Waste Oil	550 Gallons
Unleaded Gasoline	8000 Gallons
Unleaded Gasoline	6000 Gallons
Unleaded Gasoline	6000 Gallons

All tanks were constructed of steel.

4.0 FIELD OBSERVATIONS

4.1 General Observations. On June 3 and 4, 1991, Sigma personnel observed the excavation and removal of one (1) 2000 gallon UST (Tank A), petroleum contents unknown; two (2) 6000 gallon gasoline USTs (Tanks B and C respectively); and one (1) 8000 gallon gasoline UST (Tank D), from one excavation (Excavation 1). In addition, Sigma personnel observed the excavation and removal of one (1) 550 gallon waste oil UST (Excavation 2); one (1) 550 gallon waste oil UST (Excavation 2); one (1) 550 gallon fuel oil UST (Excavation 3); and associated piping of each of the aforementioned tanks (Tank Inventory Forms SBD-7437, Appendix A). In addition to the above-mentioned USTs, a white gas/kerosene pit was re-excavated for soil sample collection (Excavation 4). The ambient temperature was approximately 72°, with partly cloudy skies and breezy.

Prior to the UST removals, excess product and free liquids were pumped out of the tanks to a level of approximately two inches above the bottom of the tank.

After product removal, the USTs were removed from the excavation intact and visually inspected for their structural integrity. The 2000 gallon tank (Tank A) had holes at each end and showed signs of pitting. The west 6000 gallon tank (Tank B) showed signs of pitting, but no holes were apparent. The 8000 gallon tank (Tank C) had a hole at the base of the south end; the east 6000 gallon tank (Tank D) showed pitting, however no holes. The four aforementioned tanks were oriented in a north/south direction.

The overall dimensions of Excavation 1, gasoline tanks, were 27 feet wide, 45 feet long and 12 feet deep. Odor and soil staining was apparent in the excavation.

The 550 gallon waste oil UST was inspected for its structural integrity. Several holes were noted in the tank along with severe pitting. The tank was oriented in an east-west direction within the excavation; the excavation was located inside of the service station building.

The dimensions of Excavation 2, waste oil tank, were 6 feet wide, 9½ feet long, and 6 feet deep. A sewer line ran along the south wall of the excavation, a water line along the east wall, and a former building foundation along the north wall of the excavation.

The 550 gallon fuel oil UST was inspected for its structural integrity. Several holes were noted at the bottom of the tank and was scattered with pitting. The tank was oriented in an east/west direction within the excavation.

The dimensions of Excavation 3, fuel oil tank, was 8 feet wide, 10 feet long and 6 feet deep. A sewer line was encountered in the southwest corner of the fuel oil tank excavation and a former building foundation ran along the north wall of the excavation. A strong odor was detected in the excavation.

A previous excavation which contained a 550 gallon white gas/kerosene which was removed in 1988, was re-excavated (Excavation 4) for soil sample collection. The dimensions of the re-excavation were 12 feet wide, 12 feet long and 7 feet deep. Stained soil was visible in the excavation and a strong odor was apparent.

4.2 Excavation Geology/Hydrogeology. The lithosequence, as evidenced during excavation, consisted of two distinct units.

- The upper unit, imported fill consisted of silty sand and gravel from one to four (1-4) feet below ground surface.

- The underlying unit lies a red-brown silty clay with traces of sand.

4.3 Site Topography and Drainage. The overall topography is classified as rolling with surficial; drainage of the site being toward the southeast toward the Milwaukee River; however, surficial drainage is mainly controlled by storm sewer.

4.4 Underground Utilities. The site is served with electricity, water, gas, sewer and communication lines. Electricity extends in a north/south direction along Humboldt Avenue and in an east/west direction along North Avenue. Water and gas enter the site from Humboldt Avenue. Communication lines run in an east/west direction along North Avenue. The buried utilities potentially provide a transport mechanism for contaminant migration.

5.0 FIELD PROCEDURES/METHODOLOGIES

5.1 Sample Collection Techniques. Soil samples were collected in locations required by the WDNR from within the excavations.

Samples were collected at base areas and side wall areas, where accessible, within each excavation utilizing a hand trowel three to four inches beyond the surface. The hand trowel was decontaminated with an alconox soap solution, rinsed with hexane and triple rinsed with deionized water between each sampling location. Two (2) samples were collected from each sampling location and immediately containerized. Preferential sample collection was given to areas visibly stained or where odors were evident. The first sample was contained in a four-ounce glass jar and sealed with a teflon lined, screw-on cap. The sample jar was filled tot he top so that no headspace remained. Each sample was properly labeled and placed in a cooler with ice for transport tot eh laboratory for analysis. The second sample was contained in a clean, four-ounce glass jar and sealed with a screw-on cap. The sample jar was filled approximately ½ to ¾ full to allow for headspace screening.

Confirmatory soil samples were collected from the base and sidewalls of the excavations. Sample locations can be found in Figures 3 and 4. The Chain-of-Custody document and laboratory reports are presented as Appendix B and C, respectively.

5.2 Field Screening. A Microtip Photoionization Detector (PID) was used to screen each soil sample for the presence of volatile organic compounds by means of headspace analysis. The PID utilized a 10.6 electron volt (eV) lamp, calibrated in the field for direct response to 100 parts per million (ppm) isobutylene. Prior to headspace analysis, each sample was allowed to equilibrate to approximately 70° F. and vigorously agitated to break-up large pieces of soil and facilitate vapor release. Soil sample headspace analysis results are summarized in Tables 1-4.

TABLE 1 - GASOLINE
EXCAVATION 1
PHOTOIONIZATION DETECTOR VALUES AND LABORATORY ANALYSIS

Sample I.D.	Location	Depth	PID Values	TPH Laboratory Analysis
101	North Wall-West	6'	27.5	<4.0
102	North Wall-East	6'	315.0	<4.0
103	East Wall	6'	40.0	<4.0
104	Tank D, North Base	12'	45.8	<4.0
105	Tank D, South Base	12'	229.0	55
106	Tank C, North Base	12'	108.0	17
107	Tank C, South Base	12'	338.0	47
108	South Wall-East	6'	1045.0	7.5
109	Tank B, North Base	12'	87.0	<4.0
110	Tank B, South Base	12'	149.0	43.0
111	South Wall-West	6'	1081.0	3400.0
112	Tank A, North Base	11'	221.0	10.0
113	Tank A, South Base	11'	260.0	<4.0
114	West Wall	6'	117.0	4.4
115	Dispenser Island-Excavation	3'	1867.0	170.0
116	Dispenser Island-North	3'	515.0	56.0
117	Dispenser Island-South	3'	4091.0	600.0

KEY: All results expressed in parts per million

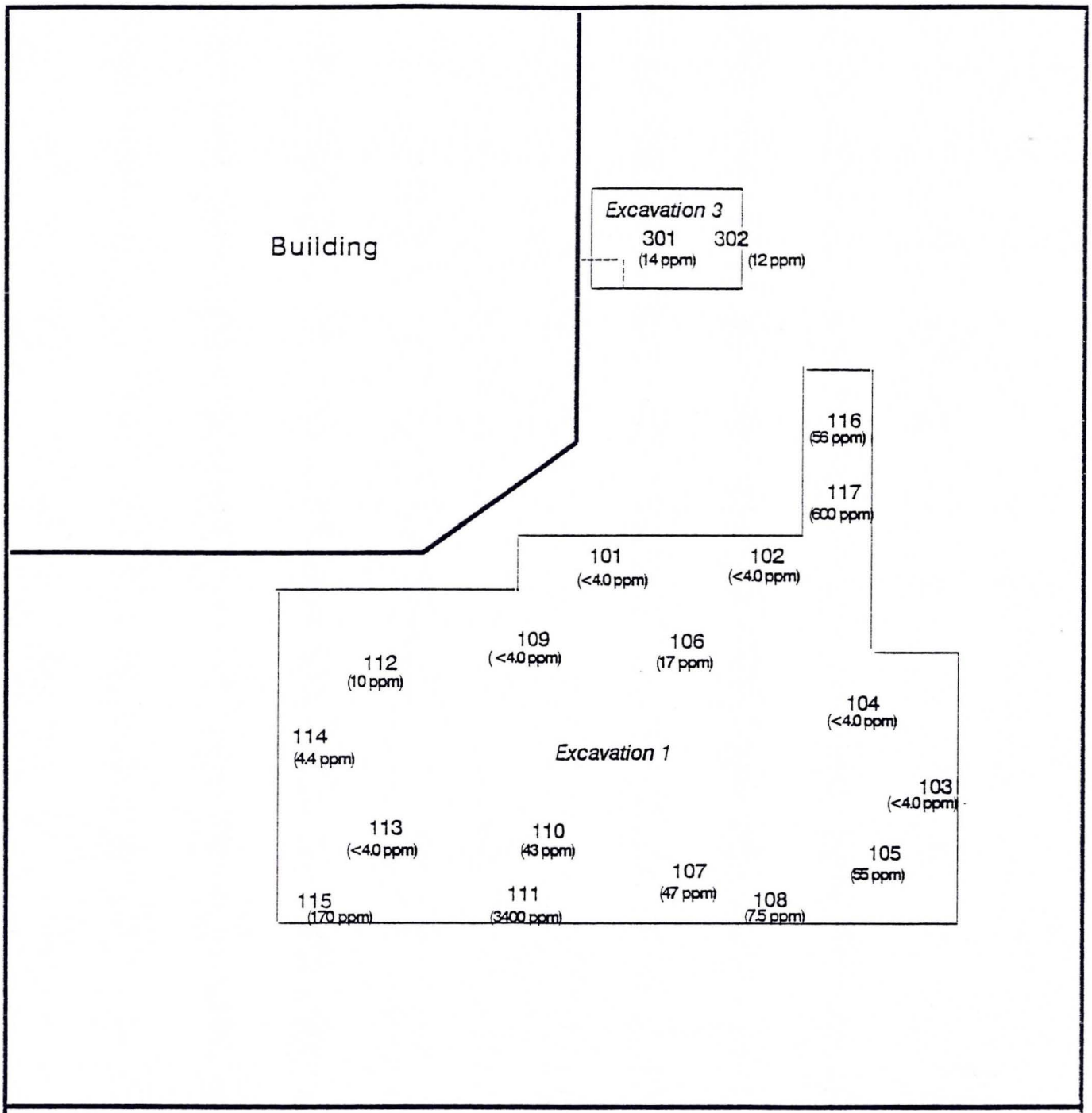


FIGURE 3

APPROXIMATE SCALE

0 10 20 Feet

SAMPLE LOCATION MAP

Excavations 1 and 3

Coffaro's Service Station
1030 East North Avenue
Milwaukee, Wisconsin

North

LEGEND

----- Buried Sewer Utility

ppm Total Petroleum Hydrocarbons

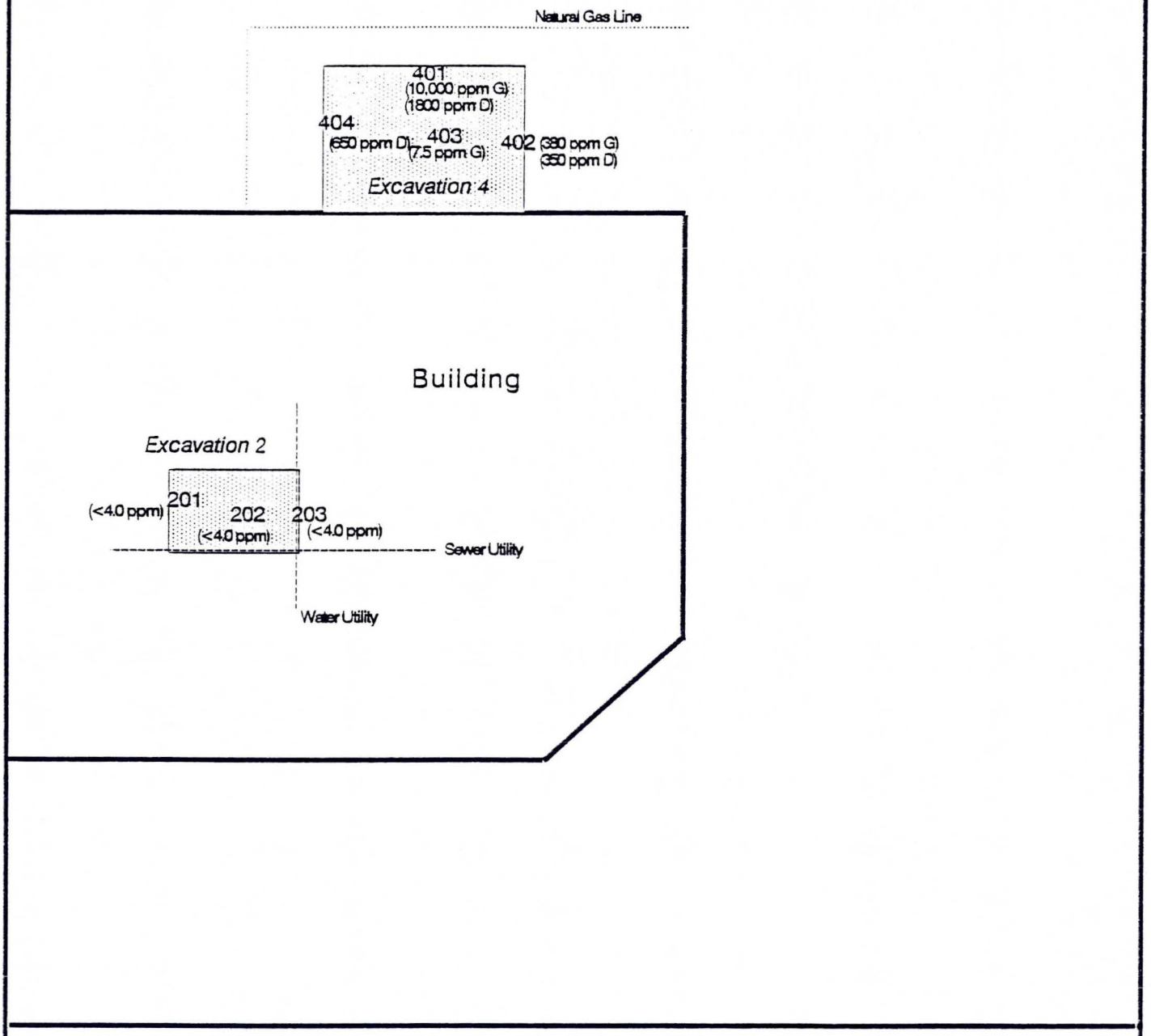


FIGURE 4

APPROXIMATE SCALE

0 10 20 Feet

SAMPLE LOCATION MAP

Excavations 2 and 4

Coffaro's Service Station
1030 East North Avenue
Milwaukee, Wisconsin

North

LEGEND

-----	Buried Sewer and Water Utility
.....	Buried Natural Gas Line
ppm	Total Petroleum Hydrocarbons
G	Gasoline
D	Diesel

TABLE 2 - WASTE OIL
EXCAVATION 2
PHOTOIONIZATION DETECTOR VALUES AND LABORATORY ANALYSIS

Sample I.D.	Location	Depth	PID Values	TPH Laboratory Analysis
201	West Wall	3'	30.3	<4.0
202	Base	6'	27.9	<4.0
203	East Wall	3'	31.3	<4.0

TABLE 3 - FUEL OIL
EXCAVATION 3
PHOTOIONIZATION DETECTOR VALUES AND LABORATORY ANALYSIS

Sample I.D.	Location	Depth	PID Values	TPH Laboratory Analysis
301	Base	6'	165.0	14.0
202	East Wall	4'	116.0	12.0

TABLE 4 - RE-EXCAVATION WHITE GAS/KEROSENE
EXCAVATION 4
PHOTOIONIZATION DETECTOR VALUES AND LABORATORY ANALYSIS

Sample I.D.	Location	Depth	PID Values	TPH Laboratory Analysis
401	North Wall	4'	2856	10000 Gasoline 1800 Diesel
402	East Wall	4'	2573	380 Gasoline 350 Diesel
403	Base	7'	120	7.5 Gasoline
404	West Wall	4'	931	650.0 Diesel

5.3 Tank Cleaning and Removal. As previously noted, during the initial excavation the USTs were removed intact. After purging the USTs vapor free, the tanks were cleaned by National Tank Services, Inc., West Allis, Wisconsin. The Tank Inventory Forms (SBD 7437) are presented in Appendix A. The sludge residual was containerized in DOT 17-H 55-gallon drums. A one-quarter representative sample was collected from the drummed waste for laboratory analysis and disposal permitting.

6.0 LABORATORY ANALYSIS/WISCONSIN REGULATIONS

6.1 Confirmatory Soil Sample Analysis. Seventeen (17) confirmatory samples from Excavation 1 and adjacent dispensing island, accompanied with a Chain-of-

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name or FID below to view Location Details page for this Activity. Other Activities, if present, may be accessed from Location Details.

< Basic Search

CONTINUING OBLIGATIONS APPLY

Due to remaining contamination, continuing obligations apply to one or more properties. For information specific to the continuing obligations review the documentation below. Prior to constructing or reconstructing a water supply well, you need to contact DNR for approval of well construction specifications.

03-41-004824 JACQUEZ SERVICE

CLOSED LUST

Location Name (Click Location Name or FID to View Location Details)			County	WDNR Region
PARKSIDE SERVICE			MILWAUKEE	SOUTHEAST
Address			Municipality	
2963 N HUMBOLDT AVE			MILWAUKEE	
PLSS Description	Latitude	Longitude	Google Maps	RR Sites Map
NE 1/4 of the NW 1/4 of Sec 16, T07N, R22E	43.0726611	-87.8980145	CLICK TO VIEW	CLICK TO VIEW
Additional Location Description			Size (Acres)	Facility ID
			UNKNOWN	241142660

Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action
DNR RR	53212-2631-63		1995-02-28	2003-07-17	2013-07-02

Characteristics

PECFA Tracked?	EPA NPL Site?	EPA Superfund?	PECFA Funds Eligible?	Above Ground Tank?	Drycleaner?	Co-Contamination?	WI DOT Site?	COs Apply?
Yes	No	No	Yes	No	No	No	No	Yes

Actions

Place Cursor Over Action Code to View Description

Date	Code	Name	Comment
1995-02-28	1	Notification of Hazardous Substance Discharge	
1995-03-01	2	Responsible Party (RP) letter sent	RP LETTER
1995-05-03	99	Miscellaneous	MAILED LETTER REQUESTING WORKPLAN BY 5/10/95
1995-05-16	2	Responsible Party (RP) letter sent	NEW RP LETTER TO CORRECT RP
1996-11-05	36	Site Investigation Workplan (SIWP) Approved	
2003-03-14	37	Site Investigation Report (SIR) Received (non-fee)	*** SITE INVESTIGATION DETERMINED BY DSPS TO BE COMPLETE - FROM DSPS DATA INTERCHANGE ***
2003-03-24	76	Activity Transferred to DSPS (formerly Commerce)	
2003-04-08	50	GIS Registry Site	Autopopulated from 700/710 entry
2003-04-08	710	Database Fee Paid for Soil Continuing Obligation(s)	REC'D CK# 00113537 $200.00
2003-04-08	700	Database Fee Paid for Groundwater Continuing Obligation(s)	REC'D CK# 00113537 $250.00

2003-06-30	84	Remaining Actions Needed	*** Conditional Closure from Commerce Data Interchange ***
2003-07-17	232	Continuing Obligation - Residual Soil Contamination	*** AUTO POPULATED AT FINAL CLOSURE DUE TO 710 ACTION ***
2003-07-17	56	Continuing Obligation(s) Applied	AUTO-POPULATED AS REPLACEMENT FOR CODE 50
For Code 56:	20030717_56_CO_Packet.pdf Click to Download or Open		
2003-07-17	11	Activity Closed	*** NR726 Closure from Commerce Data Interchange ***
2003-07-17	236	Continuing Obligation - Residual GW Contamination	*** AUTO POPULATED AT FINAL CLOSURE DUE TO 700 ACTION ***
2013-07-02	89	DSPS (formerly Commerce) Transferred Back to DNR	PECFA PROGRAM TRANSFER 2013-2015 STATE BUDGET

Other Documents and Images
Not Linked to Actions Above
Click File Name to Download or Open

The file below contains permanent records related to the site available at the time the paper Site File was scanned and uploaded. Records withheld by the department due to confidentiality, attorney-client privilege, and other sensitive records, as well as lab data, may not be included. Additional records associated with the site may or may not be accessible through an open records request.

Site File	0341004824_Site_File.pdf

PECFA Claims Paid or Pending Payment
Payments made from the Petroleum Environmental Cleanup Fund Award

PECFA Site Name:	Jaquez/Parkside Service					
Maximum Reimbursement:	$1,000,000			**Total Amount Paid:**		$54,975.00
Occ No	**Claim No**	**Audit Date**	**Paid Date**	**Amt Submitted**	**Amt Ineligible**	**Amt Paid**
A	1	2004-02-11	2004-03-29	$68,761.60	$10,761.60	$54,975.00

Substances

Substance	Type	Est Amt Released	Units
Gasoline - Unleaded and Leaded (UNLEADED GAS)	Petroleum		
Petroleum - Unknown Type (FUEL OIL)	Petroleum		
Engine Waste Oil (WASTE OIL)	Petroleum		

Who

Role	Name/Address
Responsible Party	DIRTY DOGS LLC 2211 N PROSPECT AVE MILWAUKEE, WI

For Additional Information, Please Contact

JENNIFER DORMAN 414-263-8683 jennifer.dorman@wisconsin.gov

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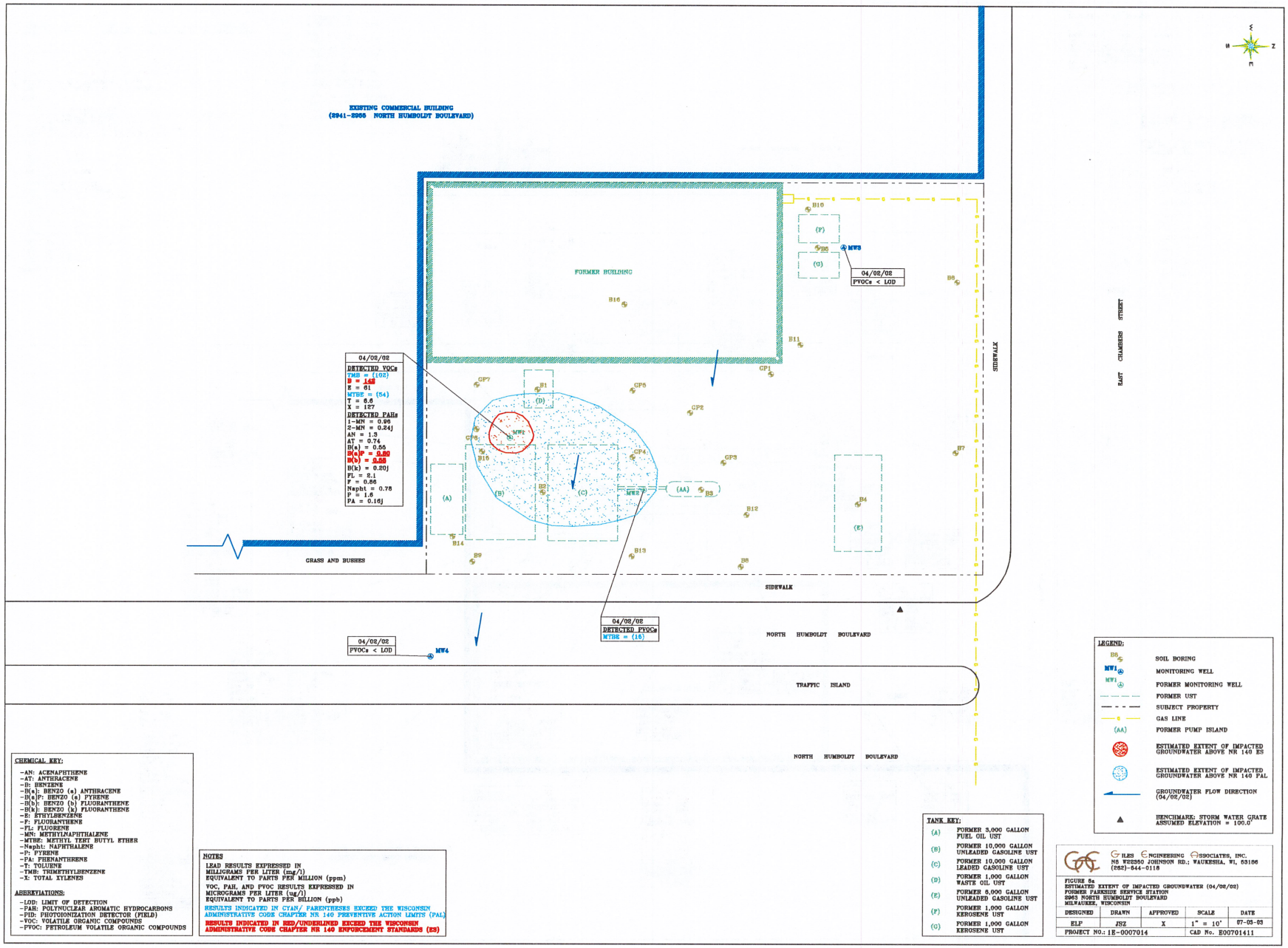
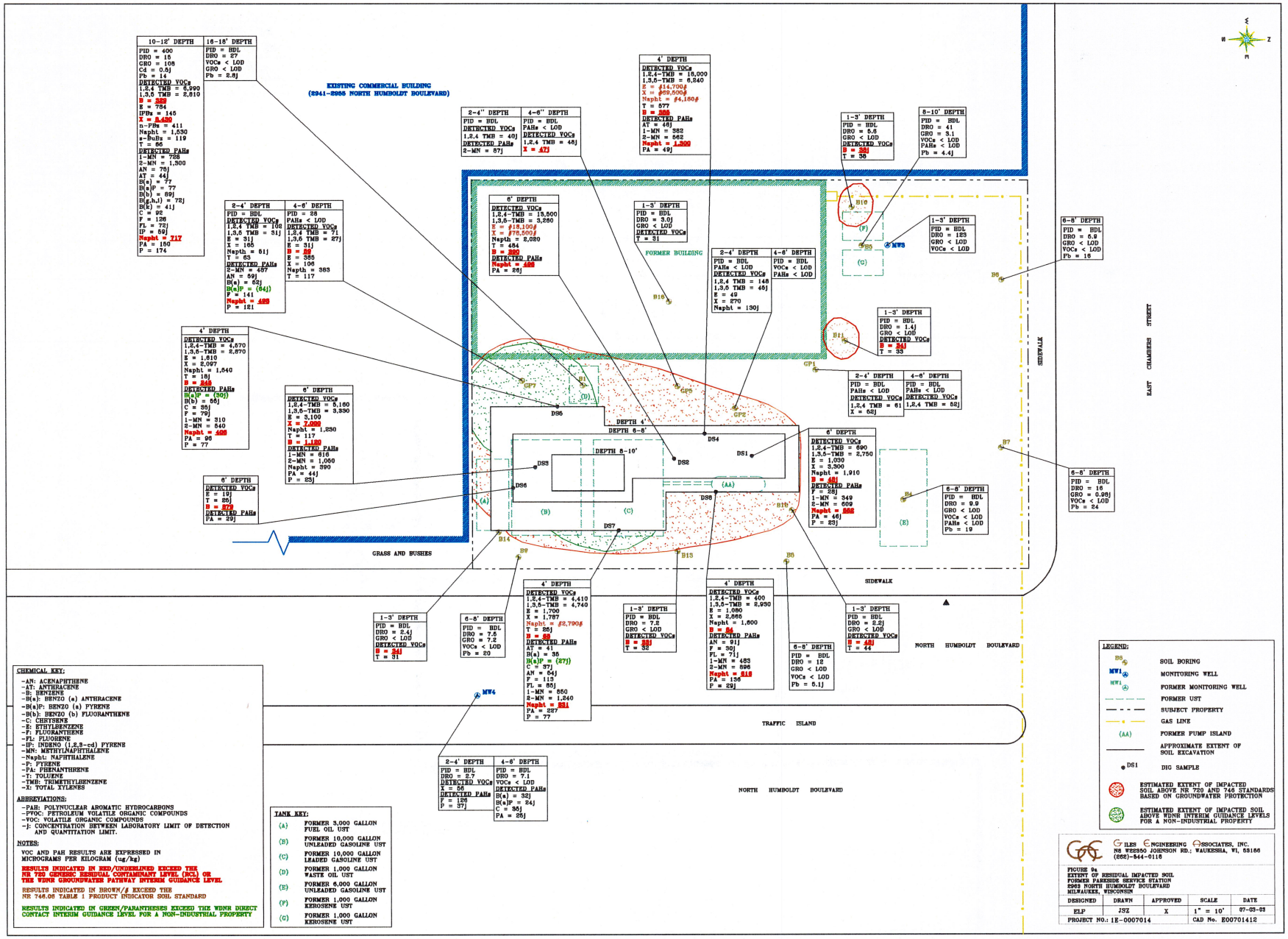

EXISTING COMMERCIAL BUILDING
(2941-2965 NORTH HUMBOLDT BOULEVARD)
FORMER BUILDING
04/02/02
PVOCs < LOD
04/02/02
DETECTED VOCs
TMB = (102)
B = 142
E = 61
MTBE = (54)
T = 8.6
X = 127
DETECTED PAHs
1-MN = 0.96
2-MN = 0.24j
AN = 1.3
AT = 0.74
B(a) = 0.55
B(a)P = 0.80
B(b) = 0.95
B(k) = 0.20j
FL = 2.1
F = 0.86
Naphl = 0.78
P = 1.6
PA = 0.16j
GRASS AND BUSHES
SIDEWALK
EAST CHAMBERS STREET
NORTH HUMBOLDT BOULEVARD
04/02/02
PVOCs < LOD
04/02/02
DETECTED PVOCs
MTBE = (16)
TRAFFIC ISLAND
NORTH HUMBOLDT BOULEVARD
LEGEND:
SOIL BORING
MONITORING WELL
FORMER MONITORING WELL
FORMER UST
SUBJECT PROPERTY
GAS LINE
FORMER PUMP ISLAND
ESTIMATED EXTENT OF IMPACTED GROUNDWATER ABOVE NR 140 ES
ESTIMATED EXTENT OF IMPACTED GROUNDWATER ABOVE NR 140 PAL
GROUNDWATER FLOW DIRECTION (04/02/02)
BENCHMARK: STORM WATER GRATE ASSUMED ELEVATION = 100.0'
CHEMICAL KEY:
-AN: ACENAPHTHENE
-AT: ANTHRACENE
-B: BENZENE
-B(a): BENZO (a) ANTHRACENE
-B(a)P: BENZO (a) PYRENE
-B(b): BENZO (b) FLUORANTHENE
-B(k): BENZO (k) FLUORANTHENE
-E: ETHYLBENZENE
-F: FLUORANTHENE
-FL: FLUORENE
-MN: METHYLNAPHTHALENE
-MTBE: METHYL TERT BUTYL ETHER
-Naphl: NAPHTHALENE
-P: PYRENE
-PA: PHENANTHRENE
-T: TOLUENE
-TMB: TRIMETHYLBENZENE
-X: TOTAL XYLENES
ABBREVIATIONS:
-LOD: LIMIT OF DETECTION
-PAH: POLYNUCLEAR AROMATIC HYDROCARBONS
-PID: PHOTOIONIZATION DETECTOR (FIELD)
-VOC: VOLATILE ORGANIC COMPOUNDS
-PVOC: PETROLEUM VOLATILE ORGANIC COMPOUNDS
NOTES
LEAD RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l) EQUIVALENT TO PARTS PER MILLION (ppm)
VOC, PAH, AND PVOC RESULTS EXPRESSED IN MICROGRAMS PER LITER (ug/l) EQUIVALENT TO PARTS PER BILLION (ppb)
RESULTS INDICATED IN CYAN/ PARENTHESES EXCEED THE WISCONSIN ADMINISTRATIVE CODE CHAPTER NR 140 PREVENTIVE ACTION LIMITS (PAL)
RESULTS INDICATED IN RED/UNDERLINED EXCEED THE WISCONSIN ADMINISTRATIVE CODE CHAPTER NR 140 ENFORCEMENT STANDARDS (ES)
TANK KEY:
(A) FORMER 5,000 GALLON FUEL OIL UST
(B) FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C) FORMER 10,000 GALLON LEADED GASOLINE UST
(D) FORMER 1,000 GALLON WASTE OIL UST
(E) FORMER 8,000 GALLON UNLEADED GASOLINE UST
(F) FORMER 1,000 GALLON KEROSENE UST
(G) FORMER 1,000 GALLON KEROSENE UST
ILES ENGINEERING ASSOCIATES, INC.
N6 W22350 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0118
FIGURE 5a
ESTIMATED EXTENT OF IMPACTED GROUNDWATER (04/02/02)
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN
DESIGNED ELP
DRAWN JSZ
APPROVED X
SCALE 1" = 10'
DATE 07-03-03
PROJECT NO.: 1E-0007014
CAD No. E00701411


10-12' DEPTH
PID = 400
DRO = 15
GRO = 108
Cd = 0.5j
Pb = 14
DETECTED VOCs
1,2,4 TMB = 5,990
1,3,5 TMB = 2,810
B = 329
E = 754
IPBz = 145
X = 3,430
n-PBz = 411
Napht = 1,530
s-BuBz = 119
T = 66
DETECTED PAHs
1-MN = 728
2-MN = 1,300
AN = 75j
AT = 44j
B(a) = 77
B(a)P = 77
B(b) = 89j
B(g,h,i) = 72j
B(k) = 41j
C = 92
F = 126
FL = 72j
IP = 69j
Napht = 717
PA = 190
P = 174
16-18' DEPTH
PID = BDL
DRO = 27
VOCs < LOD
GRO < LOD
Pb = 2.8j
EXISTING COMMERCIAL BUILDING
(2941-2965 NORTH HUMBOLDT BOULEVARD)
2-4' DEPTH
PID = BDL
DETECTED VOCs
1,2,4 TMB = 40j
DETECTED PAHs
2-MN = 87j
4-6' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 48j
X = 47j
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 16,000
1,3,5-TMB = 6,840
E = $14,700$
X = $69,500$
Napht = $4,180$
T = 577
B = 986
DETECTED PAHs
AT = 48j
1-MN = 382
2-MN = 662
Napht = 1,300
PA = 49j
1-3' DEPTH
PID = BDL
DRO = 5.6
GRO < LOD
DETECTED VOCs
B = 38j
T = 36
6-10' DEPTH
PID = BDL
DRO = 41
GRO = 3.1
VOCs < LOD
PAHs < LOD
Pb = 4.4j
6' DEPTH
DETECTED VOCs
1,2,4-TMB = 13,500
1,3,5-TMB = 3,250
E = $18,100$
X = $75,500$
Naphth = 2,020
T = 484
B = 380
DETECTED PAHs
Napht = 185
PA = 26j
1-3' DEPTH
PID = BDL
DRO = 3.0j
GRO < LOD
DETECTED VOCs
T = 31
FORMER BUILDING
2-4' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 148
1,3,5 TMB = 45j
E = 49
X = 270
Naphth = 130j
4-6' DEPTH
PID = BDL
VOCs < LOD
PAHs < LOD
1-3' DEPTH
PID = BDL
DRO = 12S
GRO < LOD
VOCs < LOD
6-8' DEPTH
PID = BDL
DRO = 5.9
GRO < LOD
VOCs < LOD
Pb = 16
1-3' DEPTH
PID = BDL
DRO = 1.4j
GRO < LOD
DETECTED VOCs
B = 54j
T = 33
2-4' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 61
X = 52j
4-6' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 52j
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 4,670
1,3,5-TMB = 2,870
E = 1,610
X = 2,027
Naphth = 1,540
T = 18j
B = 248
DETECTED PAHs
B(a)P = (30j)
B(b) = 55j
C = 35j
F = 79j
1-MN = 310
2-MN = 540
Naphth = 408
PA = 96
P = 77
6' DEPTH
DETECTED VOCs
1,2,4-TMB = 5,160
1,3,5-TMB = 3,330
E = 3,100
X = 7,000
Naphth = 1,230
T = 117
B = 1,180
DETECTED PAHs
1-MN = 616
2-MN = 1,000
Naphth = 390
PA = 44j
P = 25j
6' DEPTH
DETECTED VOCs
E = 19j
T = 25j
B = 879
DETECTED PAHs
PA = 29j
DEPTH 4'
DEPTH 6-8'
DEPTH 8-10'
DS1
DS2
DS3
DS4
DS5
DS6
DS7
DS8
GP1
GP2
GP3
GP4
GP5
GP6
GP7
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B18
(A)
(B)
(C)
(D)
(E)
(F)
(G)
(AA)
MW3
MW4
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 16,000
1,3,5-TMB = 6,840
E = $14,700$
X = $69,500$
Naphth = $4,180$
T = 577
B = 986
DETECTED PAHs
AT = 48j
1-MN = 382
2-MN = 662
Naphth = 1,300
PA = 49j
6' DEPTH
DETECTED VOCs
1,2,4-TMB = 690
1,3,5-TMB = 2,750
E = 1,020
X = 3,300
Naphth = 1,910
B = 48j
DETECTED PAHs
F = 28j
1-MN = 349
2-MN = 609
Naphth = 662
PA = 46j
P = 25j
6-8' DEPTH
PID = BDL
DRO = 9.9
GRO < LOD
VOCs < LOD
PAHs < LOD
Pb = 19
6-8' DEPTH
PID = BDL
DRO = 16
GRO = 0.98j
VOCs < LOD
Pb = 24
1-3' DEPTH
PID = BDL
DRO = 2.4j
GRO < LOD
DETECTED VOCs
B = 34j
T = 31
6-8' DEPTH
PID = BDL
DRO = 7.5
GRO = 7.2
VOCs < LOD
Pb = 20
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 4,410
1,3,5-TMB = 4,740
E = 1,700
X = 1,787
Naphth = $2,790$
T = 25j
B = 60
DETECTED PAHs
AT = 41
B(a) = 35
B(a)P = (27j)
C = 37j
AN = 64j
F = 113
FL = 85j
1-MN = 550
2-MN = 1,240
Naphth = 831
PA = 227
P = 77
1-3' DEPTH
PID = BDL
DRO = 7.8
GRO < LOD
DETECTED VOCs
B = 38j
T = 32
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 400
1,3,5-TMB = 2,930
E = 1,080
X = 2,666
Naphth = 1,600
B = 84
DETECTED PAHs
AN = 91j
F = 30j
FL = 71j
1-MN = 483
2-MN = 896
Naphth = 818
PA = 136
P = 29j
6-8' DEPTH
PID = BDL
DRO = 12
GRO < LOD
VOCs < LOD
Pb = 6.1j
1-3' DEPTH
PID = BDL
DRO = 2.2j
GRO < LOD
DETECTED VOCs
B = 42j
T = 44
2-4' DEPTH
PID = BDL
DRO = 2.7
DETECTED VOCs
X = 56
DETECTED PAHs
F = 19S
P = 37j
4-6' DEPTH
PID = BDL
DRO = 7.1
VOCs < LOD
DETECTED PAHs
B(a) = 32j
B(a)P = 24j
C = 35j
PA = 25j
GRASS AND BUSHES
SIDEWALK
SIDEWALK
EAST CHAMBERS STREET
NORTH HUMBOLDT BOULEVARD
TRAFFIC ISLAND
NORTH HUMBOLDT BOULEVARD
N
S
W
E
CHEMICAL KEY:
-AN: ACENAPHTHENE
-AT: ANTHRACENE
-B: BENZENE
-B(a): BENZO (a) ANTHRACENE
-B(a)P: BENZO (a) PYRENE
-B(b): BENZO (b) FLUORANTHENE
-C: CHRYSENE
-E: ETHYLBENZENE
-F: FLUORANTHENE
-FL: FLUORENE
-IP: INDENO (1,2,3-cd) PYRENE
-MN: METHYLNAPHTHALENE
-Naph: NAPHTHALENE
-P: PYRENE
-PA: PHENANTHRENE
-T: TOLUENE
-TMB: TRIMETHYLBENZENE
-X: TOTAL XYLENES
ABBREVIATIONS:
-PAH: POLYNUCLEAR AROMATIC HYDROCARBONS
-PVOC: PETROLEUM VOLATILE ORGANIC COMPOUNDS
-VOC: VOLATILE ORGANIC COMPOUNDS
-J: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.
NOTES:
VOC AND PAH RESULTS ARE EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg)
RESULTS INDICATED IN BED/UNDERLINED EXCEED THE NR 720 GENERIC RESIDUAL CONTAMINANT LEVEL (RCL) OR THE WDNR GROUNDWATER PATHWAY INTERIM GUIDANCE LEVEL
RESULTS INDICATED IN BROWN/$ EXCEED THE NR 746.06 TABLE 1 PRODUCT INDICATOR SOIL STANDARD
RESULTS INDICATED IN GREEN/PARANTHESES EXCEED THE WDNR DIRECT CONTACT INTERIM GUIDANCE LEVEL FOR A NON-INDUSTRIAL PROPERTY
TANK KEY:
(A) FORMER 3,000 GALLON FUEL OIL UST
(B) FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C) FORMER 10,000 GALLON LEADED GASOLINE UST
(D) FORMER 1,000 GALLON WASTE OIL UST
(E) FORMER 6,000 GALLON UNLEADED GASOLINE UST
(F) FORMER 1,000 GALLON KEROSENE UST
(G) FORMER 1,000 GALLON KEROSENE UST
LEGEND:
SOIL BORING
MW1 MONITORING WELL
MW1 FORMER MONITORING WELL
FORMER UST
SUBJECT PROPERTY
GAS LINE
(AA) FORMER PUMP ISLAND
APPROXIMATE EXTENT OF SOIL EXCAVATION
DS1 DIG SAMPLE
ESTIMATED EXTENT OF IMPACTED SOIL ABOVE NR 720 AND 746 STANDARDS BASED ON GROUNDWATER PROTECTION
ESTIMATED EXTENT OF IMPACTED SOIL ABOVE WDNR INTERIM GUIDANCE LEVELS FOR A NON-INDUSTRIAL PROPERTY
GILES ENGINEERING ASSOCIATES, INC.
N8 W62250 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0118
FIGURE 9a
EXTENT OF RESIDUAL IMPACTED SOIL
FORMER PAKESIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN
DESIGNED ELP
DRAWN JSZ
APPROVED X
SCALE 1" = 10'
DATE 07-03-03
PROJECT NO.: 1E-0007014
CAD No. E00701412

TANK KEY:

(A)	FORMER 3,000 GALLON FUEL OIL UST
(B)	FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C)	FORMER 10,000 GALLON LEADED GASOLINE UST
(D)	FORMER 1,000 GALLON WASTE OIL UST
(E)	FORMER 6,000 GALLON UNLEADED GASOLINE UST
(F)	FORMER 1,000 GALLON KEROSENE UST
(G)	FORMER 1,000 GALLON KEROSENE UST

LEGEND:

B6	SOIL BORING
MW1	MONITORING WELL
MW1	FORMER MONITORING WELL
	FORMER UST
	SUBJECT PROPERTY
G	GAS LINE
(AA)	FORMER PUMP ISLAND
▲	BENCHMARK: STORM WATER GRATE ASSUMED ELEVATION = 100.0'

GILES ENGINEERING ASSOCIATES, INC.
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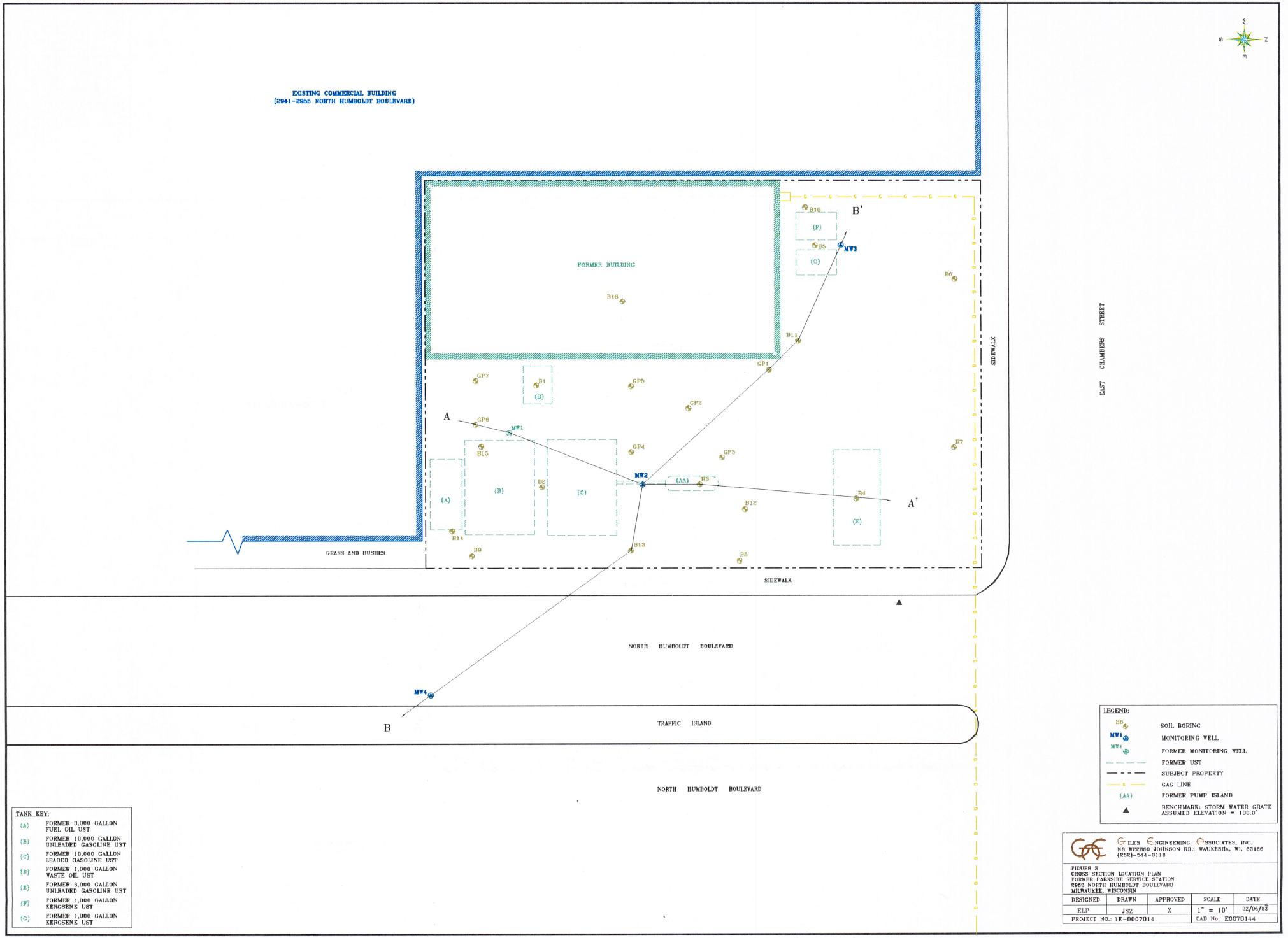
(262)-544-0118

FIGURE 2
SITE FEATURES AND BORING LOCATION PLAN
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	RH	X	1" = 10'	06/05/02

PROJECT NO.: 1E-0007014 | CAD No. E0070141



TANK KEY:

(A)	FORMER 3,000 GALLON FUEL OIL UST
(B)	FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C)	FORMER 10,000 GALLON LEADED GASOLINE UST
(D)	FORMER 1,000 GALLON WASTE OIL UST
(E)	FORMER 6,000 GALLON UNLEADED GASOLINE UST
(F)	FORMER 1,000 GALLON KEROSENE UST
(G)	FORMER 1,000 GALLON KEROSENE UST

LEGEND:

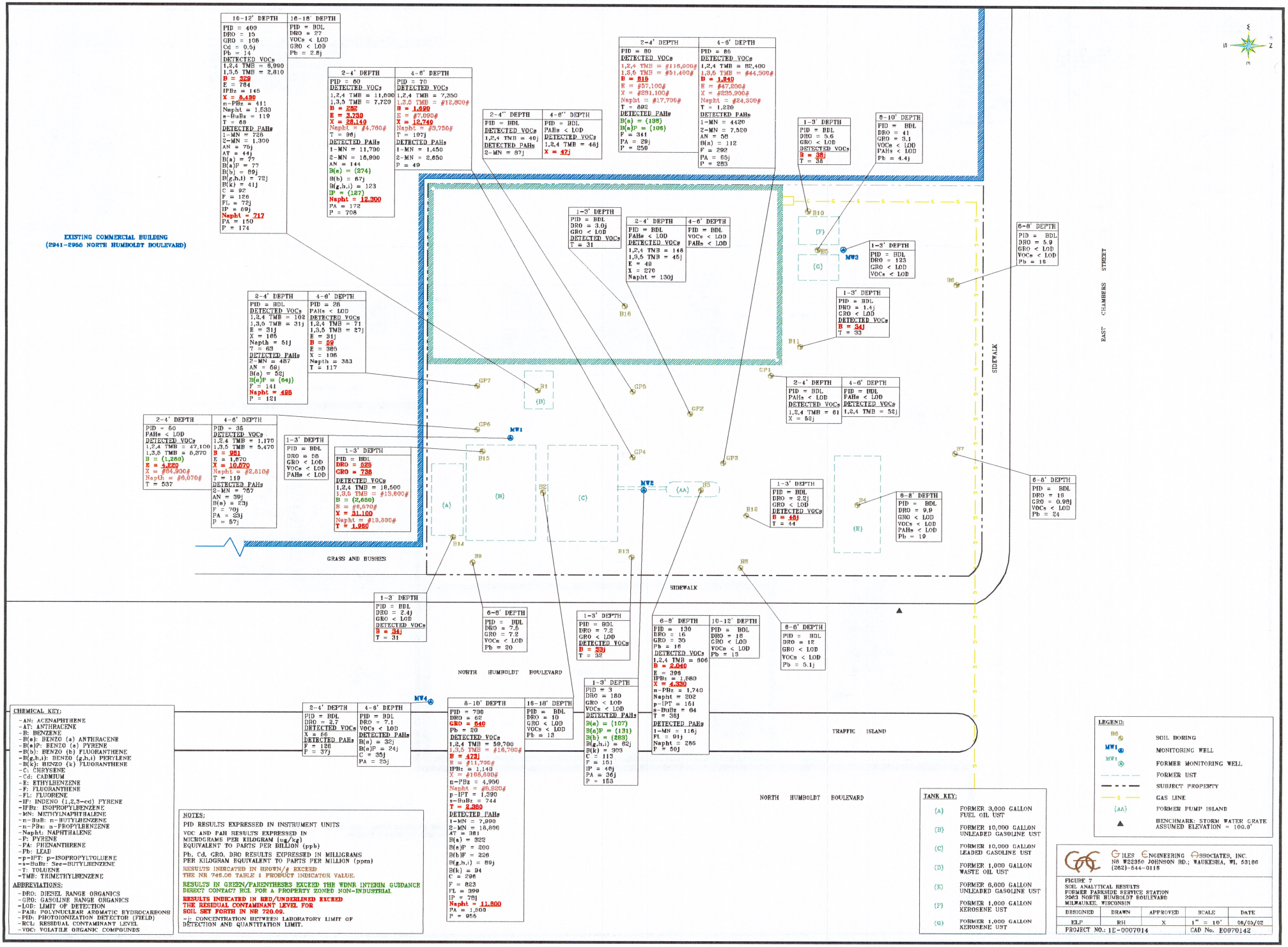
B6	SOIL BORING
MW1	MONITORING WELL
MW1	FORMER MONITORING WELL
	FORMER UST
	SUBJECT PROPERTY
G	GAS LINE
(AA)	FORMER PUMP ISLAND
▲	BENCHMARK: STORM WATER GRATE ASSUMED ELEVATION = 100.0'

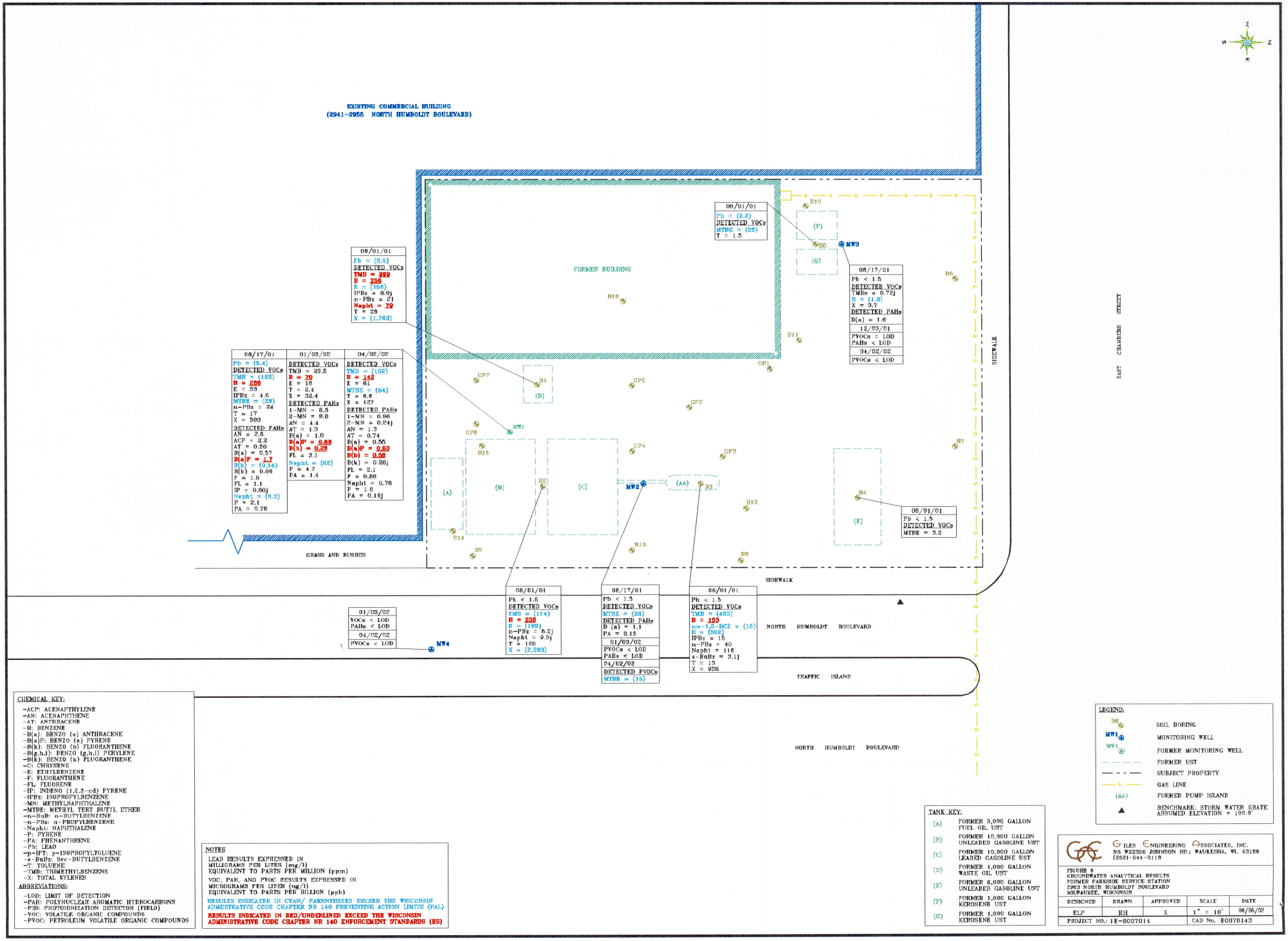
GILES ENGINEERING ASSOCIATES, INC.
N8 W22360 JOHNSON RD.; WAUKESHA, WI. 53186
(262)-544-0118

FIGURE 3
CROSS SECTION LOCATION PLAN
FORMER PARKSIDE SERVICE STATION
2965 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	JSZ	X	1" = 10'	02/06/03

PROJECT NO.: 1E-0007014 | CAD No. E0070144


EXISTING COMMERCIAL BUILDING
(2941-2955 NORTH HUMBOLDT BOULEVARD)
GRASS AND BUSHES
SIDEWALK
SIDEWALK
EAST CHAMBERS STREET
NORTH HUMBOLDT BOULEVARD
NORTH HUMBOLDT BOULEVARD
TRAFFIC ISLAND
10-12' DEPTH
PID = 400
DRO = 15
GRO = 108
Cd = 0.5j
Pb = 14
DETECTED VOCs
1,2,4 TMB = 6,990
1,3,5 TMB = 2,810
B = 329
E = 784
IPBz = 145
X = 5,430
n-PBz = 411
Napht = 1,530
s-BuBz = 119
T = 68
DETECTED PAHs
1-MN = 728
2-MN = 1,300
AN = 75j
AT = 44j
B(a) = 77
B(a)P = 77
B(b) = 89j
B(g,h,i) = 72j
B(k) = 41j
C = 92
F = 126
FL = 72j
IP = 69j
Napht = 717
PA = 150
P = 174
16-18' DEPTH
PID = BDL
DRO = 27
VOCs < LOD
GRO < LOD
Pb = 2.8j
2-4' DEPTH
PID = 60
DETECTED VOCs
1,2,4 TMB = 11,600
1,3,5 TMB = 7,720
B = 282
E = 3,750
X = 28,140
Napht = #4,760#
T = 96j
DETECTED PAHs
1-MN = 11,700
2-MN = 16,900
AN = 144
B(a) = (274)
B(b) = 67j
B(g,h,i) = 123
IP = (127)
Napht = 12,300
PA = 172
P = 708
4-6' DEPTH
PID = 70
DETECTED VOCs
1,2,4 TMB = 7,350
1,3,5 TMB = #12,800#
B = 1,690
E = #7,000#
X = 12,740
Napht = #3,750#
T = 197j
DETECTED PAHs
1-MN = 1,450
2-MN = 2,650
P = 49
2-4' DEPTH
PID = BDL
DETECTED VOCs
1,2,4 TMB = 46j
DETECTED PAHs
2-MN = 87j
4-6' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 48j
X = 47j
2-4' DEPTH
PID = 80
DETECTED VOCs
1,2,4 TMB = #116,000#
1,3,5 TMB = #51,400#
B = 815
E = #57,100#
X = #231,100#
Napht = #17,700#
T = 892
DETECTED PAHs
B(a) = (135)
B(a)P = (105)
F = 341
PA = 29j
P = 256
4-6' DEPTH
PID = 86
DETECTED VOCs
1,2,4 TMB = 82,400
1,3,5 TMB = #44,900#
B = 1,840
E = #47,200#
X = #235,900#
Napht = #24,300#
T = 1,220
DETECTED PAHs
1-MN = 4420
2-MN = 7,520
AN = 58
B(a) = 112
F = 292
PA = 65j
P = 283
1-3' DEPTH
PID = BDL
DRO = 5.6
GRO < LOD
DETECTED VOCs
B = 38j
T = 38
6-10' DEPTH
PID = BDL
DRO = 41
GRO = 3.1
VOCs < LOD
PAHs < LOD
Pb = 4.4j
1-3' DEPTH
PID = BDL
DRO = 3.0j
GRO < LOD
DETECTED VOCs
T = 31
2-4' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 148
1,3,5 TMB = 46j
E = 48
X = 270
Napht = 130j
4-6' DEPTH
PID = BDL
VOCs < LOD
PAHs < LOD
1-3' DEPTH
PID = BDL
DRO = 123
GRO < LOD
VOCs < LOD
6-8' DEPTH
PID = BDL
DRO = 5.9
GRO < LOD
VOCs < LOD
Pb = 16
1-3' DEPTH
PID = BDL
DRO = 1.4j
GRO < LOD
DETECTED VOCs
B = 34j
T = 33
2-4' DEPTH
PID = BDL
DETECTED VOCs
1,2,4 TMB = 102
1,3,5 TMB = 31j
E = 31j
X = 185
Napht = 51j
T = 63
DETECTED PAHs
2-MN = 487
AN = 66j
B(a) = 52j
B(a)P = (64j)
F = 141
Napht = 486
P = 121
4-6' DEPTH
PID = 28
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 71
1,3,5 TMB = 27j
E = 31j
B = 59
E = 386
X = 106
Napht = 383
T = 117
2-4' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 61
X = 52j
4-6' DEPTH
PID = BDL
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 52j
2-4' DEPTH
PID = 60
PAHs < LOD
DETECTED VOCs
1,2,4 TMB = 47,100
1,3,5 TMB = 6,870
B = (1,260)
E = 4,220
X = #54,900#
Napth = #6,070#
T = 537
4-6' DEPTH
PID = 35
DETECTED VOCs
1,2,4 TMB = 1,170
1,3,5 TMB = 5,470
B = 981
E = 1,670
X = 10,670
Napht = #2,610#
T = 119
DETECTED PAHs
2-MN = 757
AN = 39j
B(a) = 23j
F = 70j
PA = 23j
P = 57j
1-3' DEPTH
PID = BDL
DRO = 56
GRO < LOD
VOCs < LOD
PAHs < LOD
1-3' DEPTH
PID = BDL
DRO = 525
GRO = 738
DETECTED VOCs
1,2,4 TMB = 16,500
1,3,5 TMB = #13,800#
B = (2,650)
E = #6,670#
X = 31,100
Napht = #13,800#
T = 1,980
1-3' DEPTH
PID = BDL
DRO = 7.2
GRO < LOD
DETECTED VOCs
B = 33j
T = 32
1-3' DEPTH
PID = BDL
DRO = 2.4j
GRO < LOD
DETECTED VOCs
B = 34j
T = 31
6-8' DEPTH
PID = BDL
DRO = 7.5
GRO = 7.2
VOCs < LOD
Pb = 20
6-8' DEPTH
PID = 130
DRO = 16
GRO = 35
Pb = 16
DETECTED VOCs
1,2,4 TMB = 866
B = 2,040
E = 396
IPBz = 1,680
X = 4,330
n-PBz = 1,740
Napht = 202
p-IPT = 161
s-BuBz = 64
T = 36j
DETECTED PAHs
1-MN = 116j
FL = 91j
Napht = 286
P = 50j
10-12' DEPTH
PID = BDL
DRO = 18
GRO < LOD
VOCs < LOD
Pb = 13
6-8' DEPTH
PID = BDL
DRO = 18
GRO < LOD
VOCs < LOD
Pb = 5.1j
1-3' DEPTH
PID = 3
DRO = 180
GRO < LOD
VOCs < LOD
DETECTED PAHs
B(a) = (107)
B(a)P = (131)
B(b) = (283)
B(g,h,i) = 82j
B(k) = 90j
C = 113
F = 151
IP = 49j
PA = 36j
P = 153
2-4' DEPTH
PID = BDL
DRO = 2.7
DETECTED VOCs
X = 66
DETECTED PAHs
F = 126
F = 37j
4-6' DEPTH
PID = BDL
DRO = 7.1
VOCs < LOD
DETECTED PAHs
B(a) = 32j
B(a)P = 24j
C = 35j
PA = 25j
8-10' DEPTH
PID = 700
DRO = 62
GRO = 640
Pb = 20
DETECTED VOCs
1,2,4 TMB = 59,700
1,3,5 TMB = #16,700#
B = 473j
E = #11,700#
IPBz = 1,140
X = #105,500#
n-PBz = 4,950
Napht = #8,920#
p-IPT = 1,290
s-BuBz = 744
T = 2,360
DETECTED PAHs
1-MN = 7,900
2-MN = 18,800
AT = 381
B(a) = 322
B(a)P = 200
B(b)F = 226
B(g,h,i) = 89j
B(k) = 94
C = 296
F = 823
FL = 399
IP = 78j
Napht = 11,800
PA = 1,500
P = 956
16-18' DEPTH
PID = BDL
DRO = 10
GRO < LOD
VOCs < LOD
Pb = 13
6-8' DEPTH
PID = BDL
DRO = 16
GRO = 0.98j
VOCs < LOD
Pb = 24
6-8' DEPTH
PID = BDL
DRO = 9.9
GRO < LOD
VOCs < LOD
PAHs < LOD
Pb = 19
6-8' DEPTH
PID = BDL
DRO = 5.9
GRO < LOD
VOCs < LOD
Pb = 16
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
GP1
GP2
GP3
GP4
GP5
GP6
GP7
MW1
MW2
MW3
MW4
{A}
{B}
{C}
{D}
{E}
{F}
{G}
{AA}
CHEMICAL KEY:
-AN: ACENAPHTHENE
-AT: ANTHRACENE
-B: BENZENE
-B(a): BENZO (a) ANTHRACENE
-B(a)P: BENZO (a) PYRENE
-B(b): BENZO (b) FLUORANTHENE
-B(g,h,i): BENZO (g,h,i) PERYLENE
-B(k): BENZO (k) FLUORANTHENE
-C: CHRYSENE
-Cd: CADMIUM
-E: ETHYLBENZENE
-F: FLUORANTHENE
-FL: FLUORENE
-IP: INDENO (1,2,3-cd) PYRENE
-IPBz: ISOPROPYLBENZENE
-MN: METHYLNAPHTHALENE
-n-BuB: n-BUTYLBENZENE
-n-PBz: n-PROPYLBENZENE
-Napht: NAPHTHALENE
-P: PYRENE
-PA: PHENANTHRENE
-Pb: LEAD
-p-IPT: p-ISOPROPYLTOLUENE
-s-BuBz: Sec-BUTYLBENZENE
-T: TOLUENE
-TMB: TRIMETHYLBENZENE
ABBREVIATIONS:
-DRO: DIESEL RANGE ORGANICS
-GRO: GASOLINE RANGE ORGANICS
-LOD: LIMIT OF DETECTION
-PAH: POLYNUCLEAR AROMATIC HYDROCARBONS
-PID: PHOTOIONIZATION DETECTOR (FIELD)
-RCL: RESIDUAL CONTAMINANT LEVEL
-VOC: VOLATILE ORGANIC COMPOUNDS
NOTES:
PID RESULTS EXPRESSED IN INSTRUMENT UNITS
VOC AND PAH RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg) EQUIVALENT TO PARTS PER BILLION (ppb)
Pb, Cd, GRO, DRO RESULTS EXPRESSED IN MILLIGRAMS PER KILOGRAM EQUIVALENT TO PARTS PER MILLION (ppm)
RESULTS INDICATED IN BROWN/# EXCEED THE NR 746.06 TABLE 1 PRODUCT INDICATOR VALUE.
RESULTS IN GREEN/PARENTHESES EXCEED THE WDNR INTERIM GUIDANCE DIRECT CONTACT RCL FOR A PROPERTY ZONED NON-INDUSTRIAL
RESULTS INDICATED IN RED/UNDERLINED EXCEED THE RESIDUAL CONTAMINANT LEVEL FOR SOIL SET FORTH IN NR 720.09.
-; CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.
TANK KEY:
{A} FORMER 3,000 GALLON FUEL OIL UST
{B} FORMER 10,000 GALLON UNLEADED GASOLINE UST
{C} FORMER 10,000 GALLON LEADED GASOLINE UST
{D} FORMER 1,000 GALLON WASTE OIL UST
{E} FORMER 6,000 GALLON UNLEADED GASOLINE UST
{F} FORMER 1,000 GALLON KEROSENE UST
{G} FORMER 1,000 GALLON KEROSENE UST
LEGEND:
B6 SOIL BORING
MW1 MONITORING WELL
MW1 FORMER MONITORING WELL
FORMER UST
SUBJECT PROPERTY
G GAS LINE
{AA} FORMER PUMP ISLAND
BENCHMARK: STORM WATER GRATE ASSUMED ELEVATION = 100.0'
GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI. 53186
(262)-544-0118
FIGURE 7
SOIL ANALYTICAL RESULTS
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN
DESIGNED ELP
DRAWN RH
APPROVED X
SCALE 1" = 10'
DATE 08/05/02
PROJECT NO.: 1E-0007014
CAD No. E0070142



CHEMICAL KEY:

- -ACP: ACENAPTHYLENE
- -AN: ACENAPHTHENE
- -AT: ANTHRACENE
- -B: BENZENE
- -B(a): BENZO (a) ANTHRACENE
- -B(a)P: BENZO (a) PYRENE
- -B(b): BENZO (b) FLUORANTHENE
- -B(g,h,i): BENZO (g,h,i) PERYLENE
- -B(k): BENZO (k) FLUORANTHENE
- -C: CHRYSENE
- -E: ETHYLBENZENE
- -F: FLUORANTHENE
- -FL: FLUORENE
- -IP: INDENO (1,2,3-cd) PYRENE
- -IPBz: ISOPROPYLBENZENE
- -MN: METHYLNAPHTHALENE
- -MTBE: METHYL TERT BUTYL ETHER
- -n-BuB: n-BUTYLBENZENE
- -n-PBz: n-PROPYLBENZENE
- -Napht: NAPHTHALENE
- -P: PYRENE
- -PA: PHENANTHRENE
- -Pb: LEAD
- -p-IPT: p-ISOPROPYLTOLUENE
- -s-BuBz: Sec-BUTYLBENZENE
- -T: TOLUENE
- -TMB: TRIMETHYLBENZENE
- -X: TOTAL XYLENES

ABBREVIATIONS:

- -LOD: LIMIT OF DETECTION
- -PAH: POLYNUCLEAR AROMATIC HYDROCARBONS
- -PID: PHOTOIONIZATION DETECTOR (FIELD)
- -VOC: VOLATILE ORGANIC COMPOUNDS
- -PVOC: PETROLEUM VOLATILE ORGANIC COMPOUNDS

NOTES

LEAD RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l) EQUIVALENT TO PARTS PER MILLION (ppm)

VOC, PAH, AND PVOC RESULTS EXPRESSED IN MICROGRAMS PER LITER (ug/l) EQUIVALENT TO PARTS PER BILLION (ppb)

RESULTS INDICATED IN CYAN/ PARENTHESES EXCEED THE WISCONSIN ADMINISTRATIVE CODE CHAPTER NR 140 PREVENTIVE ACTION LIMITS (PAL)

RESULTS INDICATED IN RED/UNDERLINED EXCEED THE WISCONSIN ADMINISTRATIVE CODE CHAPTER NR 140 ENFORCEMENT STANDARDS (ES)

TANK KEY:

(A)	FORMER 3,090 GALLON FUEL OIL UST
(B)	FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C)	FORMER 10,000 GALLON LEADED GASOLINE UST
(D)	FORMER 1,000 GALLON WASTE OIL UST
(E)	FORMER 6,000 GALLON UNLEADED GASOLINE UST
(F)	FORMER 1,000 GALLON KEROSENE UST
(G)	FORMER 1,000 GALLON KEROSENE UST

LEGEND:

- B6 — SOIL BORING
- MW1 — MONITORING WELL
- MW1 — FORMER MONITORING WELL
- FORMER UST
- SUBJECT PROPERTY
- GAS LINE
- (AA) — FORMER PUMP ISLAND
- BENCHMARK: STORM WATER GRATE ASSUMED ELEVATION = 100.0'

GILES ENGINEERING ASSOCIATES, INC.
N5 W22360 JOHNSON RD.; WAUKESHA, WI. 53186
(262)-544-0118

FIGURE 5
GROUNDWATER ANALYTICAL RESULTS
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	RH	X	1" = 10'	06/06/02

PROJECT NO.: 1E-0007014 | CAD No. E0070143

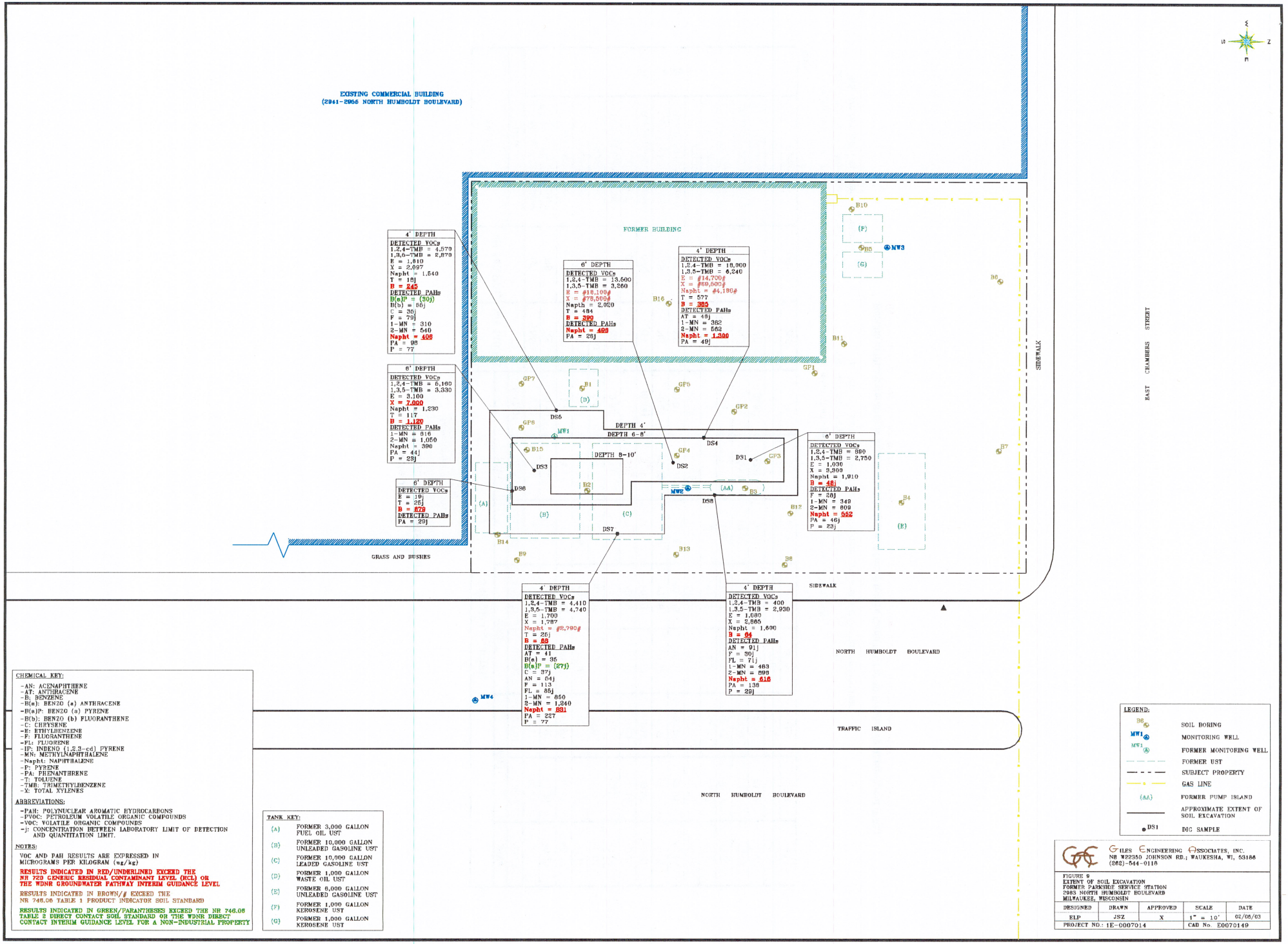

EXISTING COMMERCIAL BUILDING
(2941-2955 NORTH HUMBOLDT BOULEVARD)
FORMER BUILDING
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 4,570
1,3,5-TMB = 2,870
E = 1,810
X = 2,097
Napht = 1,540
T = 18J
B = 245
DETECTED PAHs
B(a)P = (309)
B(b) = 66J
C = 36J
F = 79J
1-MN = 310
2-MN = 540
Napht = 406
PA = 98
P = 77
6' DEPTH
DETECTED VOCs
1,2,4-TMB = 6,160
1,3,5-TMB = 3,330
E = 3,100
X = 7,000
Napht = 1,230
T = 117
B = 1,120
DETECTED PAHs
1-MN = 516
2-MN = 1,050
Napht = 396
PA = 44J
P = 28J
6' DEPTH
DETECTED VOCs
E = 19J
T = 25J
B = 879
DETECTED PAHs
PA = 29J
6' DEPTH
DETECTED VOCs
1,2,4-TMB = 13,500
1,3,5-TMB = 3,260
E = #18,100#
X = #75,500#
Napth = 2,020
T = 484
B = 390
DETECTED PAHs
Napht = 498
PA = 26J
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 18,000
1,3,5-TMB = 6,240
E = #14,700#
X = #69,500#
Napht = #4,180#
T = 577
B = 385
DETECTED PAHs
AT = 49J
1-MN = 382
2-MN = 562
Napht = 1,300
PA = 49J
6' DEPTH
DETECTED VOCs
1,2,4-TMB = 880
1,3,5-TMB = 2,750
E = 1,030
X = 2,900
Napht = 1,910
B = 48J
DETECTED PAHs
F = 20J
1-MN = 349
2-MN = 609
Napht = 552
PA = 46J
F = 23J
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 4,410
1,3,5-TMB = 4,740
E = 1,700
X = 1,787
Napht = #2,790#
T = 25J
B = 88
DETECTED PAHs
AT = 41
B(e) = 35
B(a)P = (27J)
C = 37J
AN = 64J
F = 113
FL = 85J
1-MN = 850
2-MN = 1,240
Napht = 881
PA = 227
P = 77
4' DEPTH
DETECTED VOCs
1,2,4-TMB = 400
1,3,5-TMB = 2,930
E = 1,080
X = 2,865
Napht = 1,600
B = 94
DETECTED PAHs
AN = 91J
F = 50J
FL = 71J
1-MN = 483
2-MN = 899
Napht = 616
PA = 138
P = 29J
DEPTH 4'
DEPTH 6-8'
DEPTH 8-10'
DS1
DS2
DS3
DS4
DS6
DS7
DS8
MW1
MW2
MW3
MW4
GP1
GP2
GP3
GP4
GP5
GP6
GP7
GP8
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
(A)
(B)
(C)
(D)
(E)
(F)
(G)
(AA)
GRASS AND BUSHES
SIDEWALK
SIDEWALK
EAST CHAMBERS STREET
NORTH HUMBOLDT BOULEVARD
NORTH HUMBOLDT BOULEVARD
TRAFFIC ISLAND
CHEMICAL KEY:
-AN: ACENAPHTHENE
-AT: ANTHRACENE
-B: BENZENE
-B(a): BENZO (a) ANTHRACENE
-B(a)P: BENZO (a) PYRENE
-B(b): BENZO (b) FLUORANTHENE
-C: CHRYSENE
-E: ETHYLBENZENE
-F: FLUORANTHENE
-FL: FLUORENE
-IP: INDENO (1,2,3-cd) PYRENE
-MN: METHYLNAPHTHALENE
-Napht: NAPHTHALENE
-P: PYRENE
-PA: PHENANTHRENE
-T: TOLUENE
-TMB: TRIMETHYLBENZENE
-X: TOTAL XYLENES
ABBREVIATIONS:
-PAH: POLYNUCLEAR AROMATIC HYDROCARBONS
-PVOC: PETROLEUM VOLATILE ORGANIC COMPOUNDS
-VOC: VOLATILE ORGANIC COMPOUNDS
-j: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.
NOTES:
VOC AND PAH RESULTS ARE EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg)
RESULTS INDICATED IN RED/UNDERLINED EXCEED THE NR 720 GENERIC RESIDUAL CONTAMINANT LEVEL (RCL) OR THE WDNR GROUNDWATER PATHWAY INTERIM GUIDANCE LEVEL
RESULTS INDICATED IN BROWN/# EXCEED THE NR 746.06 TABLE 1 PRODUCT INDICATOR SOIL STANDARD
RESULTS INDICATED IN GREEN/PARANTHESES EXCEED THE NR 746.06 TABLE 2 DIRECT CONTACT SOIL STANDARD OR THE WDNR DIRECT CONTACT INTERIM GUIDANCE LEVEL FOR A NON-INDUSTRIAL PROPERTY
TANK KEY:
(A) FORMER 3,000 GALLON FUEL OIL UST
(B) FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C) FORMER 10,000 GALLON LEADED GASOLINE UST
(D) FORMER 1,000 GALLON WASTE OIL UST
(E) FORMER 6,000 GALLON UNLEADED GASOLINE UST
(F) FORMER 1,000 GALLON KEROSENE UST
(G) FORMER 1,000 GALLON KEROSENE UST
LEGEND:
B6 SOIL BORING
MW1 MONITORING WELL
MW1 FORMER MONITORING WELL
FORMER UST
SUBJECT PROPERTY
GAS LINE
(AA) FORMER PUMP ISLAND
APPROXIMATE EXTENT OF SOIL EXCAVATION
DS1 DIG SAMPLE
GILES ENGINEERING ASSOCIATES, INC.
NB W22350 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0116
FIGURE 9
EXTENT OF SOIL EXCAVATION
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN
DESIGNED ELP
DRAWN JSZ
APPROVED X
SCALE 1" = 10'
DATE 02/05/03
PROJECT NO.: 1E-0007014
CAD No. E0070149

Table 3a
Groundwater Analytical Results (PAH)

2963 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007014

Analyte		NR 140 PAL	NR 140 ES	Sample Locations							
				MW1			MW2		MW3		MW4
Date				8/17/01	1/3/02	4/2/02	8/17/01	1/3/02	8/17/01	1/3/02	1/3/02
PAHs (ug/L)	1-Methyl Naphthelene	NS	NS	<0.11	8.3	0.96	<0.11	<0.21	<0.11	<0.21	<0.21
	2-Methyl Naphthalene	NS	NS	<0.10	9.0	0.24j	<0.10	<0.20	<0.10	<0.20	<0.20
	Acenaphthene	NS	NS	2.8	4.4	1.3	<0.50	<0.17	<0.50	<0.17	<0.17
	Acenaphthylene	NS	NS	2.2	<1.0	<0.16	<0.09	<1.0	<0.09	<1.0	<1.0
	Anthracene	600	3,000	0.50	1.3	0.74	<0.005	<0.01	<0.005	<0.01	<0.01
	Benzo (a) anthracene	NS	NS	0.57	1.0	0.55	1.1	<0.07	1.6	<0.07	<0.07
	Benzo (a) pyrene	0.02	0.2	**1.7**	**0.88**	**0.80**	<0.05	<0.10	<0.05	<0.10	<0.10
	Benzo (b) fluoranthene	0.02	0.2	(0.14)	**0.26**	**0.58**	<0.03	<0.07	<0.03	<0.07	<0.07
	Benzo (g,h,I) perylene	NS	NS	<0.26	<0.52	<0.29	<0.26	<0.52	<0.26	<0.52	<0.52
	Benzo (k) fluoranthene	NS	NS	0.06	<0.01	0.20j	<0.005	<0.01	<0.005	<0.01	<0.01
	Chrysene	0.02	0.2	<0.35	<0.70	0.63	<0.35	<0.70	<0.35	<0.70	<0.70
	Fluoranthrene	80	400	1.5	--	2.1	<0.18	<0.36	<0.18	<0.36	<0.36
	Fluorene	80	400	1.1	3.1	0.86	<0.17	<0.33	<0.17	<0.33	<0.33
	Indeno (1,2,3-cd) pyrene	NS	NS	0.80j	<0.59	<0.03	<0.30	<0.59	<0.30	<0.59	<0.59
	Naphthalene	8	40	(8.3)	(22)	0.78	<0.11	<0.22	<0.11	<0.22	<0.22
	Phenanthrene	NS	NS	2.1	4.7	1.6	0.15	<0.04	<0.02	<0.04	<0.04
	Pyrene	50	250	0.78	1.4	0.16j	<0.03	<0.06	<0.03	<0.06	<0.06

Notes:

--: Not Analyzed / Not Applicable
PAHs: Polynuclear aromatic hydrocarbons
NS: No regulatory standard established
ug/L: Micrograms per liter; equivalent to parts per billion (ppb)
NR: Natural Resources Chapter of the Wisconsin Administrative Code
j: Concentration detected between the detection limit and the quantitation limit

Results in blue/parentheses exceed the Wisconsin Administrative Code NR 140.10 Preventive Action Limit (PAL)
Results in red/underlined exceed the Wisconsin Administrative Code NR 140.10 Enforcement Standard (ES)

Table 3
Groundwater Analytical Results (VOC/PVOC/Lead)

2963 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007014

Sample Locations	Date	Lead	Detected VOCs/PVOCs (ug/L)							
			TMB	Benzene	E	IPBz	MTBE	n-PBz	Toluene	Xylenes
MW1	17-Aug-01	(5.4)	(192)	**286**	53	4.6	(28)	24	17	593
	3-Jan-02	--	22.5	**70**	16	--	<0.30	--	2.4	32.4
	2-Apr-02	--	(102)	**142**	61	--	(54)	--	6.6	127
MW2	17-Aug-01	<1.5	<0.34	<0.27	<0.25	<0.33	(26)	<0.28	<0.29	<0.53
	3-Jan-02	--	<0.63	<0.44	<0.57	--	<0.30	--	<0.44	<1.0
	2-Apr-02	--	<0.34	<0.27	<0.25	--	(15)	--	<0.29	<0.53
MW3	17-Aug-01	<1.5	0.72j	(1.8)	<0.25	<0.33	<0.39	<0.28	<0.29	3.7
	3-Jan-02	--	<0.63	<0.44	<0.57	--	<0.30	--	<0.44	<1.0
	2-Apr-02	--	<0.34	<0.27	<0.25	--	<0.39	--	<0.29	<0.53
MW4	17-Aug-01	--	--	--	--	--	--	--	--	--
	3-Jan-02	--	<0.34	<0.27	<0.25	<0.33	<0.39	<0.28	<0.29	<0.53
	2-Apr-02	--	<0.34	<0.27	<0.25	--	<0.39	--	<0.29	<0.53
NR 140 PAL		**1.5**	**96**	**0.5**	**140**	**NS**	**12**	**NS**	**200**	**1,000**
NR 140 ES		**15**	**480**	**5**	**700**	**NS**	**60**	**NS**	**1,000**	**10,000**

Notes:

VOCs: Volatile organic compounds
PVOCs: Petroleum volatile organic compounds
TMB: Trimethylbenzene
E: Ethylbenzene
IPBz: Isopropylbenzene
ug/L: Micrograms per liter; equivalent to parts per billion (ppb)
NR: Natural Resources Chapter of the Wisconsin Administrative Code
j: Concentration detected between the laboratory detection limit and the quantitation limit
MTBE: Methyl tert butyl ether
--: Not Applicable/Not Analyzed
NS: No regulatory standard established
n-PBz: n-Propylbenzene

Results in blue/parentheses exceed the Wisconsin Administrative Code NR 140.10 Preventive Action Limit (PAL)
Results in red/underlined exceed the Wisconsin Administrative Code NR 140.10 Enforcement Standard (ES)

TABLE 1
GROUNDWATER ELEVATION DATA
2963 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007014

Well Number	Date	Elevation Top of PVC (ft)	Ground Elevation (ft)	Screen Length (ft)	Bottom of Screen Elevation (ft)	Top of Screen Elevation (ft)	Depth to Water from PVC Pipe (ft)	Groundwater Elevation (ft)
MW1	8/17/01	101.54	101.94	10.00	86.94	96.94	7.50	94.04
	1/3/02						7.51	94.03
	4/2/02						7.05	94.49
MW2	8/17/01	101.50	101.92	10.00	75.50	86.92	7.60	93.90
	1/3/02						7.22	94.28
	4/2/02						7.11	94.39
MW3	8/17/01	101.92	102.56	10.00	87.56	97.56	7.20	94.72
	1/3/02						7.62	94.30
	4/2/02						6.41	95.51
MW4	8/17/01	--	--	--	--	--	--	--
	1/3/02	100.98	101.31	10.00	87.31	97.31	7.58	93.40
	4/2/02						7.23	93.75

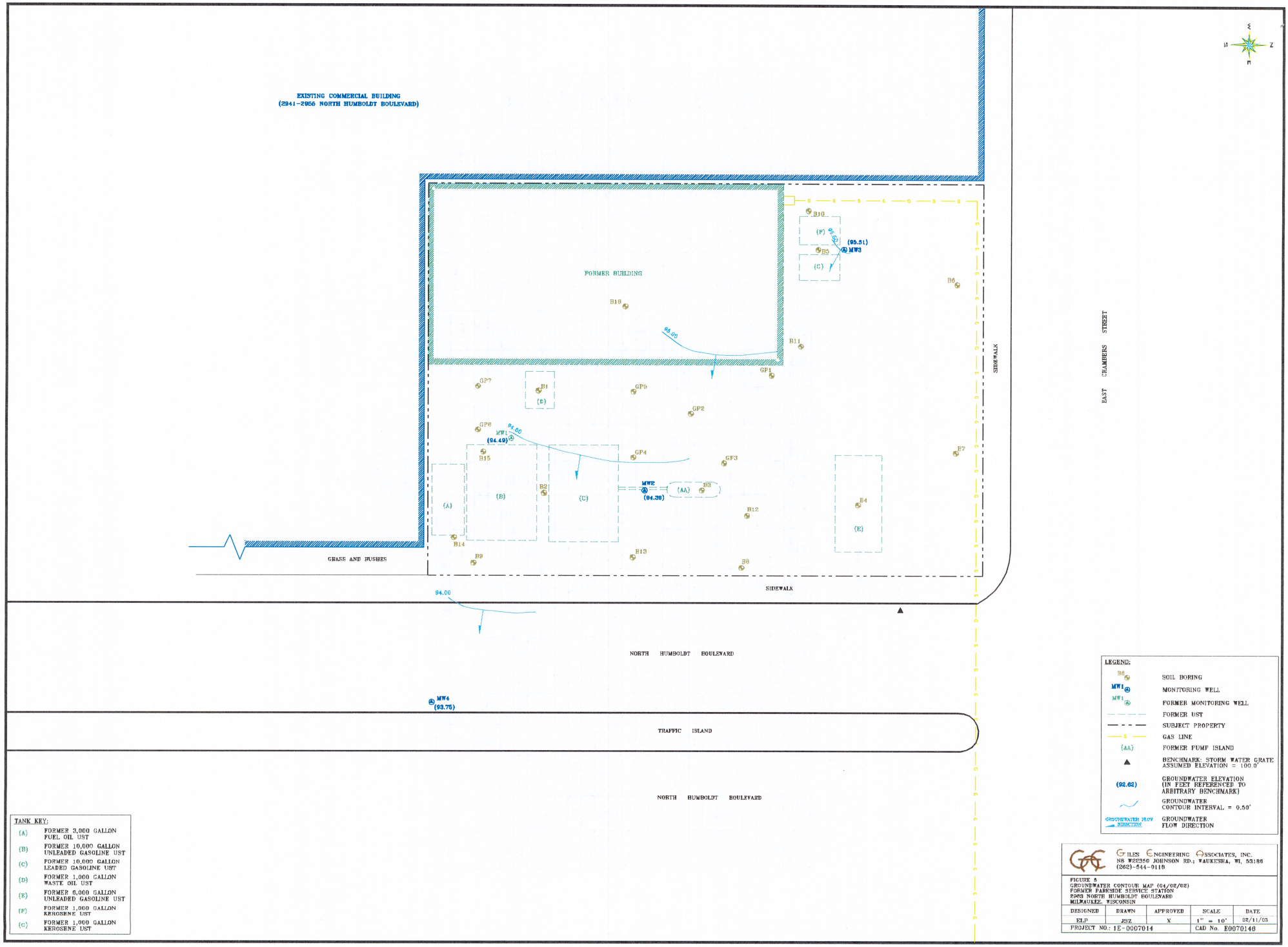
Notes:

Benchmark: Storm water grate near the northeast corner of the subject property
Assumed elevation = 100.00'

--: Not installed

PVC: Polyvinyl chloride

ft: Feet



TANK KEY:

(A)	FORMER 3,000 GALLON FUEL OIL UST
(B)	FORMER 10,000 GALLON UNLEADED GASOLINE UST
(C)	FORMER 10,000 GALLON LEADED GASOLINE UST
(D)	FORMER 1,000 GALLON WASTE OIL UST
(E)	FORMER 6,000 GALLON UNLEADED GASOLINE UST
(F)	FORMER 1,000 GALLON KEROSENE UST
(G)	FORMER 1,000 GALLON KEROSENE UST

LEGEND:

B6	SOIL BORING
MW1	MONITORING WELL
MW1	FORMER MONITORING WELL
	FORMER UST
	SUBJECT PROPERTY
G	GAS LINE
(AA)	FORMER PUMP ISLAND
▲	BENCHMARK: STORM WATER GRATE ASSUMED ELEVATION = 100.0'
(92.62)	GROUNDWATER ELEVATION (IN FEET REFERENCED TO ARBITRARY BENCHMARK)
	GROUNDWATER CONTOUR INTERVAL = 0.50'
GROUNDWATER FLOW DIRECTION	GROUNDWATER FLOW DIRECTION

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0118

FIGURE 5
GROUNDWATER CONTOUR MAP (01/02/02)
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	JSZ	X	1" = 10'	02/11/03

PROJECT NO.: 1E-0007014 | CAD No. E0070140

Table 2a
Soil Analytical Results (PAH)
2963 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007014

Test Boring Number	Sample Depth (feet)	PID (instrument units)	Collection Date	Detected PAHs (ug/kg)															
				1-MN	2-MN	AN	AT	B (a)	B (a) P	B (b)	B (g,h,i)	B (k)	C	F	FL	IP	Napht	PA	P
B-1	10-12	400	6/1/01	728	1,300	75j	44j	77	77	89j	72j	41j	92	126	72j	59j	**717**	150	174
B-2	8-10	700	6/1/01	7,990	18,800	<39	381	322	200	226	89j	94	296	823	399	78j	**11,800**	1,500	955
B-3	6-8	130	6/1/01	116j	<57	<38	<29	<22	<22	<32	<38	<18	<28	<26	91j	<36	286	<24	50j
B-4	6-8	BDL	6/1/01	<59	<59	<40	<29	<22	<23	<33	<39	<18	<29	<27	<48	<37	<59	<24	<24
B-5	8-10	BDL	6/1/01	<50	<51	<34	<25	<19	<19	<29	<33	<16	<25	<23	<41	<32	<51	<21	<21
MW-1	1-3	BDL	8/14/01	<52	<52	<35	<26	<20	<20	<29	<34	<16	<25	<24	<42	<33	<52	<22	<21
MW-2	1-3	BDL	8/14/01	<52	<53	<35	<26	**(107)**	**(131)**	**(283)**	62j	303	113	151	<42	46j	<52	36j	153
MW-4	2-4	BDL	1/2/02	<53	<53	<36	<26	<20	<20	<30	<35	<16	<26	34j	<43	<34	<53	<22	37j
MW-4	4-6	BDL	1/2/02	<54	<55	<37	<27	32j	24j	<31	<36	<17	35j	<25	<44	<35	<55	25j	<22
GP-1	2-4	BDL	10/4/02	<55	<56	<38	<28	<21	<22	<32	<37	<17	<27	<26	<45	<35	<56	<23	<23
GP-1	4-6	BDL	10/4/02	<57	<57	<38	<29	<22	<22	<32	<38	<18	<28	<26	<46	<36	<57	<24	<26
GP-2	2-4	BDL	10/4/02	<57	<57	<38	<28	<22	<22	<32	<38	<18	<28	<26	<46	<36	<57	<24	<23
GP-2	4-6	BDL	10/4/02	<57	<57	<38	<28	<22	<22	<32	<37	<18	<28	<26	<46	<36	<57	<24	<23
GP-3	2-4	80	10/4/02	<52	<53	<35	<26	**(138)**	**(106)**	<30	<35	<16	<26	341	<43	<33	<53	29j	259
GP-3	4-6	85	10/4/02	4,420	7,520	58	<28	112	<21	<31	<36	<17	<27	292	<45	<36	<55	65j	283
GP-4	2-4	60	10/4/02	11,700	16,900	144	<28	**(274)**	<21	67j	123	<17	<27	<25	<45	**(127)**	**12,300**	172	708
GP-4	4-6	70	10/4/02	1,450	2,650	<40	<30	<22	<23	<33	<39	<18	<29	<27	<48	<38	<59	<25	49
GP-5	2-4	BDL	10/4/02	<59	87j	<36	<27	<20	<21	<31	<35	<17	<26	<25	<44	<34	<54	<22	<22
GP-5	4-6	BDL	10/4/02	<59	<60	<40	<30	<22	<23	<34	<39	<19	<29	<27	<48	<38	<60	<25	<24
GP-6	2-4	50	10/4/02	<55	<55	<37	<27	<21	<21	<31	<36	<17	<27	<25	<45	<35	<55	<23	<23
GP-6	4-6	35	10/4/02	<54	757	39j	<27	23j	<21	<31	<36	<17	<27	70j	<44	<34	<54	23j	57j
GP-7	2-4	BDL	10/4/02	<55	487	59j	<28	52j	**(64j)**	<32	<37	<17	<27	141	<45	<35	**498**	<23	121
GP-7	4-6	28	10/4/02	<56	<56	<38	<28	<21	<22	<32	<37	<17	<28	<26	<45	<36	<56	<23	<23
WDNR Interim Guidance Clean-up Levels		Groundwater Pathway (ug/kg)		**2,300**	**20,000**	**38,000**	**3,000,000**	**17,000**	**48,000**	**360,000**	**6,800,000**	**870,000**	**37,000**	**500,000**	**100,000**	**680,000**	**400**	**1,800**	**8,700,000**
		Direct Contact Non-Industrial (ug/kg)		**1,100,000**	**600,000**	**900,000**	**5,000,000**	**88**	**8.8**	**88**	**1.8**	**880**	**8,800**	**600,000**	**600,000**	**88**	**20,000**	**18,000**	**500,000**

Notes:

PID: Photoionization Detector
BDL: Below detection limit
PAHs: Polynuclear aromatic hydrocarbons
MN: Methylnaphthalene
AN: Acenaphthene
AT: Anthracene
B (a): Benzo (a) anthracene
B (a) P: Benzo (a) pyrene
B (b): Benzo (b) fluoranthene
B (g,h,i): Benzo (g,h,i) perylene
B (k): Benzo (k) fluoranthene
C: Chrysene
F: Fluoranthene
ug/kg: Micrograms per kilogram, equivalent to parts per billion (ppb)
Fl: Fluorene
IP: Ideno (1,2,3-cd) pyrene
Napth: Naphthalene
PA: Phenanthrene
P: Pyrene
WDNR: Wisconsin Department of Natural Resources
j: Concentration detected between the laboratory detection limit and the quantitation limit

Results in (green) exceed the direct contact interim guidance level for a non-industrial property

Results in red exceed the groundwater pathway interim guidance level

Table 2
Soil Analytical Results (VOC/PVOC)
2963 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007014

Test Boring Number	Sample Depth (feet)	PID (instrument units)	Collection Date	DRO (mg/kg)	GRO (mg/kg)	Detected Volatile Organic Compounds (VOCs/PVOCs) (ug/kg)											Cadmium (mg/kg)	Lead (mg/kg)
						1,2,4 TMB	1,3,5 TMB	B	E	IPBz	X	n-PBz	Napth	p-IPT	s-BuBz	T		
B-1	10-12	400	6/1/01	15	108	6,990	2,810	329	784	145	8,430	411	1,530	<18	119	66	0.5j	14
B-1	16-18	BDL	6/1/01	27	<0.5	<16	<19	<15	<14	<18	<29	<15	<41	<17	<18	<16	<0.38	2.8j
B-2	8-10	700	6/1/01	62	640	59,700	#16,700#	473j	#11,700#	1140	#108,600#	4,950	#8,920#	1,390	744	2,380	<0.42	20
B-2	16-18	BDL	6/1/01	10	<0.50	<17	<20	<15	<14	<19	<30	<16	<43	<18	<19	<17	<0.40	13
B-3	6-8	130	6/1/01	16	35	606	<20	2,040	396	1,580	4,330	1,740	202	151	64	36j	<0.42	16
B-3	10-12	BDL	6/1/01	16	<0.50	<18	<21	<16	<15	<20	<32	<17	<45	<19	<20	<14	<0.42	13
B-4	6-8	BDL	6/1/01	9.9	<1.0	<18	<21	<16	<15	<20	<33	<17	<46	<19	<21	<18	<0.43	19
B-5	8-10	BDL	6/1/01	41	3.1	<16	<18	<14	<13	<17	<28	<15	<40	<16	<18	<15	<0.37	4.4j
B-6	6-8	BDL	6/1/01	5.9	<0.50	<18	<21	<16	<15	<20	<32	<17	<45	<19	<20	<17	<0.42	16
B-7	6-8	BDL	6/1/01	16	0.98j	<17	<20	<16	<15	<19	<31	<16	<44	<18	<20	<17	<0.41	24
B-8	6-8	BDL	6/1/01	12	<0.50	<18	<21	<16	<16	<20	<33	<17	<46	<19	<21	<18	<0.43	5.1j
B-9	6-8	BDL	6/1/01	7.5	7.2	<18	<21	<16	<15	<20	<32	<17	<46	<19	<20	<18	<0.42	20
B-10	1-3	BDL	2/27/02	5.6	<0.55	<27	<17	38j	<7.7	NA	<20	NA	<52	NA	NA	38	NA	NA
B-11	1-3	BDL	2/27/02	1.4j	<0.53	<26	<16	34j	<7.5	NA	<19	NA	<51	NA	NA	33	NA	NA
B-12	1-3	BDL	2/27/02	2.2j	<0.57	<27	<17	48j	<8	NA	<21	NA	<54	NA	NA	44	NA	NA
B-13	1-3	BDL	2/27/02	7.2	<0.58	<28	<18	33j	<8.2	NA	<21	NA	<55	NA	NA	32	NA	NA
B-14	1-3	BDL	2/27/02	2.4j	<0.59	<28	<18	34j	<8.3	NA	<21	NA	<56	NA	NA	31	NA	NA
B-15	1-3	BDL	2/27/02	525	738	18,500	#13,800#	(2,650)	#6,570#	NA	31,100	NA	#13,800#	NA	NA	1,960	NA	NA
B-16	1-3	BDL	2/27/02	3.0j	<0.58	<28	<17	<17	<8.1	NA	<21	NA	<55	NA	NA	31	NA	NA
MW-1	1-3	BDL	8/15/01	58	<0.54	<25	<20	<17	<17	NA	<36	NA	<51	NA	NA	<19	NA	NA
MW-2	1-3	3	8/15/01	180	<0.54	<26	<20	<17	<17	NA	<36	NA	<52	NA	NA	<19	NA	NA
MW-3	1-3	BDL	8/15/01	123	<0.54	<25	<20	<17	<17	NA	<36	NA	<51	NA	NA	<19	NA	NA
MW-4	2-4	BDL	1/2/02	2.7	<0.55	<26	<20	<18	<17	NA	56	NA	<52	NA	NA	<19	NA	NA
MW-4	4-6	BDL	1/2/02	7.1	<0.57	<27	<21	<18	<17	NA	<58	NA	<54	NA	NA	<20	NA	NA
GP-1	2-4	BDL	10/4/02	NA	NA	61	<20	<16	<15	NA	52j	NA	<44	NA	NA	<17	NA	NA
GP-1	4-6	BDL	10/4/02	NA	NA	52j	<21	<16	<15	NA	<47	NA	<45	NA	NA	<17	NA	NA
GP-2	2-4	BDL	10/4/02	NA	NA	148	45j	<16	49	NA	270	NA	130j	NA	NA	<17	NA	NA
GP-2	4-6	BDL	10/4/02	NA	NA	<18	<20	<16	<15	NA	<47	NA	<45	NA	NA	<17	NA	NA
GP-3	2-4	80	10/4/02	NA	NA	#116,000#	#51,400#	815	#57,100#	NA	#281,100#	NA	#17,700#	NA	NA	892	NA	NA
GP-3	4-6	85	10/4/02	NA	NA	82,400	#44,300#	1,340	#47,200#	NA	#235,900#	NA	#24,300#	NA	NA	1,220	NA	NA
GP-4	2-4	60	10/4/02	NA	NA	11,600	7,720	282	3,730	NA	28,140	NA	#4,760#	NA	NA	96j	NA	NA
GP-4	4-6	70	10/4/02	NA	NA	7,350	#12,800#	1,690	#7,090#	NA	12,740	NA	#3,750#	NA	NA	197j	NA	NA
GP-5	2-4	BDL	10/4/02	NA	NA	40j	<19	<15	<14	NA	<30	NA	<42	NA	NA	<16	NA	NA
GP-5	4-6	BDL	10/4/02	NA	NA	48j	<21	<17	<16	NA	47j	NA	<47	NA	NA	<18	NA	NA
GP-6	2-4	50	10/4/02	NA	NA	47,100	5,370	(1,260)	4,220	NA	#64,900#	NA	#6,070#	NA	NA	537	NA	NA
GP-6	4-6	35	10/4/02	NA	NA	11,700	5,470	981	1,670	NA	10,570	NA	#2,810#	NA	NA	119	NA	NA
GP-7	2-4	BDL	10/4/02	NA	NA	102	31j	<16	31j	NA	165	NA	51j	NA	NA	63	NA	NA
GP-7	4-6	28	10/4/02	NA	NA	71	27j	59	385	NA	106	NA	383	NA	NA	117	NA	NA
NR 746.06 Table 1 Product Indicator Values (ug/kg)				NS	NS	83,000	11,000	8,500	4,600	NS	42,000	NS	2,700	NS	NS	38,000	NS	NS
NR 746.06 Table 2 Direct Contact Values (ug/kg)				NS	NS	NS	NS	1,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
NR 720 Generic Soil Cleanup Standards (ug/kg)				250	250	NS	NS	5.5	2,900	NS	4,100	NS	NS	NS	NS	1,500	8	50

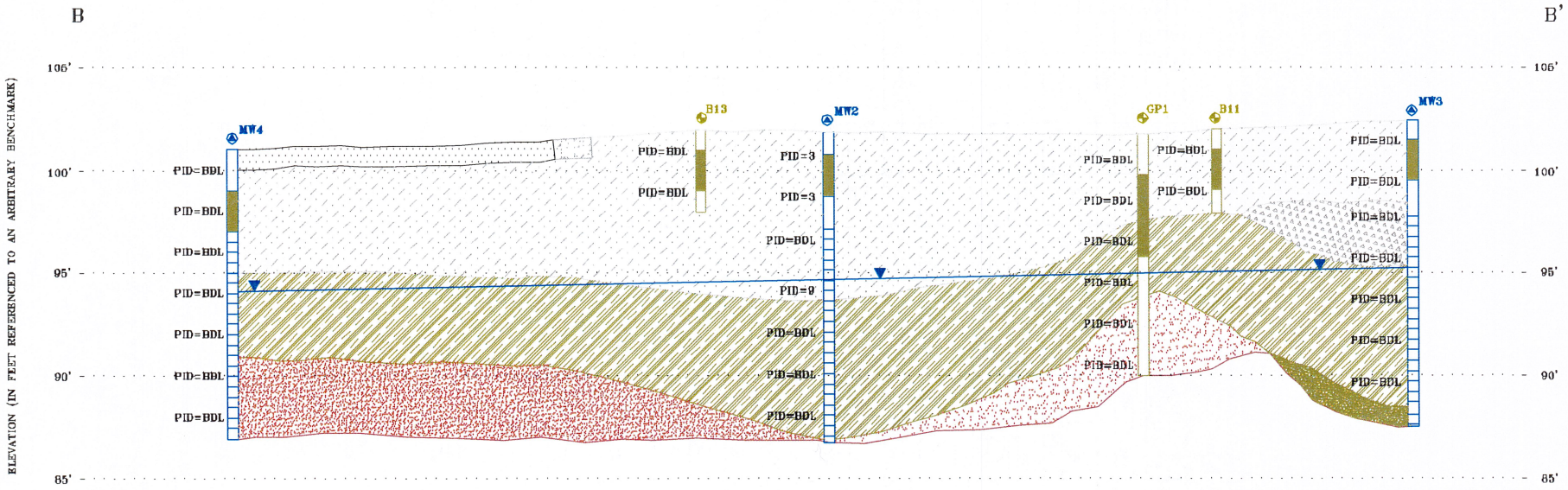
Notes:

DRO: Diesel Range Organics
GRO: Gasoline Range Organics
TMB: Trimethylbenzene
B: Benzene
E: Ethylbenzene
IPBz: Isopropylbenzene
X: Total Xylenes
n-PBz: n-Propylbenzene
Napht: Naphthalene
p-IPT: p-Isopropyltoluene
s-BuBz: sec-Butylbenzene
NR: Natural Resources Chapter of the Wisconsin Administrative Code
T: Toluene
NS: No standards available
PID: Photoionization Detector
BDL: Below detection limit
mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)
ug/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
j: Concentration detected between the laboratory detection limit and the quantitation limit

Results in red/underlined exceed the Residual Contaminant Level (RCL) set for in NR 720.09
Results in brown and denoted with # exceed the Product Indicator Values set for in NR 746.06 Table 1
Results in green and "( )" exceed the Direct Contact Values set forth in NR 746.06 Table 2

CROSS SECTION B–B'

SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 5'



SOIL KEY:

- ASPHALTIC CONCRETE UNDERLAIN BY CONCRETE
- CONCRETE UNDERLAIN BY BASE COURSE
- FILL: SANDY SILT TO SILTY CLAY WITH TRACE TO SOME FINE TO COARSE SAND AND FINE TO MEDIUM GRAVEL, AND TRACE TO SOME ORGANIC MATTER
- SILTY CLAY WITH TRACE FINE SAND
- SANDY TO CLAYEY SILT WITH TRACE TO SOME COARSE SAND
- SILTY FINE TO MEDIUM SAND AND FINE GRAVEL
- SILTY FINE SAND

NOTE:

B13, GP1, AND B11 WERE NOT SURVEYED FOR ELEVATION

PID: PHOTOIONIZATION DETECTOR EXPRESSED IN INSTRUMENT UNITS

BDL: BELOW DETECTION LEVEL

LEGEND:

- B4 — SOIL BORING
- MW2 — MONITORING WELL
- STATIC WATER LEVEL (04/02/02)
- WELL SCREEN
- INTERVAL SAMPLED FOR LABORATORY ANALYSIS

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0118

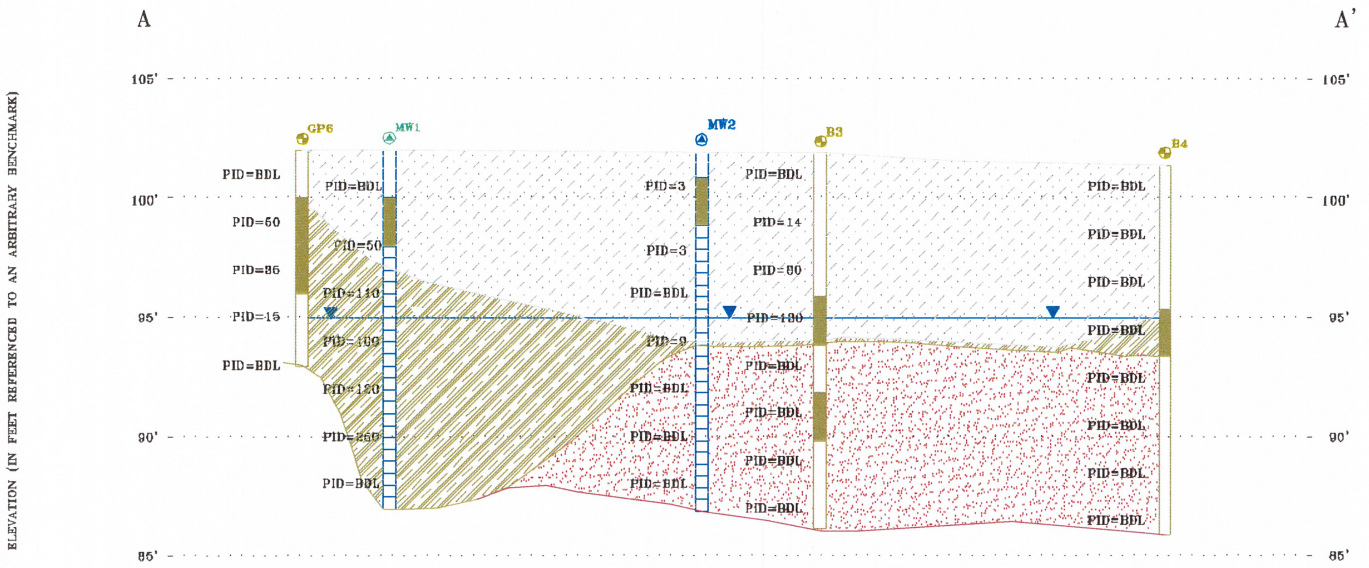
FIGURE 5
CROSS SECTION B-B'
FORMER PARKSIDE SERVICE STATION
2968 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	JSZ	X	1" = 10'	02/11/03

PROJECT NO.: 1E-0007014 | CAD No. E0070148

CROSS SECTION A-A'

SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 5'



LEGEND:

- B4 — SOIL BORING
- MW2 — MONITORING WELL
- MW1 — FORMER MONITORING WELL
- STATIC WATER LEVEL (04/02/02)
- WELL SCREEN
- INTERVAL SAMPLED FOR LABORATORY ANALYSIS

SOIL KEY:

- FILL: SILT WITH FINE TO COARSE SAND AND FINE GRAVEL
- CLAYEY SILT WITH FINE TO COARSE SAND AND FINE TO MEDIUM GRAVEL
- SILT WITH FINE TO COARSE SAND AND FINE GRAVEL

NOTE:

GP6 WAS NOT SURVEYED FOR ELEVATION

GP6 WAS TERMINATED DUE TO PROBE REFUSAL

PID: PHOTOIONIZATION DETECTOR EXPRESSED IN INSTRUMENT UNITS

BDL: BELOW DETECTION LEVEL

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0118

FIGURE 4
CROSS SECTION A-A'
FORMER PARKSIDE SERVICE STATION
2963 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	JSZ	X	1" = 10'	02/07/03
PROJECT NO.: 1E-0007014			CAD No. E0070147	

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name or FID below to view Location Details page for this Activity. Other Activities, if present, may be accessed from Location Details.

< Basic Search

03-41-484156 ALTERRA COFFEE

OPEN LUST

Location Name (Click Location Name or FID to View Location Details)			County	WDNR Region
ALTERRA COFFEE ROASTERS PROPERTY			MILWAUKEE	SOUTHEAST
Address			Municipality	
2941-2955 N HUMBOLDT AVE			MILWAUKEE	
PLSS Description	Latitude	Longitude	Google Maps	RR Sites Map
NE 1/4 of the NW 1/4 of Sec 16, T07N, R22E	43.0723519	-87.8981741	CLICK TO VIEW	CLICK TO VIEW
Additional Location Description			Size (Acres)	Facility ID
			UNKNOWN	341021560

Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action
DNR RR			2003-07-29		2020-01-03

Characteristics

PECFA Tracked?	EPA NPL Site?	EPA Superfund?	PECFA Funds Eligible?	Above Ground Tank?	Drycleaner?	Co-Contamination?	WI DOT Site?	COs Apply?
No	No	No	No	No	No	No	No	No

Actions

Place Cursor Over Action Code to View Description

Date	Code	Name	Comment
2003-07-29	1	Notification of Hazardous Substance Discharge	
2003-08-12	2	Responsible Party (RP) letter sent	
2003-12-15	79	Case Closure Review Request Received	RECVD CHECK #01014235 $1200 (INCL SOIL & GW GIS) COMPLETE (MW)
2003-12-15	50	GIS Registry Site	AUTOPOPULATED FROM 700/710 ACTION ENTRY ON 20-OCT-05
2003-12-15	700	Database Fee Paid for Groundwater Continuing Obligation(s)	RECVD CHECK #01014235 $1200 ($200 SOILS)
2003-12-15	37	Site Investigation Report (SIR) Received (non-fee)	REC'D SIR, FREE PRODUCT REMOVAL, AND REQUEST FOR CASE CLOSURE RPT
For Code 37:	20031215_37_SIR.pdf Click to Download or Open		
2003-12-15	710	Database Fee Paid for Soil Continuing Obligation(s)	RECVD CHECK #01014235 $1200 ($250 GW)
2004-05-04	80	Closure Not Recommended	BG
2006-04-25	97	Technical Assistance Request Received (fee)	REC'D CK# 089359 $500.00 REFUNDED 06/13/06 PER BB
2006-04-25	98	Technical Assistance Provided	REC'D CK# 089359 $500.00 REFUNDED 06/13/06 PER BB
2006-08-17	97	Technical Assistance Request Received (fee)	REC'D CK# 161278 $500.00
2006-08-17	98	Technical Assistance Provided	REC'D CK# 161278 $500.00
2006-08-25	2	Responsible Party (RP) letter sent	PROPERTY OWNER CHANGED
2006-12-05	90	SER First In/First Out (FIFO) Review Process Started	REC'D SUPPLEMENT REM &

			MONITORING RESULTS
2011-04-20	200	Push Action Taken	LETTER TO CITY OF MILWAUKEE, MULTIPLE SITES.
2011-09-07	130	DNR Regulatory Reminder Sent	Vapor Intrusion (VI) Assessment Notification Ltr Sent
2011-09-16	200	Push Action Taken	SENT PUSH ACTION LTR TO CITY RACM (RP) & ALTERRA
2011-09-16	130	DNR Regulatory Reminder Sent	VI ASSESSMENT NOTIFICATION LTR RESENT - DETTMER, RACM-MILWAUKEE, CC ALTERRA
For Code 130:	0341484156_VI_Letter.pdf Click to Download or Open		
2014-09-24	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 1/1/2014 - 6/30/2014
Click 195 Action Name above to view NR700.11 report			
2015-01-06	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 7/1/2014 - 12/31/2014
Click 195 Action Name above to view NR700.11 report			
2015-06-01	43	Site Activity Status Update Received	QUARTERLY REPORT
2015-07-08	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 1/1/2015 - 6/30/2015
Click 195 Action Name above to view NR700.11 report			
2015-07-15	99	Miscellaneous	FOR NR700.11 RPT, A CASE CLOSURE REQ WAS NOT YET SUBMITTED. WILL BE SUBMITTED SOON
2015-12-07	99	Miscellaneous	TELEPHONE CONVERSATION WITH CONSULTANT (GZA) IN REGARD TO STATUS REPORT AND PATHWAY TO CLOSURE.
2016-01-28	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 7/1/2015 - 12/31/2015
Click 195 Action Name above to view NR700.11 report			
2016-05-18	99	Miscellaneous	EMAIL SENT TO CONSULTANT REQUESTING STATUS UPDATE
2016-05-18	99	Miscellaneous	STATUS UPDATE RECEIVED VIA EMAIL FROM CONSULTANT (GZA). CLOSURE PACKAGE TO BE SUBMITTED JUNE 2016
2016-07-21	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 1/1/2016 - 6/30/2016
Click 195 Action Name above to view NR700.11 report			
2016-10-10	99	Miscellaneous	STATUS UPDATE RECEIVED VIA TELEPHONE CONVERSATION - NEW CONSULTANT PM (GZA - C.RUENGER)
2017-01-11	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 7/1/2016 - 12/31/2016
Click 195 Action Name above to view NR700.11 report			
2017-07-05	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 1/1/2017 - 6/30/2017
Click 195 Action Name above to view NR700.11 report			
2018-01-03	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 7/1/2017 - 12/31/2017
Click 195 Action Name above to view NR700.11 report			
2018-07-02	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 1/1/2018 - 6/30/2018
Click 195 Action Name above to view NR700.11 report			
2019-01-02	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 7/1/2018 - 12/31/2018

Click 195 Action Name above to view NR700.11 report			
2019-07-02	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 1/1/2019 - 6/30/2019
Click 195 Action Name above to view NR700.11 report			
2020-01-03	195	Semi-Annual/PECFA Cost Reporting (NR700) Requirement Met	Period: 7/1/2019 - 12/31/2019
Click 195 Action Name above to view NR700.11 report			

Substances

Substance	Type	Est Amt Released	Units
Diesel Fuel	Petroleum		

Who

Role	Name/Address
Responsible Party	DIRTY DOGS LLC 2211 N PROSPECT AVE MILWAUKEE, WI
Project Manager	MAY VANG 2300 N MARTIN LUTHER KING DR MILWAUKEE, WI 53212

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The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621

Release 2.8.7 | 12/15/2019 | Release Notes

Table 1

Groundwater Elevations

2941-2955 North Humboldt Boulevard

Milwaukee, Wisconsin

Project No. 1E-0007013

Date	MW1		MW2		MW3		MW4		MW5		Sump	
	TOC Elevation = 105.03		TOC Elevation = 100.88		TOC Elevation = 104.01		TOC Elevation = 105.07		TOC Elevation = 104.52		TOC Elevation = 105.22	
	TOS Elevation = 100.39		TOS Elevation = 96.39		TOS Elevation = 94.81		TOS Elevation = 100.46		TOS Elevation = 97.04		TOS Elevation = 95.44	
	Depth to Water (ft)	Elevation	Depth to Water (ft)	Elevation	Depth to Water (ft)	Elevation	Depth to Water (ft)	Elevation	Depth to Water (ft)	Elevation	Depth to Water (ft)	Elevation
11/6/2001	9.86	95.17	6.53	94.35	8.93	95.08	7.25	97.82	9.76	94.76	--	--
11/12/2001	10.29	94.74	--	--	--	--	--	--	--	--	--	--
11/26/2001	11.33	93.70	--	--	--	--	--	--	--	--	--	--
12/26/2001	11.22	93.81	--	--	--	--	--	--	--	--	--	--
1/3/2002	11.87	93.16	--	--	--	--	--	--	--	--	--	--
1/22/2002	12.71	92.32	--	--	--	--	--	--	--	--	--	--
2/8/2002	12.45	92.58	8.71	92.17	9.65	94.36	8.15	96.92	9.68	94.84	--	--
2/14/2002	11.44	93.59	--	--	--	--	--	--	--	--	--	--
2/22/2002	10.90	94.13	--	--	--	--	--	--	--	--	--	--
3/21/2002	10.99	94.04	--	--	--	--	--	--	--	--	--	--
5/10/2002	11.39	93.64	6.39	94.49	9.08	94.93	7.11	97.96	9.47	95.05	--	--
5/23/2002	10.40	94.63	6.23	94.65	9.00	95.01	6.83	98.24	9.44	95.08	9.81	95.41
5/30/2002	10.45	94.58	--	--	--	--	--	--	--	--	9.95	95.27
8/26/2002	10.81	94.22	--	--	10.13	93.88	--	--	--	--	10.13	95.09
11/1/2002	13.29	91.74	--	--	10.21	93.80	--	--	--	--	11.56	93.66
11/8/2002	11.95	93.08	--	--	10.16	93.85	--	--	--	--	11.76	93.46
11/15/2002	12.08	92.95	--	--	10.33	93.68	--	--	--	--	11.96	93.26
12/6/2002	12.54	92.49	--	--	10.42	93.59	--	--	--	--	12.32	92.90
12/13/2002	12.46	92.57	--	--	10.34	93.67	--	--	--	--	12.47	92.75
12/20/2002	12.35	92.68	--	--	10.43	93.58	--	--	--	--	12.53	92.69
12/27/2002	12.43	92.60	--	--	10.49	93.52	--	--	--	--	11.72	93.50
1/3/2003	12.58	92.45	--	--	10.40	93.61	--	--	--	--	12.90	92.32
1/10/2003	12.62	92.41	--	--	10.46	93.55	--	--	--	--	12.97	92.25
1/17/2003	12.77	92.26	--	--	10.65	93.36	--	--	--	--	13.14	92.08
1/24/2003	12.81	92.22	--	--	10.76	93.25	--	--	--	--	13.22	92.00
1/31/2003	12.94	92.09	--	--	10.81	93.20	--	--	--	--	13.30	91.92
2/7/2003	13.03	92.00	--	--	10.85	93.16	--	--	--	--	13.39	91.83
2/14/2003	13.12	91.91	--	--	10.95	93.06	--	--	--	--	13.48	91.74
2/21/2003	13.21	91.82	--	--	11.03	92.98	--	--	--	--	13.61	91.61
2/28/2003	13.18	91.85	--	--	11.01	93.00	--	--	--	--	13.77	91.45
3/16/2003	13.45	91.58	--	--	11.21	92.80	--	--	--	--	13.85	91.37
3/21/2003	12.88	92.15	--	--	10.68	93.33	--	--	--	--	13.16	92.06
3/28/2003	12.81	92.22	--	--	10.45	93.56	--	--	--	--	12.92	92.30
4/4/2003	12.56	92.47	--	--	10.33	93.68	--	--	--	--	12.86	92.36
4/25/2003	12.53	92.50	--	--	10.01	94.00	--	--	--	--	12.22	93.00
5/9/2003	11.58	93.45	--	--	8.82	95.19	--	--	--	--	10.83	94.39

TOC: Top of Casing
TOS: Top of Screen

ft: Feet
--: Not measured

Note: Elevation in feet referenced to an arbitrary benchmark (sewer manhole in East Chambers Street, near the northeast corner of the subject property)

Table 2

Soil Analytical Results (DRO/VOC)

2941-2955 North Humboldt Boulevard

Milwaukee, Wisconsin

Project No. 1E-0007013

Soil Boring Location	Sample Depth (feet)	PID (instrument units)	Collection Date	DRO (mg/kg)	Detected Volatile Organic Compounds (VOCs) (ug/kg)												
					1,2,4-TMB	1,3,5-TMB	B	E	IPBz	MeCl2	n-BuB	n-PBz	Napht	p-IPT	s-BuBz	T	X
B1	4-6	BDL	5/11/2001	10	<24	<18	<14	<13	<17	<16	<19	<15	<39	<16	<18	<15	<41
	10-12	65	5/11/2001	3.8	<1.7	<1.9	400	38j	<1.9	<1.7	<2.0	<1.6	133	<1.8	<1.9	255	67j
	18-20	BDL	5/11/2001	11	<16	<19	<15	<14	<18	<17	<19	<15	<41	<17	<18	<16	<43
B2	2-4	4	5/11/2001	4.9	<17	<19	<15	<14	<18	<17	<20	<15	169	<17	<19	<16	<43
	6-8	100	5/11/2001	<1.1	<16	<19	<15	<14	<18	<16	<19	<15	<41	<17	<18	<16	<43
	14-16	4	5/11/2001	18	<17	<19	<15	<14	<18	<17	<20	<16	<42	<17	<19	<16	<43
B3	4-6	BDL	5/11/2001	5.6	<26	<19	<15	<14	<18	<17	<20	<16	<42	<18	<19	<16	<44
	6-8	85	5/11/2001	141	<17	<20	<15	<14	48j	<17	338	38j	483	<18	440	<17	<44
	16-18	BDL	5/11/2001	8	<16	<18	<14	<14	<18	<16	<19	<15	<40	<17	<18	<16	<42
B4	4-6	BDL	5/11/2001	3.2j	<17	<19	<15	<14	<19	<17	<20	<16	<43	<18	<19	<16	<43
	14-16	BDL	5/11/2001	13	<16	<19	<15	<14	<18	<17	<20	<15	<41	<17	<18	<16	<44
B5	2-4	BDL	5/11/2001	1.8j	<17	<19	<15	<14	<18	<17	<20	<16	<42	<17	<19	<16	<44
	8-10	100	5/11/2001	13	<17	<20	<15	<14	<19	<17	<20	<16	<43	<18	<19	<17	<44
	18-20	20	5/11/2001	16	<18	<21	<16	<15	<20	<18	<21	<17	<45	<19	<20	<17	<47
B6	4-6	5	5/11/2001	2.2j	285	74	<15	<14	<18	<17	<20	<16	38j	<18	139	<16	<44
	6-8	100	5/11/2001	84	<18	<20	<16	<15	127	<18	357	171	2,350	<18	442	<17	<46
	12-14	70	5/11/2001	56	<18	<21	<16	<15	66	<18	129	109	416	<19	144	<18	<47
B7	8-10	140	5/11/2001	3,450	2,260	1,810	<81	1,100	4,600	<91	11,300	7,970	<226	<94	10,900	<87	473
B8	6-8	110	5/11/2001	1,230	<17	<20	<16	147	84	<18	<21	66	1,870	<18	415	<17	<45
B9	8-10	20	5/11/2001	2,140	<17	<19	<15	<14	<18	<17	<20	<16	<42	<17	<19	<16	<44
B10	2-4	4	5/14/2001	44	<17	<20	<16	<15	<19	<17	<21	<16	<44	<18	<19	<17	<45
	6-8	4	5/14/2001	6	<17	<20	<15	<15	<19	<17	<21	<16	117j	<18	<19	<17	<45
	10-12	30	5/14/2001	84	446	<20	<16	<15	124	<18	1,520	<17	<45	<19	2,500	<17	<47
B11	6-8	BDL	5/14/2001	<1.2	<18	<21	<16	<15	<20	<18	<22	<17	<45	<19	<20	<18	<47
B12	8-10	BDL	5/14/2001	3.6	<16	<19	<15	<14	<18	<16	<19	<15	<41	<17	<18	<16	<43
B13	8-10	30	5/14/2001	3,180	<18	<21	<16	<15	<20	<18	357	<17	<45	<19	739	<17	<47
B14	4-6	BDL	5/14/2001	3.8	<16	<18	<14	<13	<17	<16	<19	<15	<39	<16	<18	<15	<41
	12-14	100	5/14/2001	12,000	39,000	4,590	<167	#11,200#	6,680	<188	11,900	10,900	#54,000#	6,430	11,100	642	11,640
	18-20	BDL	5/14/2001	6.1	<16	<18	<14	<13	<17	<16	<19	<15	<40	<17	<18	<15	<41
B15	2-4	4	5/14/2001	4.8	<18	<20	<16	<15	<19	<18	<21	<17	<45	<19	<20	<17	<47
	10-12	140	5/14/2001	64	2,680	269	<16	285	385	<18	1,480	628	330	706	1110	<17	145
	16-18	BDL	5/14/2001	11	<17	<20	<16	<15	<19	<17	<21	<16	<43	<18	<19	<17	<45
B16	8-10	BDL	9/25/2001	54	<17	<19	<15	<14	<19	<17	<20	<16	<43	<18	<19	<17	<30
MW1	6-8	BDL	9/25/2001	4,830	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2	3-5	20	9/25/2001	1,580	<25	<25	<25	<25	<25	29j	30j	<25	93j	<25	<25	<25	<52
MW3	3-5	BDL	11/1/2001	<1.1	<25	<25	<25	<25	<25	230	<25	<25	<25	<25	<25	<25	<52
MW4	6-8	BDL	11/1/2001	1.9j	<25	<25	<25	<25	<25	350	<25	<25	<25	<25	<25	<25	<52
MW5	4-6	BDL	11/1/2001	<1.2	<25	<25	<25	<25	<25	47j	<25	<25	<25	<25	<25	<25	<52
NR 720 Generic RCLs				100	NS	NS	5.5	2,900	NS	NS	NS	NS	NS	NS	NS	1,500	4,100
NR 746 RCLs		Table 1. Product Indicator		NS	83,000	11,000	8,500	4,600	NS	NS	NS	NS	2,700	NS	NS	38,000	42,000
		Table 2. Direct Contact		NS	NS	NS	1,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

DRO: Diesel Range Organics
NS: No standard available
PID: Photoionization Detector
TMB: Trimethylbenzene
B: Benzene
E: Ethylbenzene
IPBz: Isopropylbenzene
X: Total Xylenes
n-BuB: n-Butylbenzene
n-PBz: n-Propylbenzene
Napht: Naphthalene
s-BuBz: sec-Butylbenzene
T: Toluene
p-IPT: p-Isopropyltoluene
mg/kg: Milligrams per kilogram, equivalent to parts per million (ppm)
ug/kg: Micrograms per kilogram, equivalent to parts per billion (ppb)
NR: Natural Resources Chapter of the Wisconsin Administrative Code
NA: Not analyzed
j: Concentration detected between the laboratory method detection limit and the quantitation limit

Results indicated in red/underlined are above the NR 720 residual contaminant level (RCL)

Results indicated in brown/# are above the NR 746 free product indicator value

Table 3
Soil Analytical Results (PAH)
2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013

Soil Boring Location	Sample Depth (feet)	PID (instrument units)	Collection Date	Detected PAHs (ug/kg)								
				1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene
B1	4-6	BDL	5/11/2001	<50	<50	<34	<42	<23	<41	<50	<21	<21
	10-12	65	5/11/2001	179	304	<3.7	<45	<2.5	<4.4	69j	75	<2.2
	18-20	BDL	5/11/2001	<52	<53	<35	<44	<24	<43	<53	<22	<22
B2	2-4	4	5/11/2001	<53	<53	<44	<44	<24	<43	<53	<22	<22
	6-8	100	5/11/2001	36,100	64,800	<705	<871	<483	6,200	17,500	9,550	<431
	14-16	4	5/11/2001	<53	<53	<36	<44	<25	<43	<53	<22	<22
B3	4-6	BDL	5/11/2001	<54	<54	<36	<45	<25	<44	<54	<22	<22
	6-8	85	5/11/2001	113j	113j	<37	<45	<25	<44	<55	<23	<22
	16-18	BDL	5/11/2001	<51	<52	<35	<43	<24	<42	<52	<21	<21
B4	4-6	BDL	5/11/2001	<54	<55	<37	<45	<25	<44	<55	<23	<22
	14-16	BDL	5/11/2001	<52	<53	<35	<44	<24	<43	<53	<22	<22
B5	2-4	BDL	5/11/2001	<53	<54	<36	<44	<25	<43	<54	<22	<22
	8-10	100	5/11/2001	187	249	<37	<45	<25	<44	<55	52j	<22
	18-20	20	5/11/2001	<57	<58	<39	<48	<27	<47	<58	<24	<24
B6	4-6	5	5/11/2001	<54	<54	<36	<45	<25	<44	<54	<22	<22
	6-8	100	5/11/2001	2,290	4,260	<38	<47	<26	<46	551	899	<23
	12-14	70	5/11/2001	<58	4,030	2,130	<48	<27	427	<58	759	<24
B7	8-10	140	5/11/2001	31,400	56,300	3,200	<958	<532	5,730	4,360	8,370	<474
B8	6-8	110	5/11/2001	1,440	2,570	<75	<93	<31	195j	623	208	<46
B9	8-10	20	5/11/2001	<212	<214	<144	<177	<98	<173	<214	<89	<88
B10	2-4	4	5/14/2001	<276	<279	<187	<231	<128	<225	<278	<115	<114
	6-8	4	5/14/2001	<55	<56	<37	<46	<25	<45	<55	<23	<23
	10-12	30	5/14/2001	2,470	2,610	<192	<237	<131	680	<285	640	<117
B11	6-8	BDL	5/14/2001	<58	<58	<39	<48	<27	<47	<58	<24	<24
B12	8-10	BDL	5/14/2001	<52	<52	<35	<43	<24	<42	<52	<22	<21
B13	8-10	30	5/14/2001	<230	<232	<156	<192	<107	<187	<231	<96	<95
B14	4-6	BDL	5/14/2001	<50	<51	<34	<42	<23	<41	<50	<21	<21
	12-14	100	5/14/2001	3,070	550	<402	<496	<275	847j	840j	1,760	<246
	18-20	BDL	5/14/2001	<51	83j	<34	<42	<23	<41	<51	<21	<21
B15	2-4	4	5/14/2001	<56	<57	<38	<47	<26	<46	<57	<24	<23
	10-12	140	5/14/2001	26,200	42,800	<700	<938	6,510	<914	6,520	9,890	613j
	16-18	BDL	5/14/2001	<55	<56	<37	<46	<26	<45	<56	<23	<23
B16	8-10	BDL	9/25/2001	<54	<55	<37	<45	<25	<44	<55	<23	<22
MW2	3-5	20	11/1/2001	<55	<56	<37	<46	<26	<45	<55	<23	<23
MW3	3-5	BDL	11/1/2001	<53	<53	<44	<44	<25	<43	<53	<22	<22
MW4	6-8	BDL	11/1/2001	<53	<54	<36	<45	<25	<44	<54	<22	<22
MW5	4-6	BDL	11/1/2001	<57	<57	<48	<48	<26	<46	<57	<24	<24
GP1	12	3.7	5/9/2003	<8.9	<6.0	<5.9	<5.3	<0.22	<1.4	<3.1	<0.86	<0.41
GP2	12	3.4	5/9/2003	<9.2	<6.2	<6.1	<5.5	<0.23	<1.5	<3.2	<0.89	<0.42
GP3	12	16.9	5/9/2003	<9.3	<6.2	<6.1	<5.5	<0.23	<1.5	<3.2	<0.89	<0.43
GP4	12	29.7	5/9/2003	1,140	1,710	<6.1	131	762	261	159	573	<0.42
GP5	12	5.9	5/9/2003	<8.7	<5.8	<5.8	<5.2	<0.22	<1.4	<3.0	<0.84	<0.40
GP6	12	4.3	5/9/2003	<9.1	<6.1	<6.1	<5.4	<0.23	<1.5	<3.1	<0.88	<0.42
GP7	12	10.7	5/9/2003	<9.3	<6.2	<6.2	<5.5	<0.23	<1.5	<3.2	<0.90	<0.43
GP8	12	14.3	5/9/2003	<8.9	<5.9	<5.9	<5.3	<0.22	<1.4	<3.1	<0.86	<0.41
GP9	12	4.8	5/9/2003	<9.1	<6.1	<6.1	<5.4	<0.23	<1.4	<3.1	<0.88	<0.42
GP10	12	90.6	5/9/2003	<9.1	1,870	<6.1	<5.4	335	281	221	387	<0.42
WDNR Interim Guidance Suggested RCLs		Groundwater Pathway		23,000	20,000	38,000	700	500,000	100,000	400	1,800	8,700,000
		Direct Contact Non-Industrial		1,100,000	600,000	900,000	18,000	600,000	600,000	20,000	18,000	500,000
		Direct Contact Industrial		70,000,000	40,000,000	60,000,000	360,000	40,000,000	40,000,000	110,000	390,000	30,000,000

PAHs: Polynuclear aromatic hydrocarbons
PID: Photoionization Detector
BDL: Below detection limit
WDNR: Wisconsin Department of Natural Resources
RCL: Residual Contaminant Level
j: Concentration detected between the laboratory method detection limit and the quantitation limit
ug/kg: Micrograms per kilogram, equivalent to parts per billion (ppb)

Results in red/underlined exceed the WDNR interim guidance suggested generic RCL for groundwater protection

Table 4

Groundwater Analytical Results

2941-2955 North Humboldt Boulevard

Milwaukee, Wisconsin

Project No. 1E-0007013

Sample Location	Collection Date	Detected Volatile Organic Compounds (VOCs) (ug/L)									Detected Polynuclear Aromatic Hydrocarbons (PAHs) (ug/L)								
		TMBs	Benzene	E	IPBz	X	n-PBz	Napht	s-BuBz	T	1-MN	2-MN	AN	ACP	AT	B(a)	Fluorene	PA	Pyrene
MW1	11/06/2001*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/08/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/10/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2	11/6/2001	0.30	<0.27	0.58j	0.39j	0.28j	0.39j	(12)	0.38j	<0.29	<0.21	<0.20	<0.17	<1.0	0.01j	<0.07	<0.33	0.14	<0.06
	2/8/2002	1.7j	<0.44	<0.57	NA	2.7	NA	<1.2	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/10/2002	<1.25	<0.44	1.0j	NA	<1.48	NA	NA	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3	11/6/2001	(160)	<0.54	49	23	4.2	27	199	23	<0.58	25	1.9	3.0	8.4	0.44	0.29	2.7	7.0	0.66
	2/8/2002	559	<0.44	107	NA	276	NA	306	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/10/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW4	11/6/2001	2.93	<0.27	2.1	1.0j	0.80j	0.69j	2.6	0.34	<0.29	<0.21	0.33j	<0.17	<1.0	<0.01	<0.07	<0.33	<0.04	<0.06
	2/8/2002	9.9	(1.7)	5.9	NA	5.2	NA	(16)	NA	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/10/2002	1.0j	<0.44	1.2j	NA	1.1j	NA	NA	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5	11/6/2001	<0.64	<0.27	<0.25	<0.33	<0.78	<0.28	<0.75	<0.34	<0.29	<0.21	<0.20	<0.17	<1.0	<0.01	<0.07	<0.33	<0.04	<0.06
	2/8/2002	0.68j	<0.44	<0.57	NA	7.5	NA	2.2j	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/10/2002	<1.25	<0.44	0.65j	NA	<1.48	NA	NA	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA
NR 140 ES		480	5	700	NS	10,000	NS	40	NS	1,000	NS	NS	NS	NS	3,000	NS	400	NS	250
NR 140 PAL		96	0.5	140	NS	1,000	NS	8	NS	200	NS	NS	NS	NS	600	NS	80	NS	50

TMBs: Trimethylbenzenes
E: Ethylbenzene
IPBz: Isopropylbenzene
X: Xylenes
n-PBz n-Propylbenzene
Napht: Naphthalene
s-BuBz: Sec-Butylbenzene
T: Toluene
MN: Methylnaphthalene
AN: Acenaphthene
ACP: Acenaphthylene
AT: Anthracene
B(a) Benzo (a) anthracene
PA: Phenanthrene

NA: Not Analyzed
NS: No standard established
ug/L: Micrograms per liter; equivalent to parts per billion (ppb)
NR: Natural Resources Chapter of the Wisconsin Administrative Code
j: Concentration detected between the laboratory method detection limit and the quantitation limit
Results indicated in blue/parentheses exceed the NR 140 preventive action limit (PAL)
Results indicated in red/underlined exceed the NR 140 enforcement standard (ES)
*: Free product was present

Table 5

Natural Attenuation Indicator Parameters

2941-2955 North Humboldt Boulevard

Milwaukee, Wisconsin

Project No. 1E-0007013

Well Number	Date	Field Measurements								Laboratory Analyses		
		Temperature (°C)	Dissolved Oxygen (mg/L)	pH (units)	Specific Conductance (us/cm)	Salinity (ppt)	Resistivity (k-ohm-cm)	TDS (g/l)	ORP (mV)	Dissolved Iron (mg/L)	Dissolved Sulfate (mg/L)	Dissolved Methane (ug/L)
MW1	11/6/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2	11/6/2001	14.64	0.90	6.85	930	0.49	1.077	0.594	462	NA	NA	NA
	2/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	<0.081	74	<0.50
MW3	11/6/2001	14.56	1.33	7.39	547	0.28	1.844	0.348	449	NA	NA	NA
	2/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	1.2	82	<0.50
MW4	11/6/2001	14.36	4.38	7.59	263	0.13	3.800	0.168	442	NA	NA	NA
	2/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW5	11/6/2001	14.48	5.35	7.09	836	0.44	1.192	0.542	455	NA	NA	NA
	2/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

mg/L: milligrams per liter

us/cm: microsiemens per centimeter

ppt: parts per thousand

k-ohm-cm: kilo-ohm-centimeter

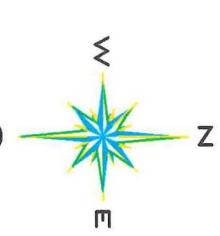
g/L: grams per liter

mV: millivolt

TDS: Total dissolved solids

ORP: Oxydation Reduction Potential

NA: Not measured / Not analyzed



11/06/01	02/08/02	05/10/02
DETECTED VOCs	DETECTED PVOCs	DETECTED PVOCs
TMBs = 2.93	TMBs = 9.9	TMBs = 1.0j
E = 2.1	B = (1.7)	E = 1.2j
IPBz = 1.0j	E = 5.9	X = 1.1j
X = 0.80j	X = 5.2	
n-PBz = 069j	Napht = (16)	
Napht = 2.6	T = 4.1	
s-BuBz = 0.34		
DETECTED PAHs		
2-MN = 0.33j		

MW4

RAILROAD RIGHT-OF-WAY

B5
GP2
GP3
B4
B3
B2
B14
B1
GP1

BATHROOM
BOIL ROO
SERVICE ROOM
BATHROOM
BATHR
BOILER ROOM

LOADING DOCK AREA

ALT & CRETE KING EA

OFFICE

WAREHOUSE AREA

SERVICE ROOM

OFFICE AREA

MW5

GRASS AND SHRUBS

MW3

B16

SIDEWALK

11/06/01	02/08/02	05/10/02
VOCs < LOD	DETECTED PVOCs	DETECTED PVOCs
PAHs < LOD	TMBs = 0.68j	E = 0.65j
	X = 7.5	
	Napht = 2.2j	

NORTH HUMBOLDT BOULEVARD

TRAFFIC ISLAND

11/06/01	02/08/02	FREE PRODUCT
DETECTED VOCs	DETECTED PVOCs	
TMBs = (160)	TMBs = 559	
E = 49	E = 107	
IPBz = 23	X = 276	
X = 4.2	Napht = 306	
n-PBz = 27		
Napht = 199		
s-BuBz = 23		
DETECTED PAHs		
1-MN = 25		
2-MN = 1.9		
AN = 3.0		
ACP = 8.4		
AT = 0.44		
B(a) = 0.29		
FL = 2.7		
PA = 7.0		
P = 0.66		

NORTH HUMBOLDT BOULEVARD

ICAL KEY:

CP: ACENAPTHYLENE
N: ACENAPTHENE
T: ANTHRACENE
BENZENE
(a): BENZO (A) ANTHRACENE
ETHYLBENZENE
FLUORENE
Bz: ISOPROPYLBENZENE
N: METHYLNAPHTHALENE
-PBz: n-PROPYLBENZENE
apht: NAPHTHALENE
PYRENE
A: PHENANTHRENE
-BuBz: Sec-BUTYLBENZENE
TOLUENE
MB: TRIMETHYLBENZENE
TOTAL XYLENES

EVIATIONS:

OD: LIMIT OF DETECTION
AH: POLYNUCLEAR AROMATIC HYDROCARBON
VOC: PETROLEUM VOLATILE ORGANIC COMPOUND
OC: VOLATILE ORGANIC COMPOUND

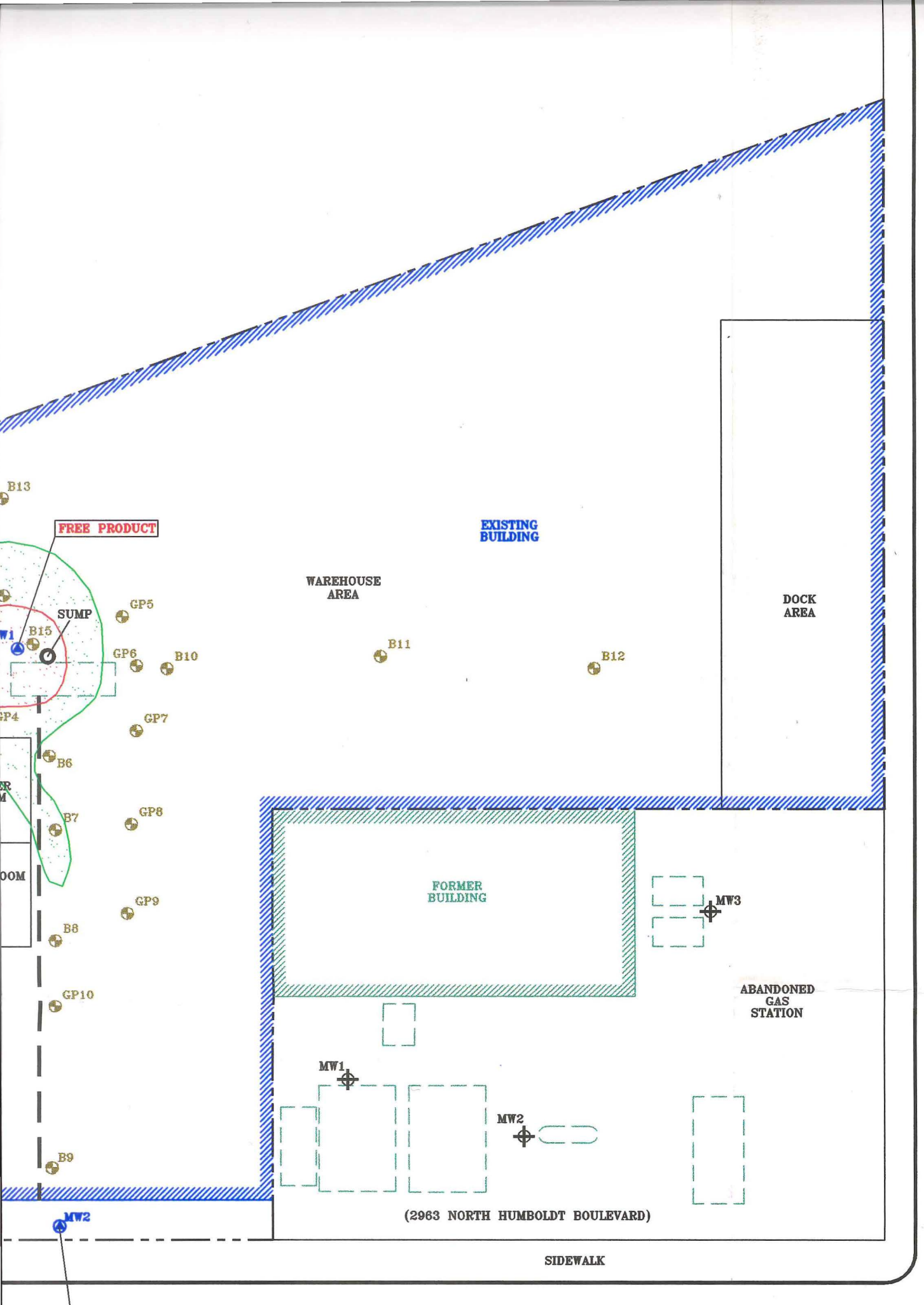
NOTES:

VOC, PVOC AND PAH RESULTS EXPRESSED IN MICROGRAMS PER LITER (ug/l) EQUIVALENT TO PARTS PER BILLION (ppb)

RESULTS INDICATED IN BLUE/PARENTHESIS ARE ABOVE THE WISCONSIN ADMINISTRATIVE CODE NR 140 PREVENTIVE ACTION LIMIT (PAL)

RESULTS INDICATED IN RED/UNDERLINED EXCEED THE WISCONSIN ADMINISTRATIVE CODE NR 140 ENFORCEMENT STANDARD (ES)

-j: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.



11/06/01	02/08/02	05/10/02
DETECTED VOCs TMBs = 0.30 E = 0.58j IPBz = 0.39j X = 0.28j n-PBz = 0.39j Napht = (12) s-BuBz = 0.38j DETECTED PAHs AT = 0.01j PA = 0.14	DETECTED PVOCs TMBs = 1.7j X = 2.7	DETECTED PVOCs E = 1.0j

LEGEND:

- MW1 — GROUNDWATER MONITORING WELL
- MW4 — GROUNDWATER MONITORING INSTALLED AS PART OF 29 HUMBOLDT SITE INVESTIGA
- B1/GP1 — SOIL BORING
- FORMER USTs
- SUBJECT PROPERTY
- CURB LINE
- APPROXIMATE LOCATION OF FORMER FILL PIPE
- SUMP
- BENCHMARK
- FREE PRODUCT MARGIN (POST REMEDIAL)
- FREE PRODUCT MARGIN (PRE REMEDIAL)

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI, 531
(414)-544-0118

FIGURE 8
GROUNDWATER ANALYTICAL RESULTS
2941-2955 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DAT
ELP	JSZ	X	1" = 20'	07-2

PROJECT NO.: 1E-0007013 | CAD NO.: E0070134

11/06/01	02/08/02	05/10/02
DETECTED VOCs	DETECTED PVOCs	DETECTED PVOCs
TMBs = 2.93	TMBs = 9.9	TMBs = 1.0j
E = 2.1	B = (1.7)	E = 1.2j
IPBz = 1.0j	E = 5.9	X = 1.1j
X = 0.80j	X = 5.2	
n-PBz = 069j	Napht = (16)	
Napht = 2.6	T = 4.1	
s-BuBz = 0.34		
DETECTED PAHs		
2-MN = 0.33j		

RAILROAD RIGHT-OF-WAY

MW4

B13

B5

FREE PRODUCT

EXISTING BUILDING

WAREHOUSE AREA

DOCK AREA

GP2

GP3

GP5

SUMP

B4

B3

B2

MW1

B15

B14

GP6

B10

B11

B12

B1

GP1

GP4

GP7

B6

BATHROOM

BOILER ROOM

SERVICE ROOM

B7

GP8

BATHROOM

BATHROOM

GP9

B8

FORMER BUILDING

MW3

BOILER ROOM

GP10

ABANDONED GAS STATION

WAREHOUSE AREA

SERVICE ROOM

OFFICE AREA

MW1

MW2

B9

MW5

GRASS AND SHRUBS

MW3

B16

MW2

(2963 NORTH HUMBOLDT BOULEVARD)

SIDEWALK

SIDEWALK

02/08/02	05/10/02
DETECTED PVOCs	DETECTED PVOCs
TMBs = 0.68j	E = 0.65j
X = 7.5	
Napht = 2.2j	

NORTH HUMBOLDT BOULEVARD

MW4

TRAFFIC ISLAND

11/06/01	02/08/02	FREE PRODUCT
DETECTED VOCs	DETECTED PVOCs	

11/06/01	02/08/02	05/10/02
DETECTED VOCs	DETECTED PVOCs	DETECTED PVOCs

14/01
DEPTH
= BDL
= 3.8
< LOD
< LOD

05/14/01
12-14' DEPTH
PID = 100
DRO = 12,000
DETECTED VOCs
1,2,4 TMB = 39,000
1,3,5 TMB = 4,590
E = #11,200#
IPBz = 6,680
X = 11,640
n-BuB = 11,900
n-PBz = 10,900
Napht = #54,000#
p-IPT = 6,430
s-BuBz = 11,100
T = 642
X = 11,640
DETECTED PAHs
1-MN = 3,070
2-MN = 550
FL = 847j
Napht = 840j
PA = 1,760

05/14/01
18-20' DEPTH
PID = BDL
DRO = 6.1
VOCs < LOD
DETECTED PAHs
2-MN = 83j

05/11/01
2-4' DEPTH
PID = BDL
DRO = 1.8j
VOCs < LOD
PAHs < LOD

05/11/01
8-10' DEPTH
PID = 100
DRO = 13
VOCs < BDL
DETECTED PAHs
1-MN = 187
2-MN = 249
PA = 52j

05/11/01
18-20' DEPTH
PID = 20
DRO = 16
VOCs < LOD
PAHs < LOD

05/14/01
2-4'
PID =
DRO =
VOCs
PAHs

05/11/01
2-4' DEPTH
PID = 4
DRO = 4.9
PAHs < BDL
DETECTED VOCs
Napht = 169

05/11/01
6-8' DEPTH
PID = 100
DRO < 1.1
VOCs < LOD
DETECTED PAHs
1-MN = 36,100
2-MN = 64,800
FL = 6,200
Napht = #17,500#
PA = 9,550

05/11/01
14-16' DEPTH
PID = 4
DRO = 18
VOCs < LOD
PAHs < LOD

05/14/01
8-10' DEPTH
PID = 30
DRO = 3,180
PAHs < LOD
DETECTED VOCs
n-BuB = 357
s-BuBz = 739

05/11/01
4-6' DEPTH
PID = BDL
DRO = 5.6
VOCs < LOD
PAHs < LOD

05/11/01
6-8' DEPTH
PID = 85
DRO = 141
DETECTED VOCs
IPBz = 48j
n-BuB = 338
n-PBz = 38j
Napht = 483
s-BuBz = 440
DETECTED PAHs
1-MN = 113j
2-MN = 113j

05/11/01
16-18' DEPTH
PID = BDL
DRO = 8
VOCs < LOD
PAHs < LOD

05/09/03
12' DEPTH *
PID = 3.4
PAHs < LOD

09/25/01
6-8' DEPTH
PID = BDL
DRO = 4,830

11/01/01
6-8' DEPTH
PID = BDL
DRO = 1.9j
PAHs < LOD
DETECTED VOCs
MeCl2 = 350

05/11/01
4-6' DEPTH
PID = BDL
DRO = 3.2j
VOCs < LOD
PAHs < LOD

05/11/01
14-16' DEPTH
PID = BDL
DRO = 13
VOCs < LOD
PAHs < LOD

11/01
DEPTH
= BDL
= 10
< LOD
< LOD

05/11/01
10-12' DEPTH
PID = 65
DRO = 3.8
DETECTED VOCs
B = 400
E = 38j
X = 67j
Napht = 133
T = 255
DETECTED PAHs
1-MN = 179
2-MN = 304
Napht = 69j
PA = 75

05/11/01
18-20' DEPTH
PID = BDL
DRO = 11
VOCs < LOD
PAHs < LOD

05/09/03
12' DEPTH *
PID = 3.7
PAHs < LOD

05/09/03
12' DEPTH *
PID = 29.7
DETECTED PAHs
1-MN = 1,140
2-MN = 1,710
ACP = 131
F = 762
FL = 261
Napht = 159
PA = 573

11/01/01
4-6' DEPTH
PID = BDL
DRO < 1.2
PAHs < LOD
DETECTED VOCs
MeC12 = 47j

11/01/01
3-5' DEPTH
PID = BDL
DRO < 1.1
PAHs < LOD
DETECTED VOCs
MeC12 = 230

09/25/01
8-10' DEPTH
PID = BDL
DRO = 54
VOCs < LOD
PAHs < LOD

05/11/01
8-10' DEPTH
PID = 140
DRO = 3,450
DETECTED VOCs
1,2,4 TMB = 2,260
1,3,5 TMB = 1,810
E = 1,100
IPBz = 4,600
n-BuB = 11,300
n-PBz = 7,970
s-BuBz = 10,900
X = 473
DETECTED PAHs
1-MN = 31,400
2-MN = 56,300
AN = 3,200
FL = 5,730
Napht = #4,360#
PA = 8,370

05/11/01
6-8' DEPTH
PID = 110
DRO = 1,230
DETECTED VOCs
E = 147
IPBz = 84
n-PBz = 66
Napht = 1,870
s-BuBz = 415
DETECTED PAHs
1-MN = 1,440
2-MN = 2,570
FL = 195j
Napht = 623
PA = 208

09/25/
3-5' DE
PID = 20
DRO = 1.
PAHs < L
DETECTED
MeC12 =
n-BuBz =
Napht =

RAILROAD RIGHT-OF-WAY

LOADING DOCK AREA

OFFICE

WAREHOUSE AREA

SERVICE ROOM

OFFICE AREA

SERVICE ROOM

BATHROOM

BATHROOM

BOILER ROOM

GRASS AND SHRUBS

SIDEWALK

MW4 MW5 MW3

B1 B2 B3 B4 B5 B14 B16 GP1 GP2

ALT & CRETE KING REA

MICAL KEY:

CP: ACENAPTHYLENE
N: ACENAPHTHENE
: BENZENE
: ETHYLBENZENE
: FLUORANTHENE
L: FLUORENE
PBz: ISOPROPYLBENZENE
eCl2: METHYLENE CHLORIDE
N: METHYLNAPHTHALENE
-BuB: n-BUTYLBENZENE
-PBz: n-PROPYLBENZENE
apht: NAPHTHALENE
: PYRENE
A: PHENANTHRENE
-IPT: p-ISOPROPYLTOLUENE
-BuBz: Sec-BUTYLBENZENE
: TOLUENE
MB: TRIMETHYLBENZENE
: TOTAL XYLENES

REVIATIONS:

DL: BELOW DETECTION LIMIT
RO: DIESEL RANGE ORGANICS
OD: LIMIT OF DETECTION
AH: POLYNUCLEAR AROMATIC HYDROCARBONS
ID: PHOTOIONIZATION DETECTOR (FIELD)
OC: VOLATILE ORGANIC COMPOUNDS

NOTES:

FIELD PID RESULTS EXPRESSED IN INSTRUMENT UNITS

DRO RESULTS EXPRESSED IN MILLIGRAMS PER KILOGRAM (mg/kg) EQUIVALENT TO PARTS PER MILLION (ppm)

VOC AND PAH RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg) EQUIVALENT TO PARTS PER BILLION (ppb)

RESULTS INDICATED IN RED/UNDERLINED EXCEED THE WISCONSIN ADMINISTRATIVE CODE NR 720.09 GENERIC RESIDUAL CONTAMINANT LEVEL (RCL) (DRO/VOC) OR THE WDNR INTERIM GUIDANCE SUGGESTED GENERIC RCL (PAH) BASED ON GROUNDWATER PROTECTION

RESULTS INDICATED IN BROWN/# EXCEED THE WISCONSIN ADMINISTRATIVE CODE NR 746-TABLE 1 RESIDUAL PETROLEUM PRODUCT IN SOIL PORES SCREENING LEVELS

-j: CONCENTRATION BETWEEN LABORATORY LIMIT OF DETECTION AND QUANTITATION LIMIT.

-*: SOIL SAMPLE COLLECTED WITHIN WATER TABLE FOR FREE PRODUCT ASSESSMENT. DATA FROM THIS SOIL BORING WAS NOT USED FOR IMPACTED SOIL CONTOURING.

05/14/01	05/14/01
10–12' DEPTH	16–18' DEPTH
PID = 140	PID = BDL
DRO = 64	DRO = 11
DETECTED VOCs	VOCs < LOD
1,2,4 TMB = 2,680	PAHs < LOD
1,3,5 TMB = 269	
E = 285	
IPBz = 385	
X = 145	
n–BuB = 1,480	
n–PBz = 628	
Napht = 330	
p–IPT = 706	
s–BuBz = 1,110	
DETECTED PAHs	
1–MN = 26,200	
2–MN = 42,800	
F = 6,510	
Napht = #6,520#	
PA = 9,890	
P = 613j	

05/14/01	05/14/01	05/14/01
2–4' DEPTH	6–8' DEPTH	10–12' DEPTH
PID = 4	PID = 4	PID = 30
DRO = 44	DRO = 6	DRO = 84
VOCs < LOD	PAHs < LOD	DETECTED VOCs
PAHs < LOD	DETECTED VOCs	1,2,4 TMB = 446
	Napht = 117j	IPBz = 124
		n–BuB = 1,520
		s–BuBz = 2,500
		DETECTED PAHs
		1–MN = 2,470
		2–MN = 2,610
		FL = 680
		PA = 640

05/09/03
12' DEPTH *
PID = 16.9
PAHs < LOD

05/09/03
12' DEPTH *
PID = 4.3
PAHs < LOD

05/09/03
12' DEPTH *
PID = 5.9
PAHs < LOD

05/14/01
6–8' DEPTH
PID = BDL
DRO < 1.2
VOCs < LOD
PAHs < LOD

05/14/01
8–10' DEPTH
PID = BDL
DRO = 3.6
VOCs < LOD
PAHs < LOD

05/09/03
12' DEPTH *
PID = 10.7
PAHs < LOD

05/09/03
12' DEPTH *
PID = 14.3
PAHs < LOD

05/09/03
12' DEPTH *
PID = 4.8
PAHs < LOD

05/11/01
8–10' DEPTH
PID = 20
DRO = 2,140
VOCs < LOD
PAHs < LOD

05/09/03
12' DEPTH *
PID = 90.6
DETECTED PAHs
2–MN = 1,870
F = 335
FL = 281
Napht = 221
PA = 387

05/11/01	05/11/01	05/11/01
4–6' DEPTH	6–8' DEPTH	12–14' DEPTH
PID = 5	PID = 100	PID = 70
DRO = 2.2j	DRO = 84	DRO = 56
PAHs < LOD	DETECTED VOCs	DETECTED VOCs
DETECTED VOCs	IPBz = 127	IPBz = 66
1,2,4 TMB = 285	n–BuB = 357	n–BuB = 129
1,3,5 TMB = 74	n–PBz = 171	n–PBz = 109
Napht = 38j	Napht = 2,350	Napht = 416
s–BuBz = 139	s–BuBz = 442	s–BuBz = 144
	DETECTED PAHs	DETECTED PAHs
	1–MN = 2,290	2–MN = 4,030
	2–MN = 4,260	AN = 2,130
	Napht = 551	FL = 427
	PA = 899	PA = 759

EXISTING BUILDING
WAREHOUSE AREA
DOCK AREA
CHAMBERS STREET
EAST
FORMER BUILDING
ABANDONED GAS STATION
(2963 NORTH HUMBOLDT BOULEVARD)
SIDEWALK
NORTH HUMBOLDT BOULEVARD
TRAFFIC ISLAND
NORTH HUMBOLDT BOULEVARD
SUMP
B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B15
GP1 GP2 GP3 GP4 GP5 GP6 GP7 GP8 GP9 GP10
MW1 MW2 MW3 MW4

LEGEND:

- MW1 — GROUNDWATER MONITORING WELL
- MW4 — GROUNDWATER MONITORING INSTALLED AS PART OF 29 HUMBOLDT SITE INVESTIGA
- B1/GP1 — SOIL BORING
- FORMER USTs
- SUBJECT PROPERTY
- CURB LINE
- APPROXIMATE LOCATION OF FORMER FILL PIPE
- SUMP
- BENCHMARK
- ESTIMATED EXTENT OF IMPACTE ABOVE NR 720 GENERIC RCLs A WDNR SUGGESTED GENERIC RCL BASED ON GROUNDWATER PROTE

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FIGURE 7
SOIL ANALYTICAL RESULTS
2941–2955 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DAT
ELP	JSZ	X	1" = 20'	07–2

PROJECT NO.: 1E–0007013 | CAD NO.: E0070133

05/11/01
2–4' DEPTH
PID = 4
DRO = 4.9
PAHs < BDL
DETECTED VOCs
Napht = 169

05/11/01
6–8' DEPTH
PID = 100
DRO < 1.1
VOCs < LOD
DETECTED PAHs
1–MN = 36,100
2–MN = 64,800
FL = 6,200
Napht = #17,500#
PA = 9,550

05/11/01
14–16' DEPTH
PID = 4
DRO = 18
VOCs < LOD
PAHs < LOD

05/14/01
8–10' DEPTH
PID = 30
DRO = 3,180
PAHs < LOD
DETECTED VOCs
n–BuB = 357
s–BuBz = 739

05/11/01
4–6' DEPTH
PID = BDL
DRO = 5.6
VOCs < LOD
PAHs < LOD

05/11/01
6–8' DEPTH
PID = 85
DRO = 141
DETECTED VOCs
IPBz = 48j
n–BuB = 338
n–PBz = 38j
Napht = 483
s–BuBz = 440
DETECTED PAHs
1–MN = 113j
2–MN = 113j

05/11/01
16–18' DEPTH
PID = BDL
DRO = 8
VOCs < LOD
PAHs < LOD

05/09/03
12' DEPTH *
PID = 3.4
PAHs < LOD

09/25/01
6–8' DEPTH
PID = BDL
DRO = 4,630

05/09/03
12' DEPTH *
PID = 16.9
PAHs < LOD

05/09/03
12' DEPTH *
n–PBz = 628
Napht = 330
p–IPT = 706
s–BuBz = 1,110
DETECTED PAHs
1–MN = 26,200
2–MN = 42,800
F = 6,510
Napht = #6,520#
PA = 9,890
P = 613j

05/09/03
12' DEPTH *
PID = 4.3
PAHs < LOD

05/09/03
12' DEPTH *
PID = 5.9
PAHs < LOD

11/01/01
6–8' DEPTH
PID = BDL
DRO = 1.9j
PAHs < LOD
DETECTED VOCs
MeCl2 = 350

05/11/01
4–6' DEPTH
PID = BDL
DRO = 3.2j
VOCs < LOD
PAHs < LOD

05/11/01
14–16' DEPTH
PID = BDL
DRO = 13
VOCs < LOD
PAHs < LOD

05/09/03
12' DEPTH *
PID = 3.7
PAHs < LOD

05/09/03
12' DEPTH *
PID = 10.7
PAHs < LOD

05/09/03
12' DEPTH *
PID = 14.3
PAHs < LOD

05/09/03
12' DEPTH *
PID = 29.7
DETECTED PAHs
1–MN = 1,140
2–MN = 1,710
ACP = 131
F = 762
FL = 261
Napht = 159
PA = 573

05/09/03
12' DEPTH *
PID = 4.8
PAHs < LOD

11/01/01
4–6' DEPTH
PID = BDL
DRO < 1.2
PAHs < LOD
DETECTED VOCs
MeC12 = 47j

11/01/01
3–5' DEPTH
PID = BDL
DRO < 1.1
PAHs < LOD
DETECTED VOCs
MeC12 = 230

09/25/01
8–10' DEPTH
PID = BDL
DRO = 54
VOCs < LOD
PAHs < LOD

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16

GP1 GP2 GP3 GP4 GP5 GP6 GP7 GP8 GP9 GP10

MW1 MW2 MW3 MW4 MW5

EXISTING BUILDING

WAREHOUSE AREA

DOCK AREA

SUMP

BATHROOM

BATHROOM

BOILER ROOM

BOILER ROOM

SERVICE ROOM

SERVICE ROOM

OFFICE AREA

WAREHOUSE AREA

FORMER BUILDING

ABANDONED GAS STATION

(2963 NORTH HUMBOLDT BOULEVARD)

RAILROAD RIGHT–OF–WAY

GRASS AND SHRUBS

SIDEWALK

SIDEWALK

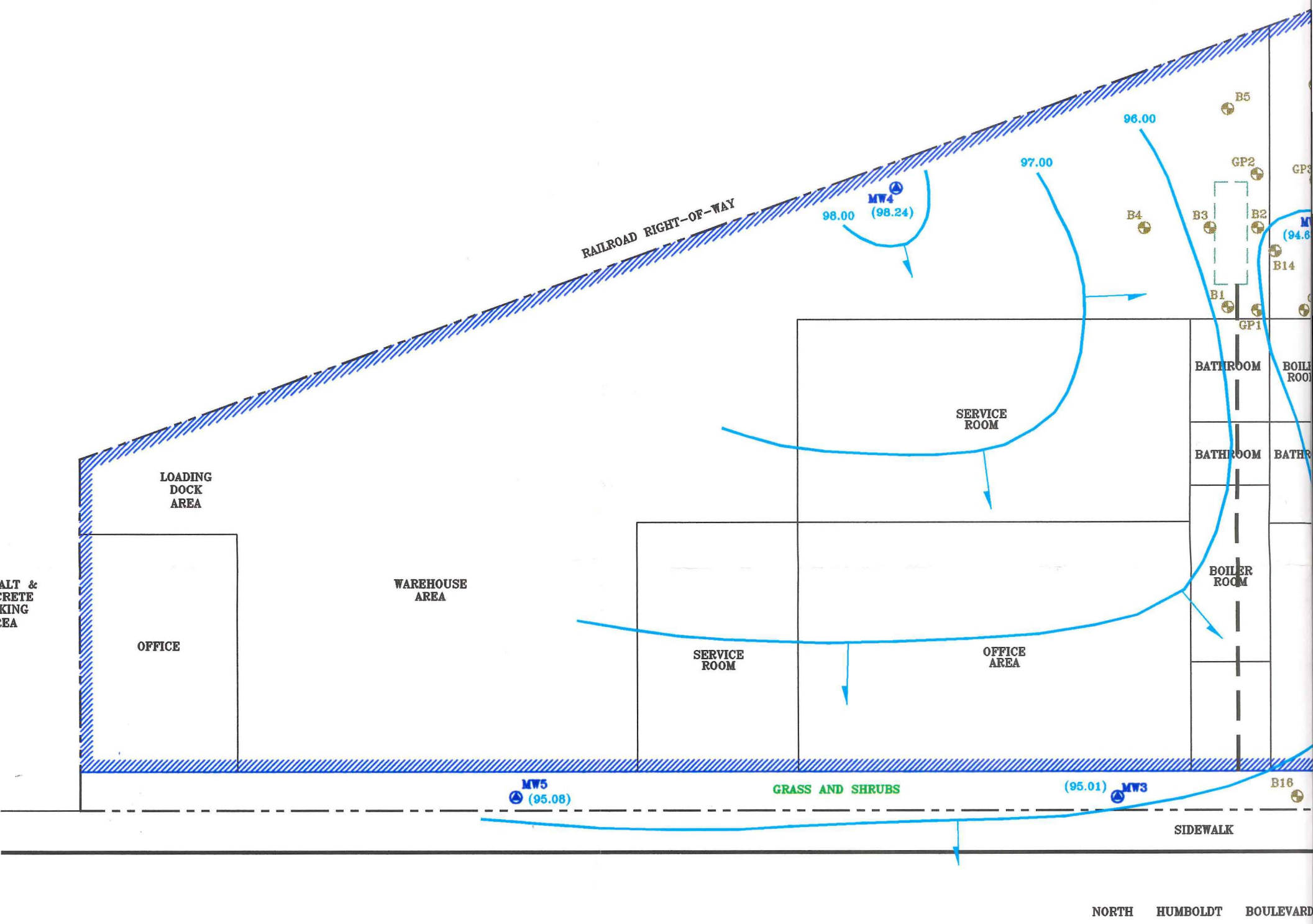
NORTH HUMBOLDT BOULEVARD

TRAFFIC ISLAND

W

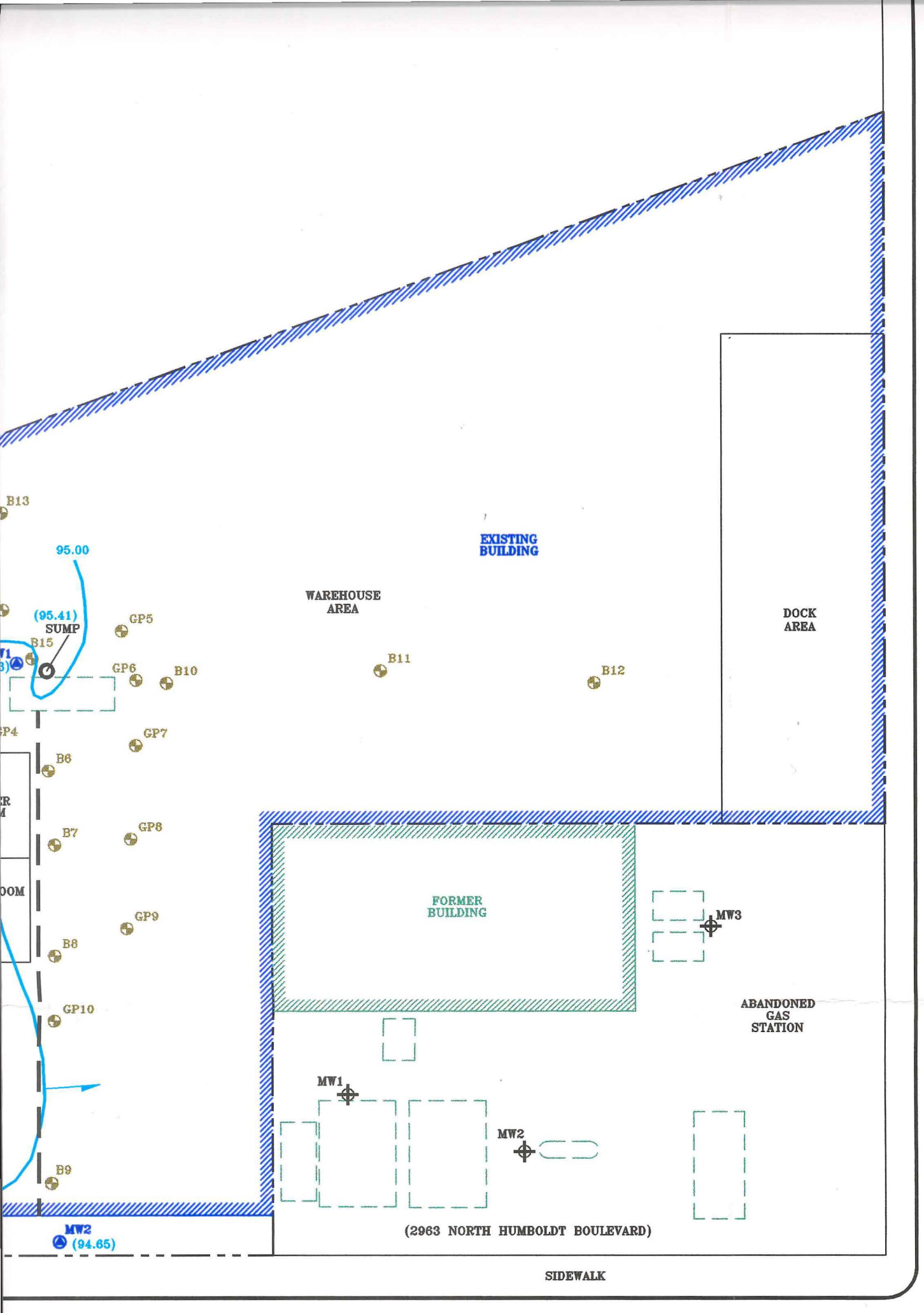
Z

E



TRAFFIC ISLAND

NORTH HUMBOLDT BOULEVARD



LEGEND:

- 95.00 — GROUNDWATER CONTOUR INTERVAL = 1.0'
- GROUNDWATER FLOW DIREC
- (94.65) — GROUNDWATER ELEVATION (IN FEET REFERENCED TO ARBITRARY BENCHMARK)
- MW1 — GROUNDWATER MONITORING WELL
- MW4 — GROUNDWATER MONITORING INSTALLED AS PART OF 29 HUMBOLDT SITE INVESTIGA
- B1/GP1 — SOIL BORING
- FORMER USTs
- SUBJECT PROPERTY
- CURB LINE
- APPROXIMATE LOCATION OF FORMER FILL PIPE
- SUMP
- BENCHMARK

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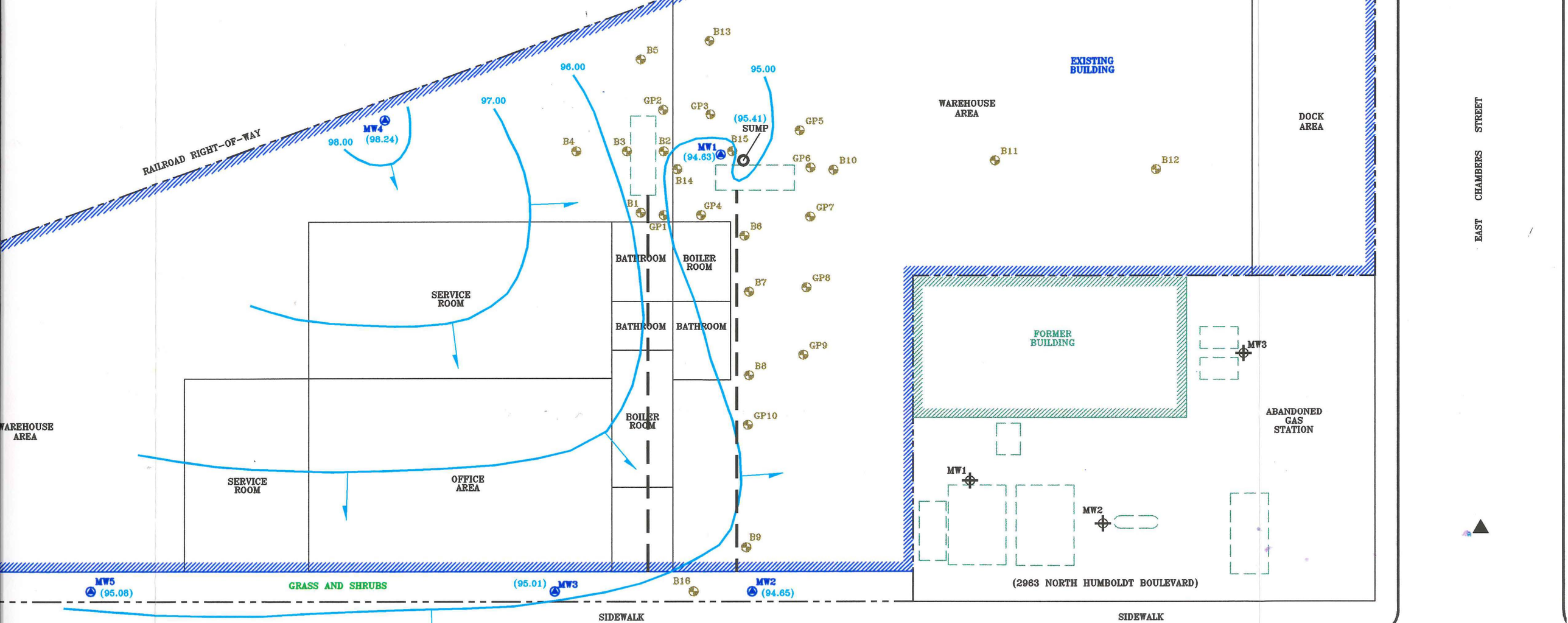
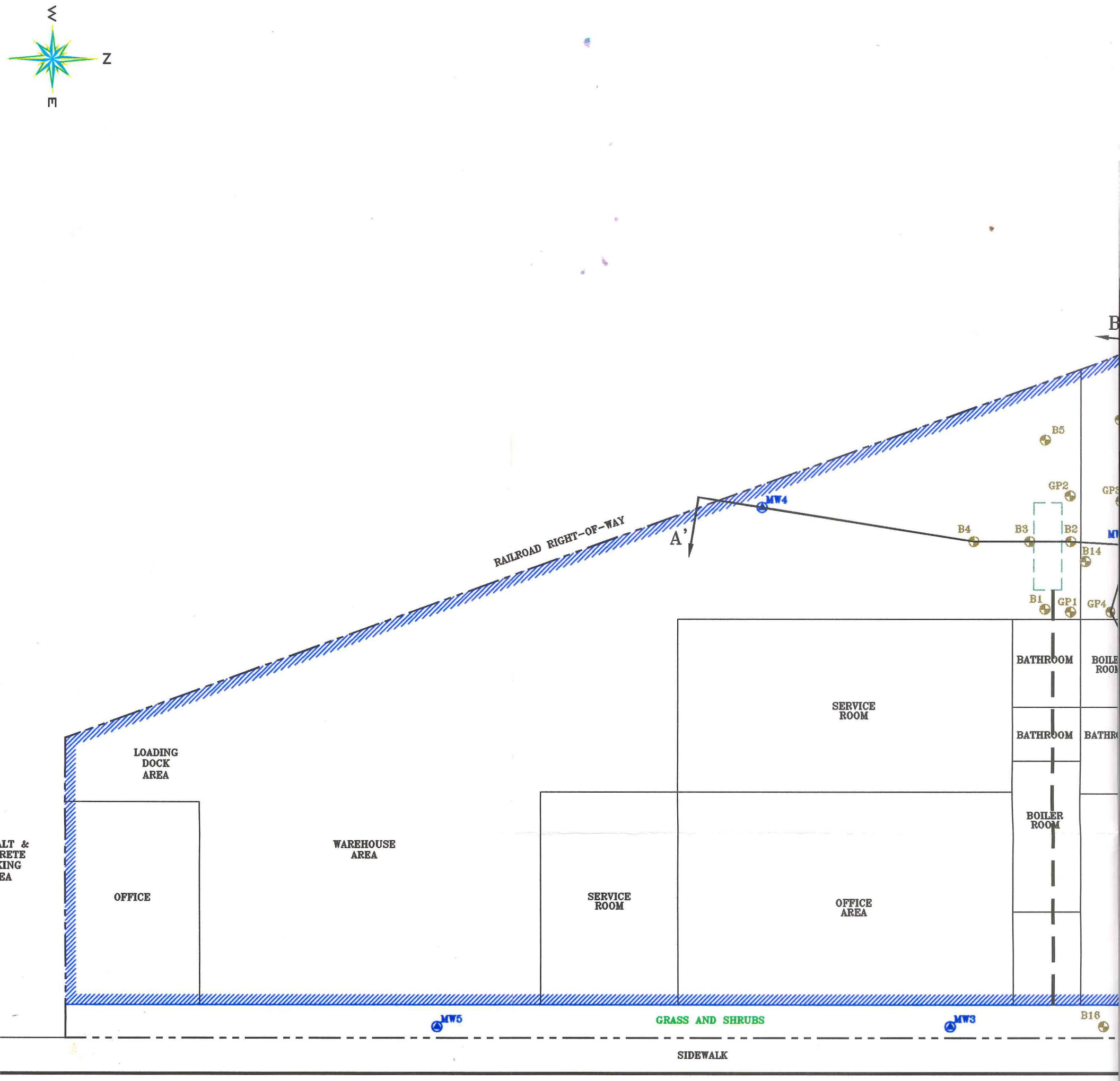
FIGURE 6
GROUNDWATER CONTOUR MAP (5/23/02)
2941-2955 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DAT
ELP	JSZ	X	1" = 20'	07-2

PROJECT NO.: 1E-0007013 | CAD NO.: E00701312

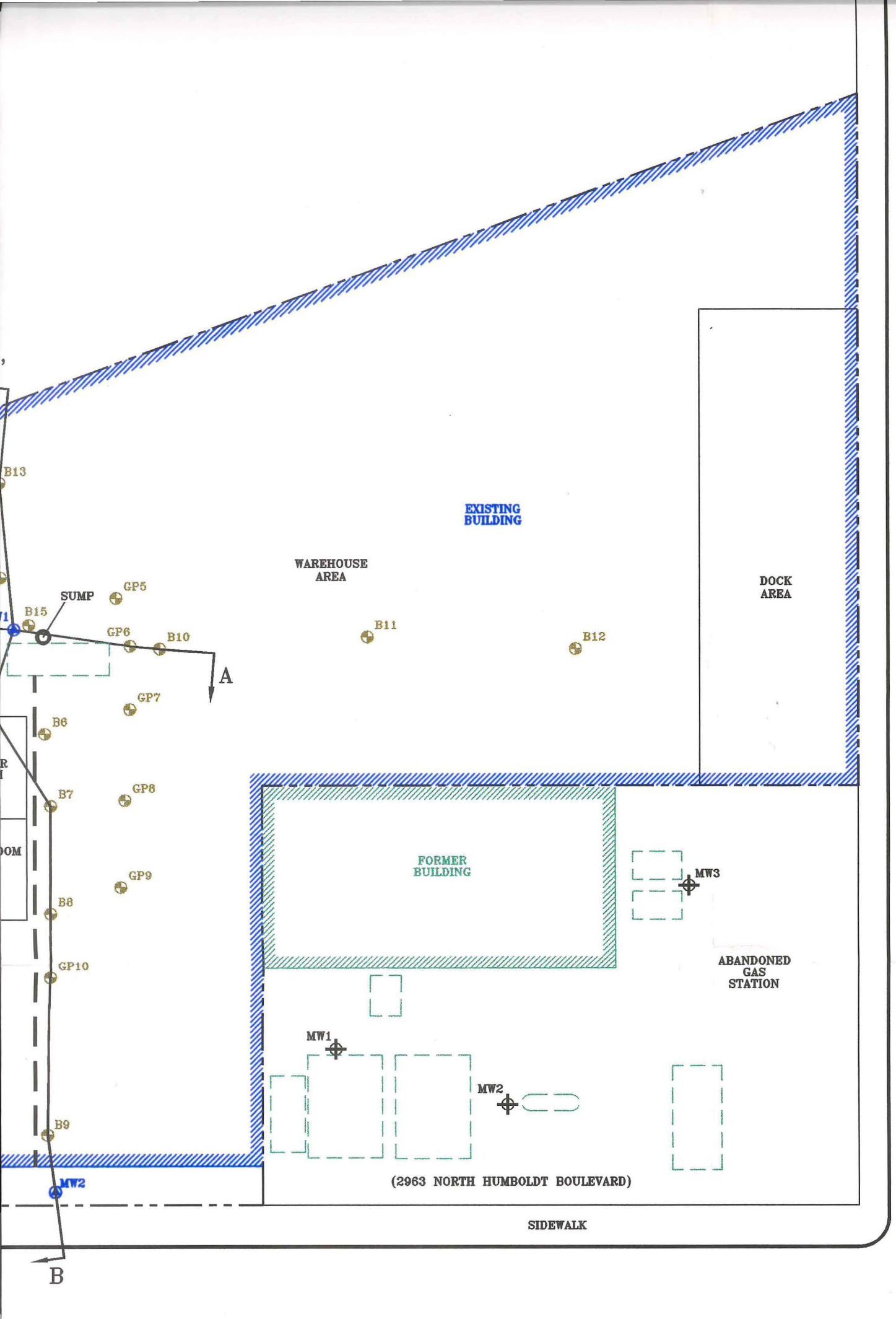

RAILROAD RIGHT-OF-WAY
MW4
(98.24)
98.00
96.00
97.00
95.00
B13
B5
GP2
GP3
(95.41)
SUMP
GP5
B4
B3
B2
MW1
(94.63)
B15
GP6
B10
B14
B1
GP4
GP7
GP1
B6
BATHROOM
BOILER ROOM
SERVICE ROOM
B7
GP8
BATHROOM
BATHROOM
GP9
B8
BOILER ROOM
GP10
WAREHOUSE AREA
SERVICE ROOM
OFFICE AREA
B9
MW5
(95.08)
GRASS AND SHRUBS
(95.01)
MW3
B16
MW2
(94.65)
SIDEWALK
EXISTING BUILDING
WAREHOUSE AREA
DOCK AREA
B11
B12
FORMER BUILDING
MW3
ABANDONED GAS STATION
MW1
MW2
(2963 NORTH HUMBOLDT BOULEVARD)
SIDEWALK
EAST CHAMBERS STREET
NORTH HUMBOLDT BOULEVARD
MW4
TRAFFIC ISLAND
NORTH HUMBOLDT BOULEVARD
LEGEND:
95.00
(94.65)
MW1
MW4
B1/GP1



NORTH HUMBOLDT BOULEVARD

TRAFFIC ISLAND

NORTH HUMBOLDT BOULEVARD



LEGEND:

- A–A' — CROSS-SECTION LINE
- MW1 — GROUNDWATER MONITORING WELL
- MW4 — GROUNDWATER MONITORING INSTALLED AS PART OF 29 HUMBOLDT SITE INVESTIGA
- B1/GP1 — SOIL BORING
- FORMER USTs
- SUBJECT PROPERTY
- CURB LINE
- APPROXIMATE LOCATION OF FORMER FILL PIPE
- SUMP
- BENCHMARK

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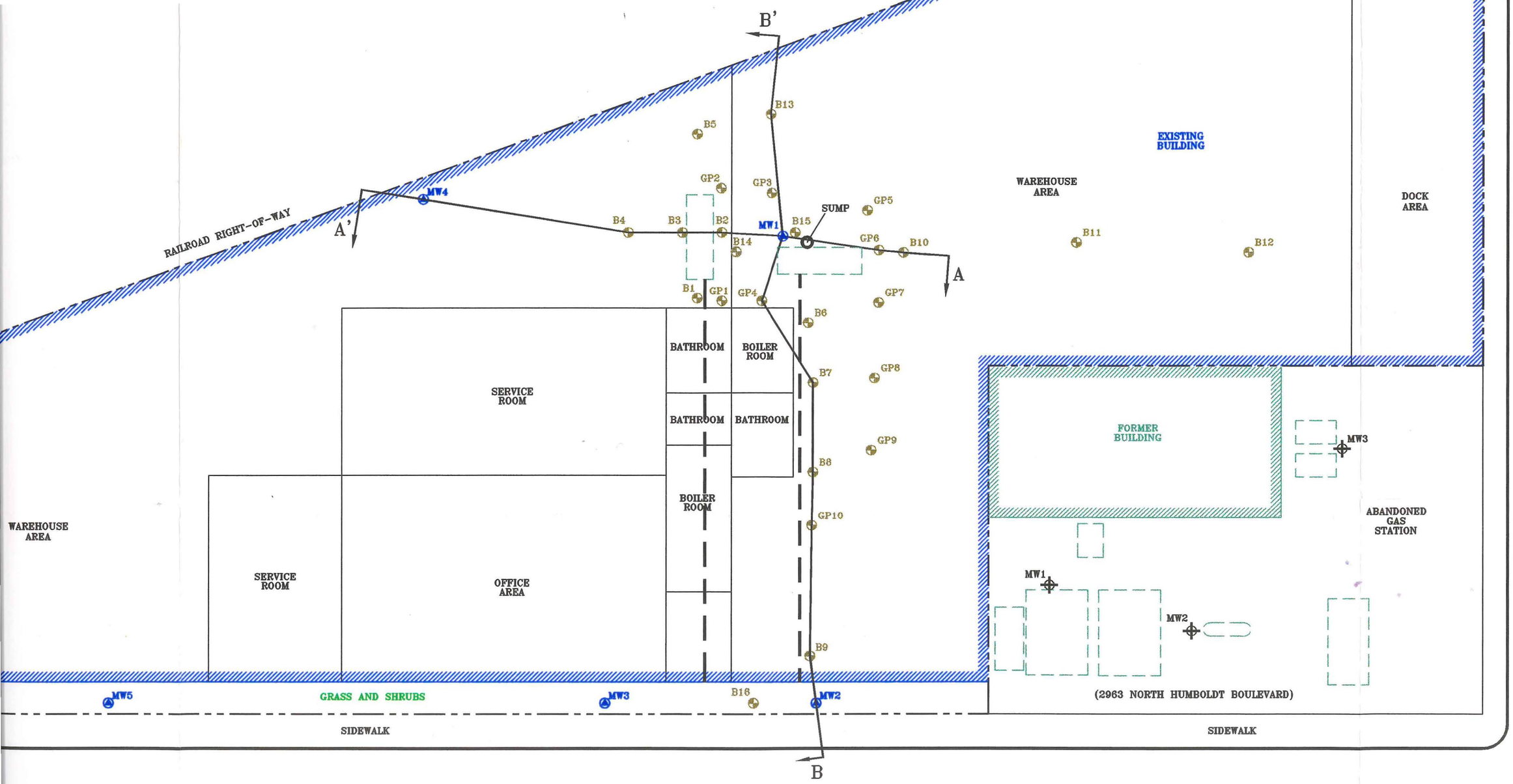
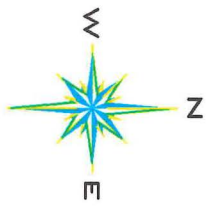
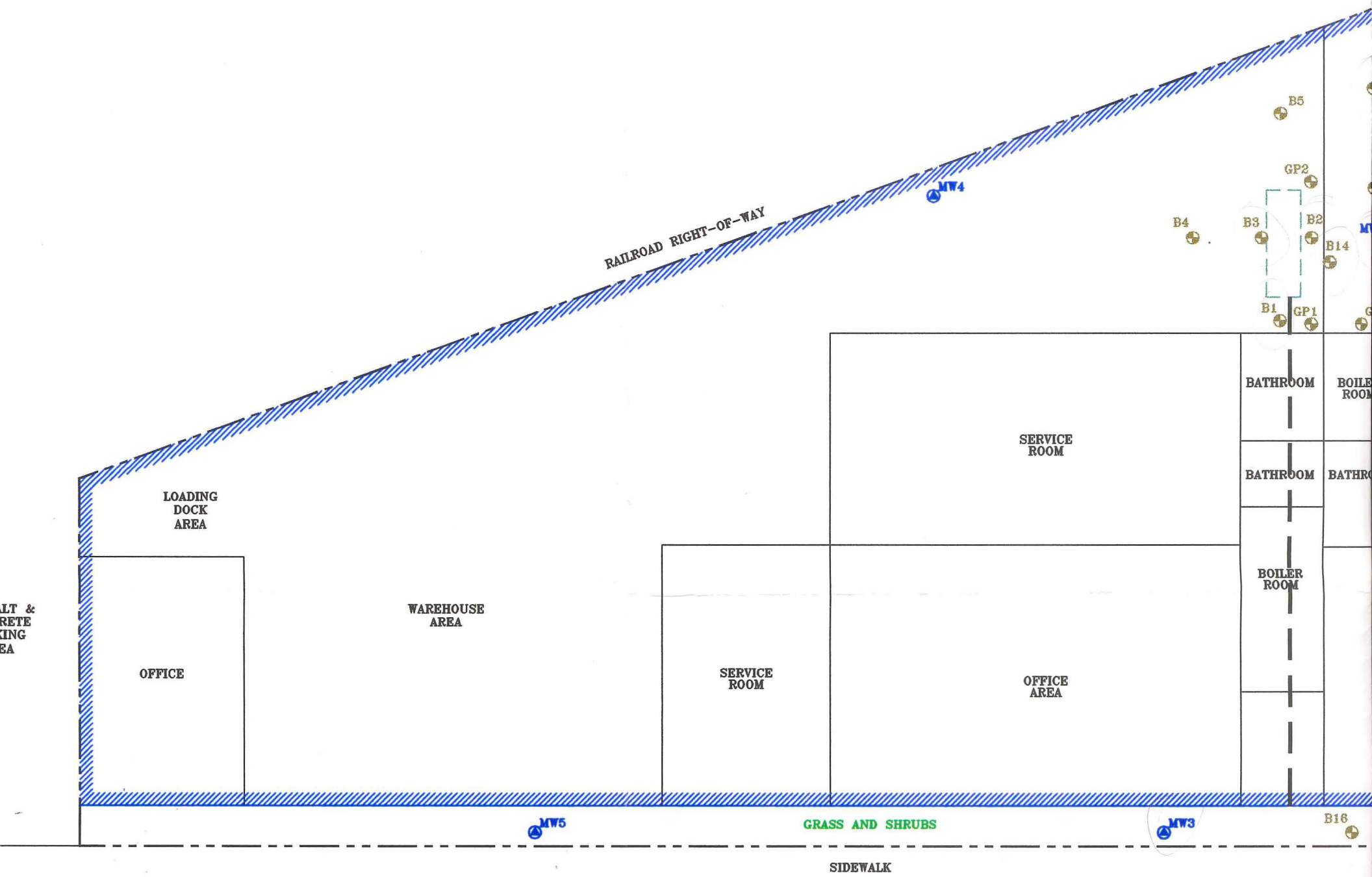
FIGURE 3
CROSS-SECTION LOCATION PLAN
2941–2955 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DAT
ELP	JSZ	X	1" = 20'	07-1

PROJECT NO.: 1E-0007013 | CAD NO.: E0070139


B'
A'
A
B
RAILROAD RIGHT-OF-WAY
MW4
MW1
MW5
MW3
MW2
B13
B5
GP2
GP3
GP5
SUMP
B4
B3
B2
B15
B14
GP6
B10
B1
GP1
GP4
GP7
B6
B7
GP8
GP9
B8
GP10
B9
B16
BATHROOM
BOILER ROOM
BATHROOM
BATHROOM
BOILER ROOM
SERVICE ROOM
SERVICE ROOM
OFFICE AREA
WAREHOUSE AREA
WAREHOUSE AREA
EXISTING BUILDING
DOCK AREA
B11
B12
FORMER BUILDING
MW3
ABANDONED GAS STATION
MW1
MW2
(2963 NORTH HUMBOLDT BOULEVARD)
EAST CHAMBERS STREET
GRASS AND SHRUBS
SIDEWALK
SIDEWALK
NORTH HUMBOLDT BOULEVARD
MW4
TRAFFIC ISLAND
NORTH HUMBOLDT BOULEVARD
LEGEND:
A-A'
MW1
MW4
B1/GP1

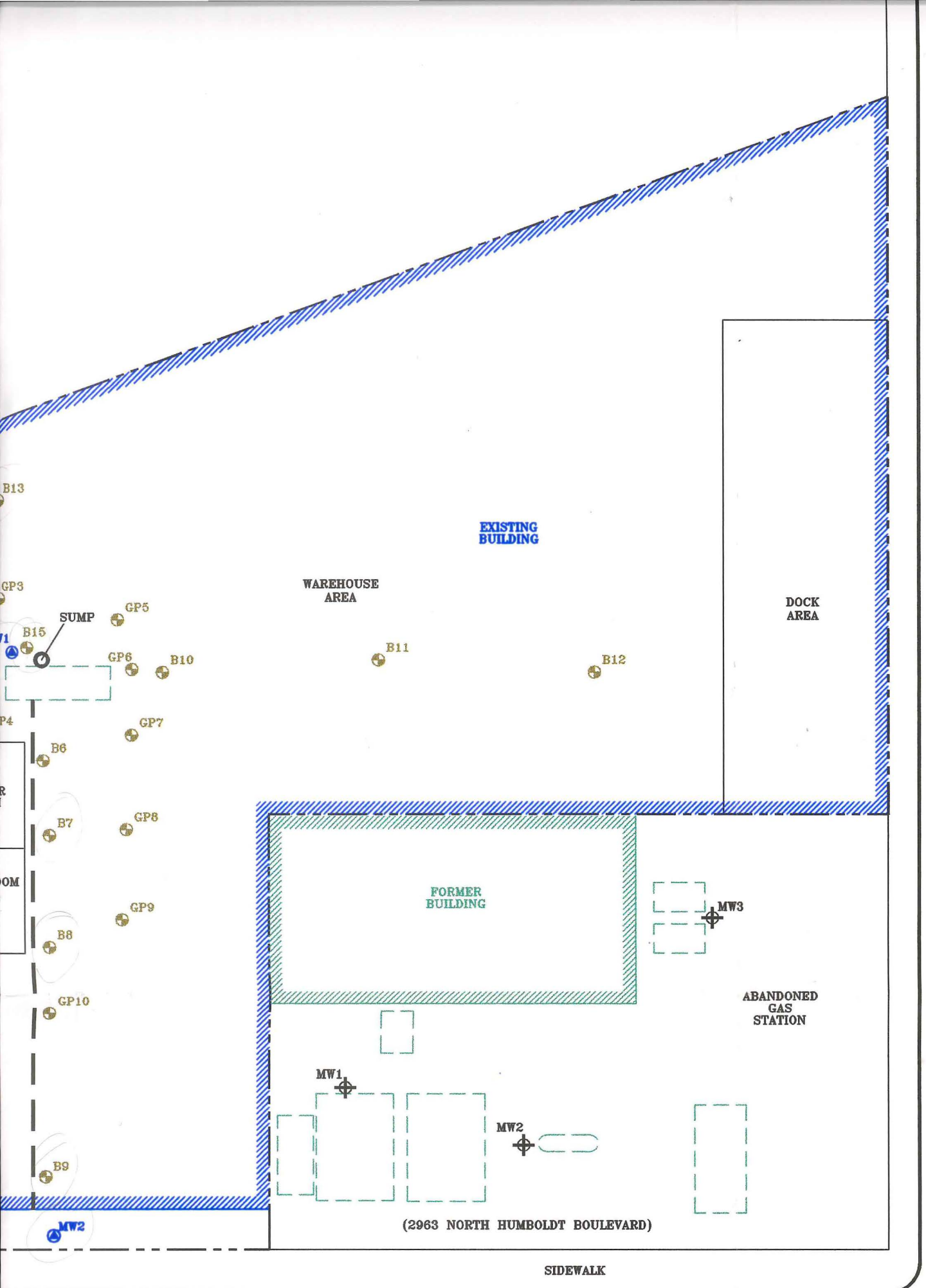




NORTH HUMBOLDT BOULEVARD

TRAFFIC ISLAND

NORTH HUMBOLDT BOULEVARD



MW4

LEGEND:

- MW1 — GROUNDWATER MONITORING WELL
- MW4 — GROUNDWATER MONITORING INSTALLED AS PART OF 296 HUMBOLDT SITE INVESTIGAT
- B1/GP1 — SOIL BORING
- FORMER USTs
- SUBJECT PROPERTY
- CURB LINE
- APPROXIMATE LOCATION OF FORMER FILL PIPE
- SUMP
- BENCHMARK

GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI, 5318
(414)-544-0118

FIGURE 2
SITE FEATURES AND SOIL BORING /MONITORING WELL LOCATION PLA
2941-2955 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	JSZ	X	1" = 20'	07-18

PROJECT NO.: 1E-0007013 | CAD NO.: E0070132

RAILROAD RIGHT-OF-WAY

MW4

B13

B5

GP2

GP3

GP5

SUMP

B4

B3

B2

MW1

B15

B14

GP6

B10

B1

GP1

GP4

GP7

B6

BATHROOM

BOILER ROOM

SERVICE ROOM

B7

GP8

BATHROOM

BATHROOM

GP9

B8

BOILER ROOM

GP10

WAREHOUSE AREA

SERVICE ROOM

OFFICE AREA

B9

MW5

GRASS AND SHRUBS

MW3

B16

MW2

SIDEWALK

WAREHOUSE AREA

EXISTING BUILDING

B11

B12

DOCK AREA

FORMER BUILDING

MW3

ABANDONED GAS STATION

MW1

MW2

(2963 NORTH HUMBOLDT BOULEVARD)

SIDEWALK

EAST CHAMBERS STREET

NORTH HUMBOLDT BOULEVARD

MW4

TRAFFIC ISLAND

NORTH HUMBOLDT BOULEVARD

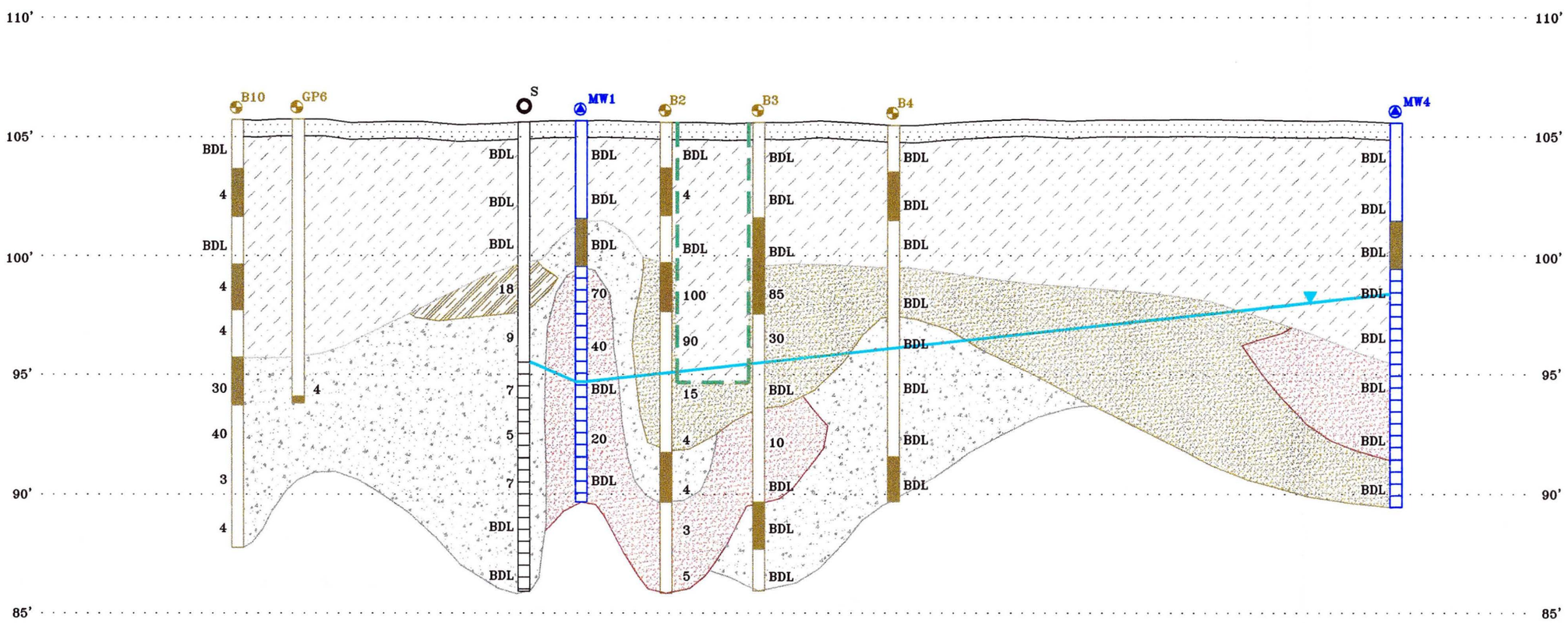
CROSS-SECTION A-A'

SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 5'

A

A'

ELEVATION (IN FEET REFERENCED TO AN ARBITRARY BENCHMARK)

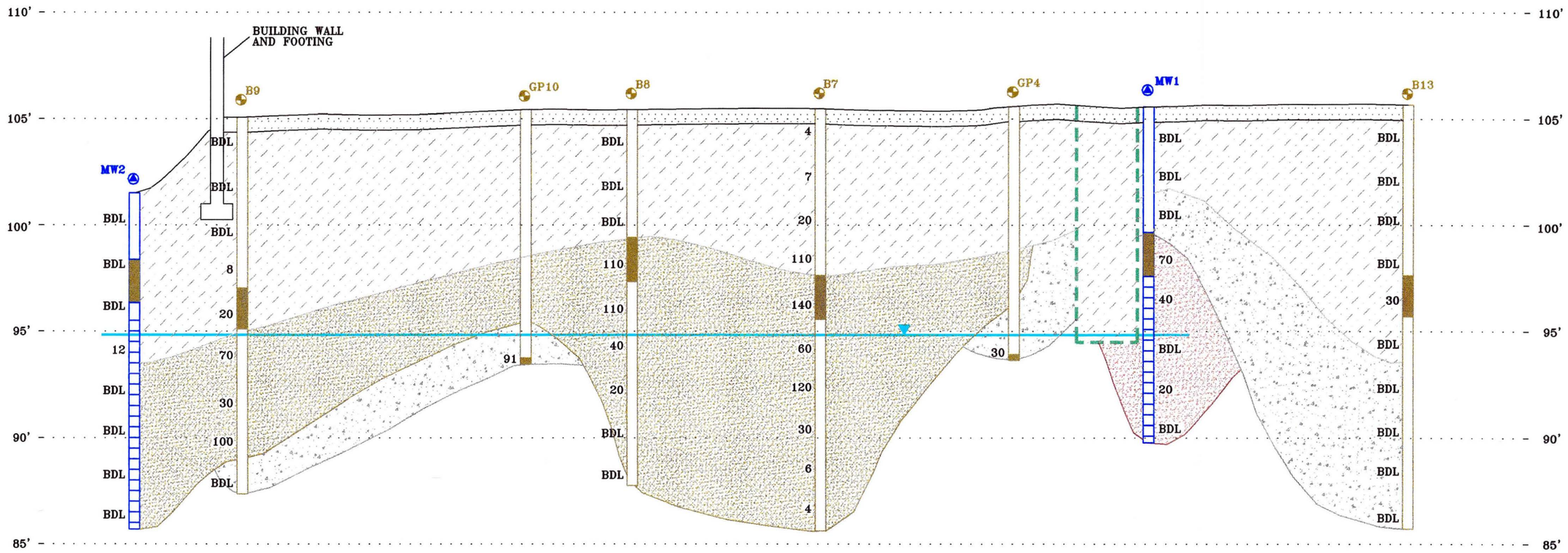

110'
105'
100'
95'
90'
85'
B10
GP6
S
MW1
B2
B3
B4
MW4
BDL
4
BDL
4
4
30
40
3
4
4
18
9
7
5
7
BDL
BDL
BDL

CROSS-SECTION B-B'

SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 5'

B B'

ELEVATION (IN FEET REFERENCED TO AN ARBITRARY BENCHMARK)



SOIL KEY:

- CONCRETE UNDERLAIN BY BASE COURSE
- FILL: FINE SAND TO SILTY CLAY WITH FINE TO COARSE SAND AND GRAVEL
- SILT
- CLAYEY SILT TO SILTY CLAY WITH TRACE TO SOME FINE TO COARSE SAND
- SILTY FINE SAND

NOTES:

GP10 AND GP4 WERE BLIND DRILLED TO 10'
BDL = BELOW DETECTION LIMIT
LINES BETWEEN SOIL BORINGS ARE INFERRED

LEGEND:

- B9/GP10 — SOIL BORING
- MW2 — MONITORING WELL
- FORMER UST CAVITY
- STATIC WATER LEVEL (05/23/02)
- WELL SCREEN
- INTERVAL SAMPLED FOR LABORATORY ANALYSIS
- 4 — PHOTOIONIZATION DETECTOR (PID) READING IN INSTRUMENT UNITS
- BDL — BELOW DETECTION LIMIT

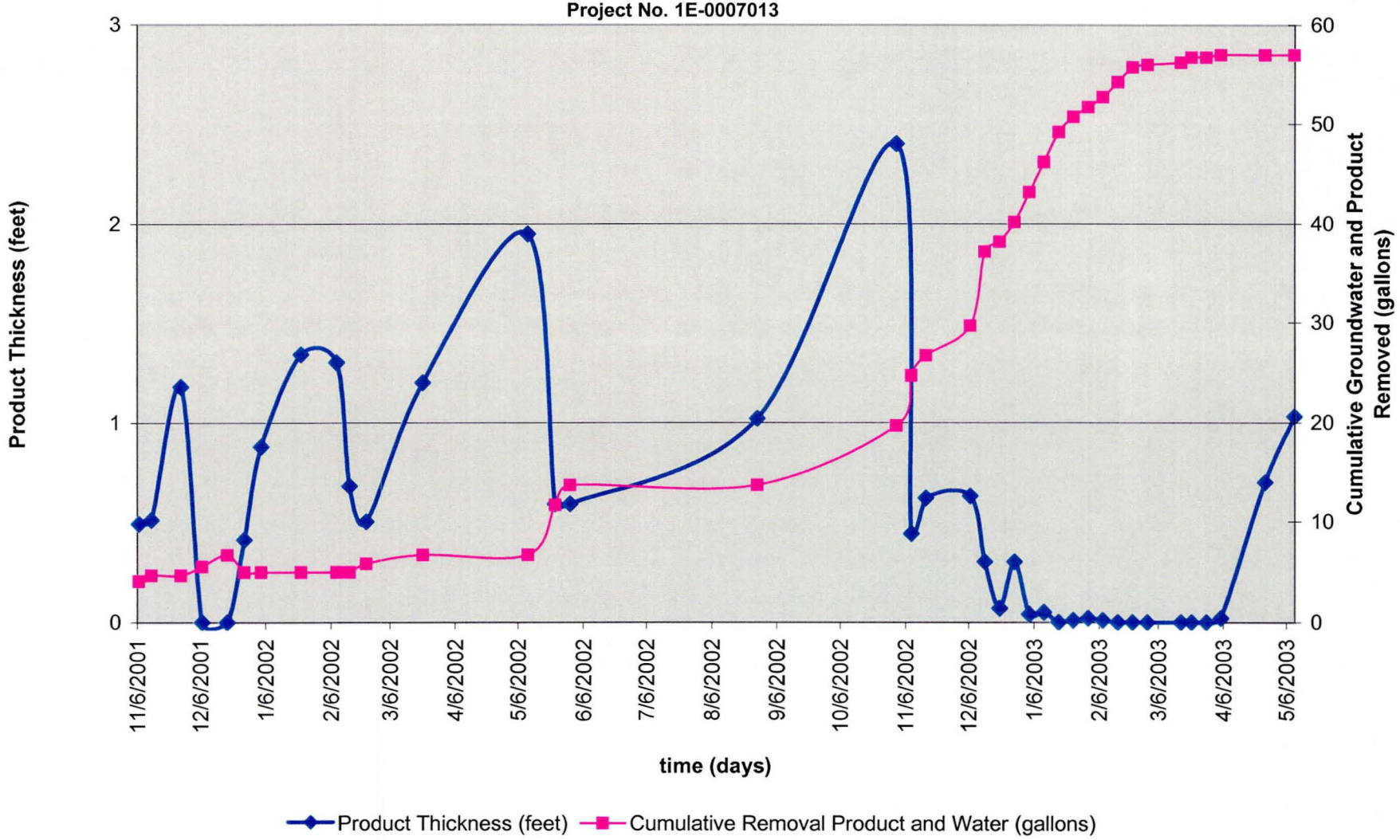
GILES ENGINEERING ASSOCIATES, INC.
N8 W22350 JOHNSON RD.; WAUKESHA, WI, 53186
(262)-544-0118

FIGURE 5
CROSS SECTION B-B'
2941-2955 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN

DESIGNED	DRAWN	APPROVED	SCALE	DATE
ELP	JSZ	X	1" = 10'	07-18-03

PROJECT NO.: 1E-0007013 CAD No. E00701311

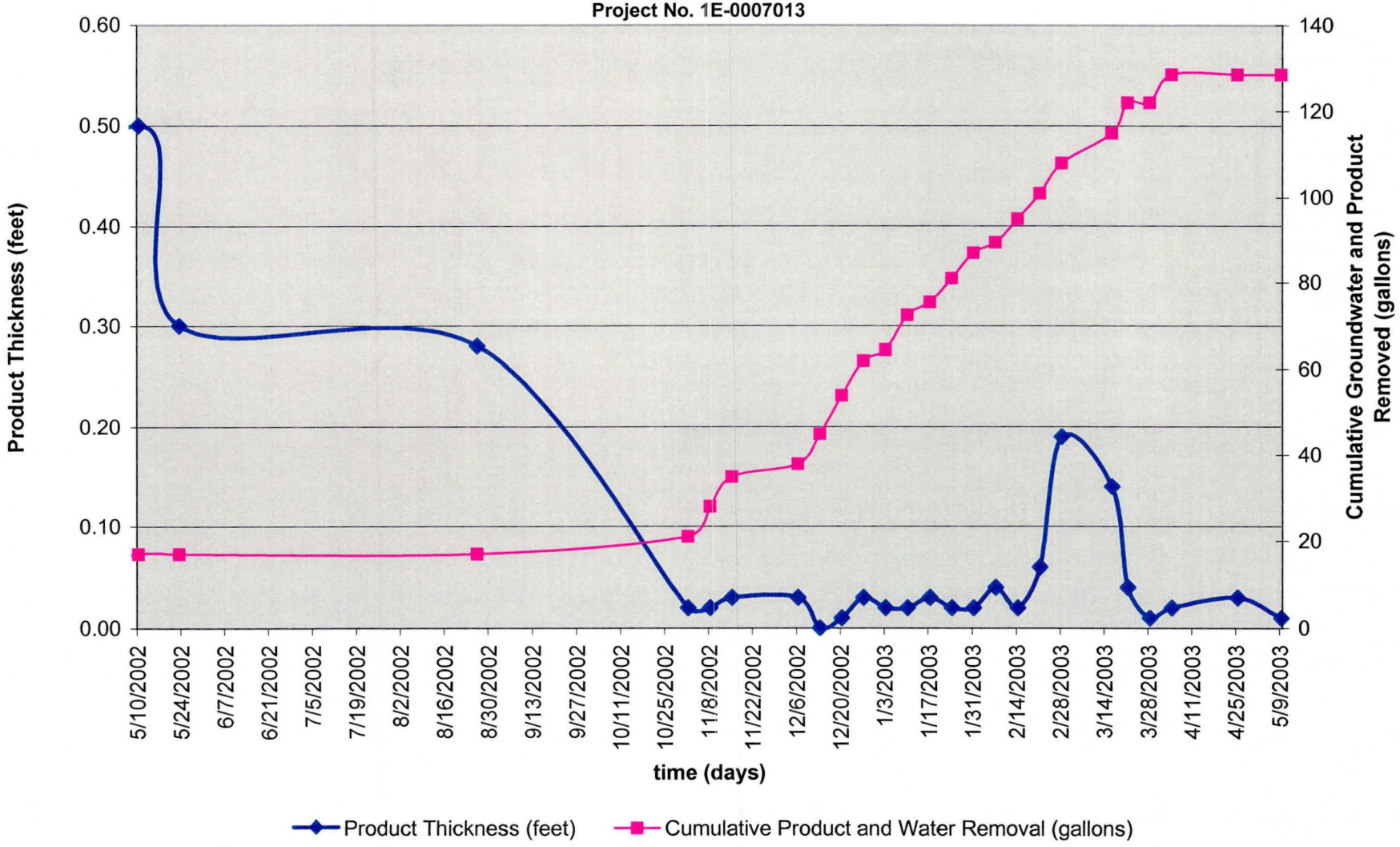
GRAPH 1. Monitoring Well MW1
Product Thickness vs. Time
2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013



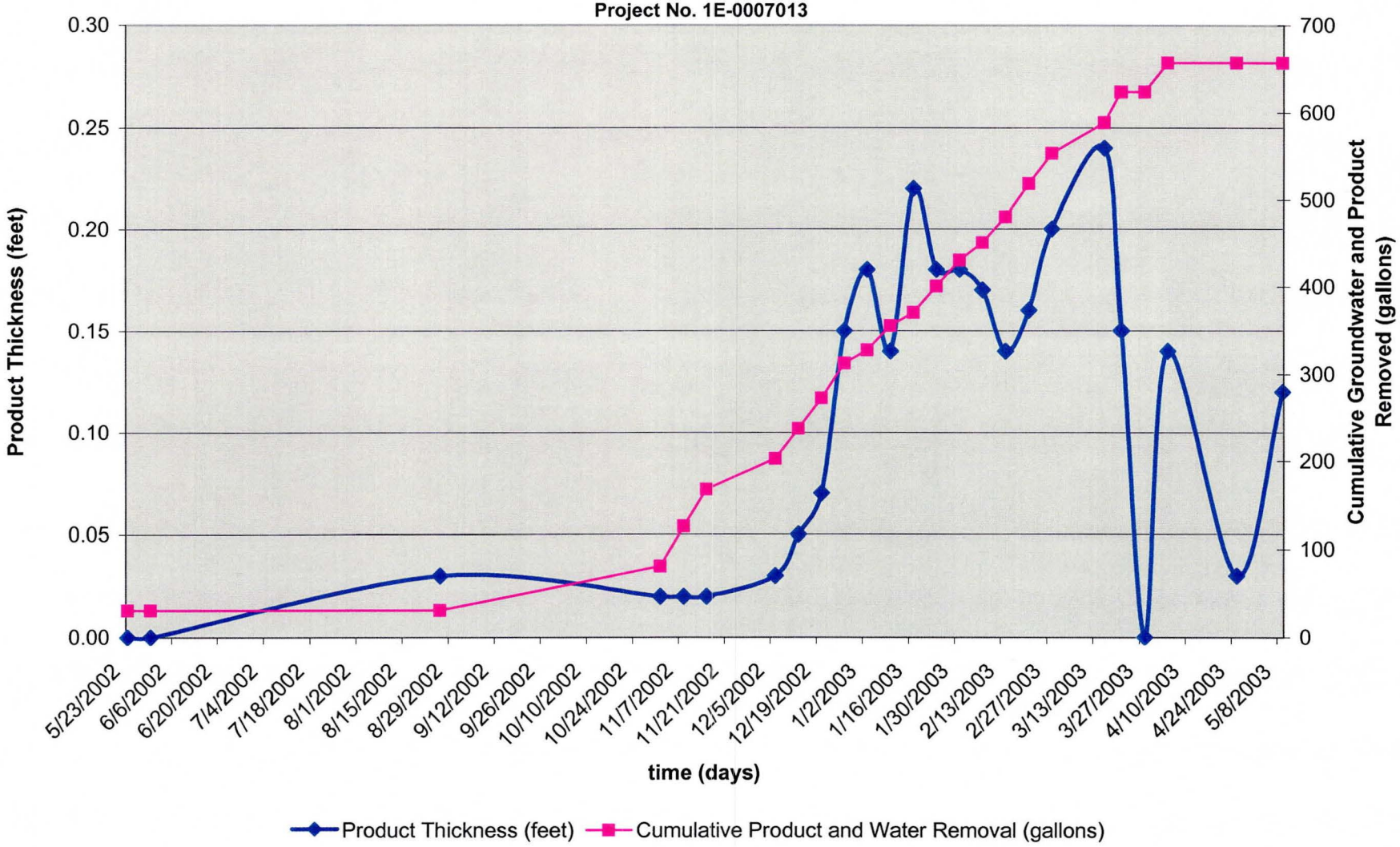
GRAPH 2. Monitoring Well MW3

Product Thickness vs. Time

2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013



GRAPH 3. Recovery Sump
Product Thickness vs. Time
2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013



Free Product Recovery Information
Monitoring Well MW1

2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013

MW-1							
Surface Elevation		105.39	Free Product Abatement				
Top of Casing Elevation		105.03					
Top of Screen Elevation		100.39					
Bottom of Screen Elevation		90.39					
Measurement Date	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Product Thickness in Recovery Drum (feet)	Increase in Product Thickness in Recovery Drum	Product Removed (gallons)	Cumulative Removal Product and Water (gallons)
11/06/2001	9.86	9.37	0.49	0.14	0.14	4.08	4.08
11/12/2001	10.29	9.78	0.51	0.16	0.02	0.58	4.66
11/26/2001	11.33	10.15	1.18	0.16	0.00	0.00	4.66
12/06/2001	--	--	--	0.19	0.03	0.87	5.54
12/18/2001	--	--	--	0.23	0.04	1.16	6.70
12/26/2001	11.22	10.81	0.41	0.24	0.01	0.29	4.95
01/03/2002	11.87	10.99	0.88			0.00	4.95
01/22/2002	12.71	11.37	1.34			0.00	4.95
02/08/2002	12.45	11.15	1.30			0.00	4.95
02/14/2002	11.44	10.76	0.68			0.00	4.95
02/22/2002	10.90	10.40	0.50	0.27	0.03	0.87	5.83
03/21/2002	10.99	9.79	1.20	0.30	0.03	0.87	6.70
05/10/2002	11.39	9.44	1.95			0.00	6.70
05/23/2002	10.4	9.81	0.59			5.00	11.70
05/30/2002	10.45	9.86	0.59			2.00	13.70
08/27/2002	10.81	9.79	1.02			0.00	13.70
11/01/2002	13.29	10.89	2.40			6.00	19.70
11/08/2002	11.95	11.51	0.44			5.00	24.70
11/15/2002	12.08	11.46	0.62			2.00	26.70
12/06/2002	12.54	11.91	0.63			3.00	29.70
12/13/2002	12.46	12.16	0.30			7.50	37.20
12/20/2002	12.35	12.28	0.07			1.00	38.20
12/27/2002	12.43	12.13	0.30			2.00	40.20
01/03/2003	12.58	12.54	0.04			3.00	43.20
01/10/2003	12.62	12.57	0.05			3.00	46.20
01/17/2003	12.77	0.00	0.00			3.00	49.20
01/24/2003	12.81	12.80	0.01			1.50	50.70
01/31/2003	12.94	12.92	0.02			1.00	51.70
02/07/2003	13.03	13.02	0.01			1.00	52.70
02/14/2003	13.12	0.00	0.00			1.50	54.20
02/21/2003	13.21	0.00	0.00			1.50	55.70
02/28/2003	13.18	0.00	0.00			0.25	55.95
03/16/2003	13.45	0.00	0.00			0.25	56.20
03/21/2003	12.88	0.00	0.00			0.50	56.70
03/28/2003	12.81	0.00	0.00			0.00	56.70
04/04/2003	12.56	12.54	0.02			0.25	56.95
04/25/2003	12.53	11.83	0.70			0.00	56.95
05/09/2003	11.58	10.55	1.03			0.00	56.95

Free Product Recovery Information
Monitoring Well MW3

2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013

MW3					
Surface Elevation		101.81	Free Product Abatement		
Top of Casing Elevation		104.01			
Top of Screen Elevation		94.81			
Bottom of Screen Elevation		84.81			
Measurement Date	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Product and Water Removed (gallons)	Cumulative Product and Water Removal (gallons)
02/08/2002	9.65	9.35	0.30	7.00	7.00
05/10/2002	9.08	8.58	0.50	10.00	17.00
05/23/2002	9.00	8.70	0.30	0.00	17.00
08/26/2002	10.13	9.85	0.28	0.00	17.00
11/01/2002	10.21	10.19	0.02	4.00	21.00
11/08/2002	10.16	10.14	0.02	7.00	28.00
11/15/2002	10.33	10.30	0.03	7.00	35.00
12/06/2002	10.42	10.39	0.03	3.00	38.00
12/13/2002	10.34	0.00	0.00	7.00	45.00
12/20/2002	10.43	10.42	0.01	9.00	54.00
12/27/2002	10.49	10.46	0.03	8.00	62.00
01/03/2003	10.40	10.38	0.02	2.50	64.50
01/10/2003	10.46	10.44	0.02	8.00	72.50
01/17/2003	10.65	10.62	0.03	3.00	75.50
01/24/2003	10.76	10.74	0.02	5.50	81.00
01/31/2003	10.81	10.79	0.02	6.00	87.00
02/07/2003	10.85	10.81	0.04	2.50	89.50
02/14/2003	10.95	10.93	0.02	5.50	95.00
02/21/2003	11.03	10.97	0.06	6.00	101.00
02/28/2003	11.01	10.82	0.19	7.00	108.00
03/16/2003	11.21	11.07	0.14	7.00	115.00
03/21/2003	10.68	10.64	0.04	7.00	122.00
03/28/2003	10.45	10.44	0.01	0.00	122.00
04/04/2003	10.33	10.31	0.02	6.50	128.50
04/25/2003	10.01	9.98	0.03	0.00	128.50
05/09/2003	8.82	8.81	0.01	0.00	128.50

Free Product Recovery Information
Recovery Sump

2941-2955 North Humboldt Boulevard
Milwaukee, Wisconsin
Project No. 1E-0007013

Recovery Sump					
Surface Elevation		105.44	Free Product Abatement		
Top of Casing Elevation		105.22			
Top of Screen Elevation		95.44			
Bottom of Screen Elevation		85.44			
Measurement Date	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Product and Water Removed (gallons)	Cumulative Product and Water Removal (gallons)
05/23/2002	9.81	0.00	0.00	31.00	31.00
05/30/2002	9.95	0.00	0.00	0.00	31.00
08/26/2002	10.13	10.10	0.03	0.00	31.00
11/01/2002	11.56	11.54	0.02	50.00	81.00
11/08/2002	11.76	11.74	0.02	45.00	126.00
11/15/2002	11.96	11.94	0.02	42.00	168.00
12/06/2002	12.32	12.29	0.03	35.00	203.00
12/13/2002	12.47	12.42	0.05	35.00	238.00
12/20/2002	12.53	12.46	0.07	35.00	273.00
12/27/2002	11.72	11.57	0.15	40.00	313.00
01/03/2003	12.90	12.72	0.18	15.00	328.00
01/10/2003	12.97	12.83	0.14	28.00	356.00
01/17/2003	13.14	12.92	0.22	15.00	371.00
01/24/2003	13.22	13.04	0.18	30.00	401.00
01/31/2003	13.30	13.12	0.18	30.00	431.00
02/07/2003	13.39	13.22	0.17	20.00	451.00
02/14/2003	13.48	13.34	0.14	30.00	481.00
02/21/2003	13.61	13.45	0.16	38.00	519.00
02/28/2003	13.77	13.57	0.20	35.00	554.00
03/16/2003	13.85	13.61	0.24	35.00	589.00
03/21/2003	13.16	13.01	0.15	35.00	624.00
03/28/2003	12.92	0.00	0.00	0.00	624.00
04/04/2003	12.86	12.72	0.14	33.00	657.00
04/25/2003	10.01	9.98	0.03	0.00	657.00
05/09/2003	10.83	10.71	0.12	0.00	657.00

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name or FID below to view Location Details page for this Activity. Other Activities, if present, may be accessed from Location Details.

< Basic Search

CONTINUING OBLIGATIONS APPLY

Due to remaining contamination, continuing obligations apply to one or more properties. For information specific to the continuing obligations review the documentation below. Prior to constructing or reconstructing a water supply well, you need to contact DNR for approval of well construction specifications.

IMPACTED ANOTHER PROPERTY OR RIGHT-OF-WAY

A hazardous substance discharge originating from this property has impacted one or more other properties or right-of-ways (ROWS). For more information, please review the documents below. Certain exemptions regarding the cleanup of impacted properties under Wisconsin Stat. Section 292.13 may apply.

02-41-531327 VACANT LOT

CLOSED ERP

Location Name (Click Location Name or FID to View Location Details)			County	WDNR Region
VACANT LOT			MILWAUKEE	SOUTHEAST
Address			Municipality	
3009 N HUMBOLDT BLVD			MILWAUKEE	
PLSS Description	Latitude	Longitude	Google Maps	RR Sites Map
NE 1/4 of the NW 1/4 of Sec 16, T07N, R22E	43.0731891	-87.8982961	CLICK TO VIEW	CLICK TO VIEW
Additional Location Description			Size (Acres)	Facility ID
			.5	241853150

Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action
DNR RR			2004-02-13	2010-09-14	2017-03-16

Characteristics

PECFA Tracked?	EPA NPL Site?	EPA Superfund?	PECFA Funds Eligible?	Above Ground Tank?	Drycleaner?	Co-Contamination?	WI DOT Site?	COs Apply?
No	No	No	No	No	No	No	No	Yes

Actions

Place Cursor Over Action Code to View Description

Date	Code	Name	Comment
2004-02-13	1	Notification of Hazardous Substance Discharge	
2004-08-23	99	Miscellaneous	HAZ. WASTE DETERMIN. REQUEST
2004-08-24	99	Miscellaneous	REQUEST HW DETERM CONCURRENCE
2004-09-08	99	Miscellaneous	HW DETERM CONCURRENCE ISSUED
2004-11-29	99	Miscellaneous	REC'D CK# 42327 $750.00 FOR REM. ACTION PLAN/SITE INV REPT
2004-12-09	146	Remedial Action Plan Go Ahead (Notice to Proceed)	PM - AND SITE INV APPROVAL - CONDITIONAL
2005-04-12	43	Site Activity Status Update Received	TECH UPDATE MEETING
2005-08-31	37	Site Investigation Report (SIR) Received (non-fee)	VAPOR STUDY W/RAP

			REVISION
2005-12-07	38	Site Investigation Report (SIR) Approved	VAPOR STUDY AND RAP REVISION
2006-10-12	151	Remedial Action (RA) Documentation Report Received (non-fee)	
2006-10-27	99	Miscellaneous	SENT FEE LTR FOR CONST. DOC FEE ($250)
2006-11-07	152	Remedial Action Documentation Report Received (fee)	REC'D CK# 47034 $250.00 SEE 03-41-111395
2007-02-26	153	Remedial Action (RA) Documentation Report Approved	P.M. - REQUIRED ADDTNL GW MONITORING
2007-11-06	43	Site Activity Status Update Received	REC'D GW MONITORING REPT SEE 03-41-111395
2009-05-29	99	Miscellaneous	SEE 03-41-111395 TECH FEE CK # 53263 $500.00; MTG HELD 05-28-09
2009-08-12	99	Miscellaneous	LETTER SENT FORMALIZING MAY O9 TECH ASSISTANCE RESPONSE
2010-04-19	79	Case Closure Review Request Received	REC'D CK# 54597 $750.00
2010-04-19	50	GIS Registry Site	*** AUTO POPULATED BY 700 ACTION ENTRY ***
2010-04-19	710	Database Fee Paid for Soil Continuing Obligation(s)	REC'D CK# 54598 $200.00
2010-04-19	700	Database Fee Paid for Groundwater Continuing Obligation(s)	REC'D CK# 54598 $250.00
2010-07-28	84	Remaining Actions Needed	MON. WELL ABANDONMENT NEEDED
2010-08-06	90	SER First In/First Out (FIFO) Review Process Started	WELL ABANDMENT FORMS
2010-09-14	11	Activity Closed	
2010-09-14	236	Continuing Obligation - Residual GW Contamination	
2010-09-14	46	Impacted Right-of-Way (ROW) Notification	AUTO-POPULATED 2018-03-20
2010-09-14	238	Continuing Obligation - Inspection Reports Required	
2010-09-14	66	Continuing Obligations (COs) Apply at Off-site Property(ies)	auto-populated on 08/01/2019 per activity relationship to off-site(s)
2010-09-14	91	SER First In/First Out (FIFO) Review Process Complete	
2010-09-14	56	Continuing Obligation(s) Applied	
For Code 56:	20100914_56_CO_Packet.pdf Click to Download or Open		
2010-09-14	222	Continuing Obligation - Maintain Cap Over Contaminated Area	PAVEMENT
2010-09-14	226	Continuing Obligation - Vapor Intrusion Response	PASSIVE VAPOR TRENCH AND BARRIER FEATURE
2010-09-14	232	Continuing Obligation - Residual Soil Contamination	PCE,TCE
2015-08-07	99	Miscellaneous	REMINDER PROVIDED TO RP REPRESENTATIVE TO CONDUCT ANNUAL INSPECTIONS
2015-08-07	185	Continuing Obligation(s) Compliance Audit Complete	
For Code 185:	0241531327_COAUDIT_2015.pdf Click to Download or Open		
2015-10-02	188	Maintenance/Inspection Rpt for Continuing Obligation Rcvd	REC'D COMPLETED CAP INSPECTION FORM
For Code 188:	0241531327_4400-305.pdf Click to Download or Open		
2016-04-15	188	Maintenance/Inspection Rpt for Continuing Obligation Rcvd	REC'D CO INSPECTION AND MAINTENANCE LOG
2017-03-16	188	Maintenance/Inspection Rpt for Continuing Obligation Rcvd	REC'D CO INSPECTION AND MAINTENANCE LOG
For Code 188:	20170316_188_Mtc_Inspect_Rpt_CO.pdf Click to Download or Open		

Substances

Substance	Type	Est Amt Released	Units
Chlorinated Solvents	VOC		
Perchloroethylene	VOC		

Vapor Intrusion Options	
VI Option	**Satisfied?**
(A) Exceedence of Vapor Risk Levels - Vapor Mitigation Required: Vapor mitigation is required due to sub-slab or nearby soil vapor concentrations exceeding vapor risk screening levels.	No

Who	
Role	**Name/Address**

For Additional Information, Please Contact
JENNIFER DORMAN 414-263-8683 jennifer.dorman@wisconsin.gov

BRRTS data comes from various sources, both internal and external to DNR. There may be omissions and errors in the data and delays in updating new information. Please see the disclaimers page for more information. We welcome your Feedback.

The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621

Release 2.8.7 | 12/15/2019 | Release Notes

9056-013-F1-SPMP-102307.PLT, plotted 10/23/2007

GARAGE

HOUSE

OSGP-1

GP-2 / VMP-2

GP-1 / VMP-1

SIDEWALK

SIDEWALL #1

SIDEWALL #2

SIDEWALL #3

SIDEWALL #4

SIDEWALL #5

SIDEWALL #6

SIDEWALL #7

SIDEWALL #8

SIDEWALL #9

SIDEWALL #10

SIDEWALL #11

SIDEWALL #12

SIDEWALL #13

SIDEWALL #14

TP-1

TP-2

TP-3

PZ7

MW-7R

MW-7 (ABANDONED)

PZ8

MW-8 (ABANDONED)

MW-8R

PIPE

FORMER UST BASIN

MW-3

FORMER UST

B1

FENCE

EXTRA TREATMENT AREA
TREATMENT
300 sq ft x 8' deep (4' to 12' bgs)

AREA 3
REMOVAL
3,800 sq ft x 4' deep (0' to 4' bgs)

8" DIAMETER VITRIFIED CLAY SEWER LINE REMOVED

GRASS

B19

B20

B6

B7

B8

B26

SB-1

SB-13

B15

B23

SB-3

SB-4

B9

B2

SB-5

B10

SB-6

PZ2

MW-2 (ABANDONED)

MW-2R

B25

SB-7

B11

MW-5

PZ5

B24

SB-9

SB-2

B22

SB-8

SB-10

B18

BASE #3

B12

B13

B14

SB-14

B21

BASE #4

B31

B3

2' DIA. SUMP

AREA 2
TREATMENT
1,240 sq ft x 8' deep (4' to 12' bgs)

B32

B17

GRASS

MW-9

B16

SIDEWALK

ALLEY

BUILDING

B28

FORMER UST BASIN

B27

FORMER UST

FORMER UST

B30

B4

MW-4

B5

MW-1

PZ1

B29

SIDEWALK

SIDEWALK

WEST CHAMBERS STREET

NORTH HUMBOLDT BOULEVARD

EXTENT OF PCE SOIL IMPACTS ABOVE DIRECT CONTACT RCL's WITHIN TOP FOUR FEET OF SOIL (PRE-REMEDIATION)

AREA 1
TREATMENT
20' x 12' x 11' deep (4' to 15' bgs)

EXTRA TREATMENT AREA
TREATMENT
13' x 12' x 8' deep (4' to 12' bgs)

PROPOSED PARKING LOT LAYOUT

N

LEGEND

- MW⊕ = MONITORING WELL LOCATION
- PZ⊕ = PIEZOMETER LOCATION
- B● = GEOPROBE SOIL BORING LOCATION
- ——— = PROPERTY LINE
- SIDEWALL / BASE • = CONFIRMATION SOIL SAMPLE FROM LIMITS OF EXCAVATION
- (TP-3)• = TEST PIT SOIL SAMPLE
- (1)× = POST-TREATMENT SOIL SAMPLE
- SB▲ = POST-TREATMENT VERIFICATION SAMPLING
- VMP■ = VAPOR SAMPLING LOCATION

NOTE:
MAP BASED ON SITE FEATURE MAP DEVELOPED BY GILES ENGINEERING ASSOCIATES, INC., DATED 11-11-04.

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, Wisconsin 53233
Phone: 414-643-4200
Fax: 414-643-4210

SCALE – 1" = 10' 0' 10' 20'

NO	DATE	REVISIONS	BY	APVD

	NAME:	DATE:
DRAWN BY:	SJR	9-10-07
DESIGNED BY:		
CHECKED BY:		
APPROVED BY:		

City of Milwaukee

3009 North Humboldt Boulevard, Milwaukee, Wisconsin

Site Plan Map

DRAWING NUMBER
9056-013

Figure 2

K:\CTYOFMIL\9056\9056-013.dwg, F1-SPMP, 10/23/2007 1:27:44 PM, ANSI C (17 x 22 Inches), 1:1

OSGP-1		
Sample Depth (bgs)	4'-6'	8'-10'
Date	2/16/05	2/16/05
PCE	<30	<25
TCE	<30	<25

Sidewall 1	
Sample Depth (bgs)	4'
Date	12/15/04
Chlorinated VOCs	ND

GP-2		
Sample Depth (bgs)	4'-6'	8'-10'
Date	5/24/05	5/24/05
PCE	110	56
TCE	<30	<30

Sidewall 2	
Sample Depth (bgs)	4'
Date	12/15/04
PCE	**2,000**

GP-1		
Sample Depth (bgs)	4'-6'	8'-10'
Date	5/24/05	5/24/05
PCE	<30	<30
TCE	<30	<30

Sidewall 3	
Sample Depth (bgs)	4'
Date	12/15/04
Chlorinated VOCs	ND

Sidewall 4	
Sample Depth (bgs)	4'
Date	12/15/04
Chlorinated VOCs	ND

Sidewall 11	
Sample Depth (bgs)	9'
Date	12/17/04
PCE	1,210

SB-13			
Sample Depth (bgs)	6-8'	10-12'	14'-16'
Date	05/27/05		
PCE	**120,000**	**35,000**	<55
PCE TCLP (mg/L)	**2.3**	NA	NA
TCE	<590	<29	<28

SB-1			
Sample Depth (bgs)	6'-8'	8'-10'	14'-16'
Date	05/27/05		
PCE	**20,000**	**20,000**	<27
TCE	**140**	**60**	<27

SB-5					
Sample Depth (bgs)	4'-6'	8'-10'	16'-18'	24'-26'	34'-36'
Date	05/27/05				
PCE	**75,000**	**22,000**	68	110	410
PCE TCLP (mg/L)	NA	NA	NA	NA	NA
TCE	**310**	<600	<27	<27	<27

Sidewall 12	
Sample Depth (bgs)	9'
Date	12/17/04
PCE	**98,800**

Sidewall 5	
Sample Depth (bgs)	4'
Date	12/15/04
PCE	562

SB-3				
Sample Depth (bgs)	6'-8'	10-12'	16-18'	24-26'
Date	05/27/05			
PCE	**180,000**	**28,000**	<28	210
TCE	<600	<590	<28	<27

SB-6				
Sample Depth (bgs)	4'-6'	8'-10'	16-18'	24-26'
Date	05/27/05			
PCE	**93,000**	**29,000**	<27	<27
TCE	<600	<150	<27	<27

SB-4					
Sample Depth (bgs)	4'-6'	8'-10'	16'-18'	24'-26'	34'-36'
Date	05/27/05				
PCE	**79,000**	**72,000**	28	170	31
PCE TCLP (mg/L)	NA	**1.2**	NA	NA	NA
TCE	<600	<600	<27	<27	<27

SB-7				
Sample Depth (bgs)	4'-6'	8'-10'	16-18'	24-26'
Date	05/27/05			
PCE	**73,000**	**19,000**	350	71
PCE TCLP (mg/L)	NA	0.32	NA	NA
TCE	**1,600**	<590	<27	<27

Base 3	
Sample Depth (bgs)	4'
Date	12/16/04
PCE	**2,200**

Sidewall 7		
Sample Depth (bgs)	4'	8'
Date	12/16/04	12/16/04
PCE	387	562

SB-2			
Sample Depth (bgs)	4'-6'	8'-10'	16'-18'
Date	05/27/05		
cis-DCE	<600	140	<31
PCE	**99,000**	**90,000**	73
PCE TCLP (mg/L)	NA	**1.5**	NA
TCE	<600	250	<31

Sidewall 6	
Sample Depth (bgs)	4'
Date	12/16/04
Chlorinated VOCs	ND

Sidewall 13	
Sample Depth (bgs)	9'
Date	12/20/04
cis-DCE	68
PCE	**5,530**
TCE	**440**

Base 4	
Sample Depth (bgs)	4'
Date	12/16/04
PCE	191
TCE	68

SB-9			
Sample Depth (bgs)	6'-8'	8'-10'	14'-16'
Date	05/27/05		
Benzene	34	<27	<30
cis-DCE	560	<27	<30
PCE	**80,000**	**86,000**	<30
PCE TCLP (mg/L)	NA	NA	NA
TCE	**1,100**	**520**	<30

SB-8				
Sample Depth (bgs)	4'-6'	8'-10'	16-18'	24-26'
Date	05/27/05			
Benzene	<600	**1,300**	<27	<27
PCE	**91,000**	**240,000**	460	84
PCE TCLP (mg/L)	NA	NA	NA	NA
TCE	<600	<540	<27	<27

Sidewall 10	
Sample Depth (bgs)	4'
Date	12/17/04
PCE	57

SB-10				
Sample Depth (bgs)	4'-6'	8'-10'	16-18'	24-26'
Date	05/27/05			
PCE	**63,000**	**160,000**	530	47
PCE TCLP (mg/L)	NA	NA	NA	NA
TCE	**61**	<540	<28	<27

Sidewall 8	
Sample Depth (bgs)	4'
Date	12/16/04
Chlorinated VOCs	ND

SB-14			
Sample Depth (bgs)	6-8'	10-12'	14'-16'
Date	05/27/05		
PCE	**60,000**	**48,000**	**13,000**
PCE TCLP (mg/L)	NA	NA	NA
TCE	<590	**140**	**110**

Sidewall 14	
Sample Depth (bgs)	9'
Date	12/29/04
cis-DCE	49
PCE	**30,700**
TCE	**221**

Analytical Key		
ND = Not detected		DCPA = Dichloropropane
Concentrations = µg/kg		PCE = Tetrachloroethene
Exceedances:	box = groundwater protection exceedance	TCE = Trichloroethene
	bold = direct contact exceedance (non-industrial)	cis-DCE = 1,2-cis-Dichloroethene
	bold, box = groundwater & direct contact exceedance	trans-DCE = 1,2-trans-Dichloroethen
	VOCs = Volatile Organic Compounds	DCDF = Dichlorodifluoromethan
Only concentrations of chlorinated VOCs included in this figure.		J = Estimated concentration

EXTRA TREATMENT AREA
TREATMENT
300 sq ft x 8 ft deep (4' to 12' bgs)

AREA 3
REMOVAL
3,800 sq ft x 4 ft deep (0' to 4' bgs)

AREA 2
TREATMENT
1,240 sq. ft x 8 ft. deep (4' to 12' deep)

EXTENT OF PCE SOIL IMPACTS ABOVE DIRECT CONTACT RCL's WITHIN TOP FOUR FEET OF SOIL (PRE-REMEDIATION)

AREA 1
TREATMENT
20 ft x 12 ft x 11 ft deep (4' to 15' bgs)

EXTRA TREATMENT AREA
TREATMENT
300 sq ft x 8 ft deep (4' to 12' bgs)

8" DIAMETER VITRIFIED CLAY SEWER LINE REMOVED

ESTIMATED EXTENT OF CHLORINATED VOC IMPACTS TO SOIL GREATER THAN RCLs

GARAGE
FENCE
ALLEY
BUILDING
SIDEWALK
GRASS
FORMER UST BASIN
NORTH HUMBOLDT BOULEVARD
WEST CHAMBERS STREET
OSGP-1
GP-2
GP-1
VMP-2
VMP-1
SIDEWALL #1
SIDEWALL #2
SIDEWALL #3
SIDEWALL #4
SIDEWALL #5
SIDEWALL #6
SIDEWALL #7
SIDEWALL #8
SIDEWALL #10
SIDEWALL #11
SIDEWALL #12
SIDEWALL #13
SIDEWALL #14
BASE #3
BASE #4
TP-1
TP-2
PZ7
MW-7R
MW-7 (ABANDONED)
PZ8
MW-8 (ABANDONED)
MW-8R
MW-3
MW-2 (ABANDONED)
MW-2R
PZ2
MW-5
PZ5
MW-9
MW-4
MW-1
PZ1
PIPE
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-13
SB-14
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
B18
B19
B20
B21
B22
B23
B24
B25
B26
B27
B28
B29
B31
B32

NOTE:
MAP BASED ON SITE FEATURE MAP DEVELOPED BY GILES ENGINEERING ASSOCIATES, INC., DATED 11-11-04.

LEGEND

- MW = MONITORING WELL LOCATION
- PZ = PIEZOMETER LOCATION
- B = GEOPROBE SOIL BORING LOCATION
- PROPERTY LINE
- SIDEWALL, BASE = CONFIRMATION SOIL SAMPLE FROM LIMITS OF EXCAVATION
- TP-3 = TEST PIT SOIL SAMPLE
- 1 = POST-TREATMENT SOIL SAMPLE
- SB = POST-TREATMENT VERIFICATION SAMPLING
- VMP = VAPOR SAMPLING LOCATION

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SCALE – 1" = 10'
0' 10' 20'

NO	DATE	REVISIONS	BY	APVD

	NAME:	DATE:
DRAWN BY:	SJR	9-10-07
DESIGNED BY:		
CHECKED BY:		
APPROVED BY:		

City of Milwaukee

3009 North Humboldt Boulevard, Milwaukee, Wisconsin
SOIL QUALITY MAP

DRAWING NUMBER
9056-013

FIGURE 5

K:\CTYOFMIL\9056\9056-013.dwg, F1-SPMP, 10/31/2007 8:09:32 AM, Previous paper size (22.00 x 17.00 inches), 1:1

MW-7	MW-7R							
Date	9/13/04	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.29	<0.68	<0.68	<0.68	<0.50	0.91 J	0.59 J	NA
PCE	<0.70	**9.9**	**44**	**54**	**94**	**33**	**50**	NA
TCE	<0.27	***0.53 J***	<0.44	***0.92 J***	***0.97***	***1.9***	***1.1***	NA
Vinyl Chloride	<0.27	<0.50	<0.47	<0.47	<0.20	<0.20	<0.20	NA

PZ-7								
Date	5/31/05	6/21/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.50	<0.68	<0.68	<0.68	<0.50	<0.50	NS	NA
PCE	<0.50	<0.52	<0.52	<0.52	***0.69 J***	<0.50	NS	NA
TCE	<0.20	<0.44	<0.44	<0.44	<0.20	<0.20	NS	NA
Vinyl Chloride	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	NS	NA

PZ-8									
Date	9/13/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.29	<0.50	<0.68	<0.68	<0.68	<0.50	<0.50	NS	NA
PCE	<0.70	<0.50	<0.52	<0.52	<0.52	<0.50	<0.50	NS	NA
TCE	<0.27	<0.20	<0.44	<0.44	<0.44	<0.20	<0.20	NS	NA
Vinyl Chloride	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	NS	NA

MW-8	MW-8R						
Date	9/13/04	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.29	<0.68	<0.68	<0.68	<1.0	1.5 J	<0.50	NA
PCE	<0.70	**57**	**45**	**36**	**19**	**30**	**41**	NA
TCE	<0.27	<0.44	<0.44	<0.44	<0.40	**2.7**	0.44 J	NA
Vinyl Chloride	<0.27	<0.50	<0.47	<0.47	<0.20	<0.20	<0.20	NA

MW-3											
Date	6/27/03	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09
cis-1,2-DCE	<0.27	<0.27	0.38 J	0.54 J	1.3 J	1.09 J	0.82 J	1.3 J	0.84 J	<0.50	NA
PCE	<0.31	<0.31	**19**	***1.4 J***	***2.94***	***1.6***	***1.61***	***1.0 J***	<0.50	<0.50	NA
TCE	<0.34	<0.34	<0.34	***0.81***	***1.41***	***0.83 J***	***0.97 J***	***1.0***	0.42 J	0.43 J	NA
Vinyl Chloride	<0.27	<0.27	<0.27	<0.50	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA

PZ-2							
Date	6/12/07	10/3/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.68	2.7	<0.68	<1.0	<1.0	2.7	0.82 J
PCE	***1.52 J***	***0.70 J***	***1.01 J***	<1.0	<1.0	<0.50	***0.7 J***
TCE	***0.60 J***	***4.4***	***0.58 J***	***0.68***	***0.52 J***	0.41 J	0.39 J
Vinyl Chloride	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20

MW-5										
Date	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.27	<0.27	<0.50	<0.68	<0.68	<0.68	2.8	<0.50	1.0 J	<0.50
PCE	<0.31	**64**	**33**	**60**	**44**	**138**	**99**	**120**	**61**	**61**
TCE	<0.34	***0.54 J***	0.39	***2.12***	***2.08***	***1.86***	***2.3***	***1.6***	***0.81***	***3***
Vinyl Chloride	<0.27	<0.27	<0.27	<0.50	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20

PZ-5								
Date	5/31/05	6/21/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	DRY	DRY	DRY	<0.68	<0.50	<0.50	<0.50	NA
PCE	DRY	DRY	DRY	***1.94***	***1.3 J***	***1.7***	***1.6 J***	NA
TCE	DRY	DRY	DRY	<0.44	<0.20	<0.20	0.43 J	NA
Vinyl Chloride	DRY	DRY	DRY	<0.47	<0.20	<0.20	<0.20	NA

MW-9							
Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	1.63 J	2.77	2.18 J	3.5	2.8	3.9	***33***
PCE	**95**	**85**	**28.6**	**37**	**190**	**29**	**61**
TCE	***1.66***	***2.48***	***1.7***	***2.8***	***5.2***	***2.3***	**73**
Vinyl Chloride	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20

MW-2				MW-2R						
Date	6/27/03	10/7/03	7/23/04	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	09/01/09
cis-1,2-DCE	<5.4	<0.27	4.3	<34	**820**	**9,400**	**8,600**	**9,800**	**11,000**	**11,000**
trans-1,2-DCE	<5.0	<0.50	<0.50	<50	<50	<50	<50	<50	**120 J**	***93***
PCE	**2,440**	**4,020**	**28,100**	**790**	**180**	<52	<50	<50	<62	<80
TCE	<6.8	**5.2**	**23**	**780**	**5,200**	**197**	**420**	**370**	**200**	**320**
Vinyl Chloride	<5.4	<0.27	<0.27	<23.5	<23.5	<47	<20	<20	<25	<32

MW-4										
Date	6/27/03	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09
cis-1,2-DCE	<0.27	<0.27	0.77 J	<0.50	<0.68	<0.68	<0.68	0.75 J	NS	NS
PCE	<0.31	<0.31	***3.9***	<0.50	***0.90 J***	***0.72 J***	<0.52	***0.78 J***	NS	NS
TCE	<0.34	<0.34	<0.34	<0.20	<0.44	<0.44	<0.44	***0.63 J***	NS	NS
Vinyl Chloride	<0.27	<0.27	<0.27	<0.50	<0.47	<0.47	<0.47	<0.20	NS	NS

PZ-1								
Date	9/13/04	6/21/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
cis-1,2-DCE	<0.29	DRY	DRY	DRY	DRY	DRY	DRY	DRY
PCE	<0.70	DRY	DRY	DRY	DRY	DRY	DRY	DRY
TCE	<0.27	DRY	DRY	DRY	DRY	DRY	DRY	DRY
Vinyl Chloride	<0.27	DRY	DRY	DRY	DRY	DRY	DRY	DRY

MW-1							MW-1R				
Date	6/27/03	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09
cis-1,2-DCE	<0.27	<0.27	<0.27	<0.50	<0.68	<0.68	<0.68	<0.50	<0.50	<0.50	NA
PCE	<0.31	<0.31	***1.1***	**10**	***2.63***	***4.3***	***1.35 J***	***2.3***	***0.61 J***	***0.83 J***	NA
TCE	<0.34	<0.34	<0.34	***0.74***	<0.44	<0.44	<0.44	<0.20	0.29 J	<0.20	NA
Vinyl Chloride	<0.27	<0.27	<0.27	<0.50	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA

Analytical Key

All concentrations in µg/L.

J = Analyte reported between Limit of Detection and Limit of Quantitation.

Cis-1,2-DCE = cis-1,2-dichloroethene — ***bold, italic*** = Concentration exceeds Ch. NR 140 PAL.

PCE = tetrachloroethene — **bold, box** = Concentration exceeds Ch. NR 140 ES.

TCE = trichloroethene — NS = Not sampled

NOTE:
MAP BASED ON SITE FEATURE MAP DEVELOPED BY
GILES ENGINEERING ASSOCIATES, INC., DATED 11-11-04.

GARAGE
SIDEWALK
FENCE
ALLEY
BUILDING
FORMER UST BASIN
FORMER UST
EXTRA TREATMENT AREA
TREATMENT
300 sq ft x 8' deep (4' to 12' bgs)
AREA 3
REMOVAL
3,800 sq ft x 4' deep (0' to 4' bgs)
AREA 2
TREATMENT
1,240 sq ft x 8' deep (4' to 12' bgs)
AREA 1
TREATMENT
20' x 12' x 11' deep (4' to 15' bgs)
EXTRA TREATMENT AREA
TREATMENT
13' x 12' x 8' deep (4' to 12' bgs)
EXTENT OF PCE SOIL IMPACTS ABOVE DIRECT CONTACT RCL's WITHIN TOP FOUR FEET OF SOIL (PRE-REMEDIATION)
ESTIMATED EXTENT OF CHLORINATED VOCs GREATER THAN CH. NR 140 ENFORCEMENT STANDARDS
NORTH HUMBOLDT BOULEVARD
WEST CHAMBERS STREET
GRASS
PIPE
MW-7R
MW-7 (ABANDONED)
MW-8R
MW-8 (ABANDONED)
MW-3
MW-2R
MW-2 (ABANDONED)
MW-5
MW-9
MW-4
MW-1
PZ1
PZ2
PZ5
PZ7
PZ8
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-13
SB-14
TP-1
TP-2
BASE #3
BASE #4
SIDEWALL #1
SIDEWALL #2
SIDEWALL #3
SIDEWALL #4
SIDEWALL #5
SIDEWALL #6
SIDEWALL #7
SIDEWALL #8
SIDEWALL #10
SIDEWALL #11
SIDEWALL #12
SIDEWALL #13
SIDEWALL #14
B1 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29 B30 B31 B32
GP-1 GP-2 VMP-1 VMP-2
12" DIAMETER VITRIFIED CLAY SEWER LINE REMOVED

LEGEND

- MW = MONITORING WELL LOCATION
- PZ = PIEZOMETER LOCATION
- B = GEOPROBE SOIL BORING LOCATION
- = PROPERTY LINE
- SIDEWALL, BASE = CONFIRMATION SOIL SAMPLE FROM LIMITS OF EXCAVATION
- TP-3 = TEST PIT SOIL SAMPLE
- 1 = POST-TREATMENT SOIL SAMPLE
- SB = POST-TREATMENT VERIFICATION SAMPLING
- VMP = VAPOR SAMPLING LOCATION

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Fax: 414-643-4210

SCALE – 1" = 10' (0' 10' 20')

NO	DATE	REVISIONS	BY	APVD

	NAME:	DATE:
DRAWN BY:	SJR	10-16-07
DESIGNED BY:		
CHECKED BY:		
APPROVED BY:		

City of Milwaukee

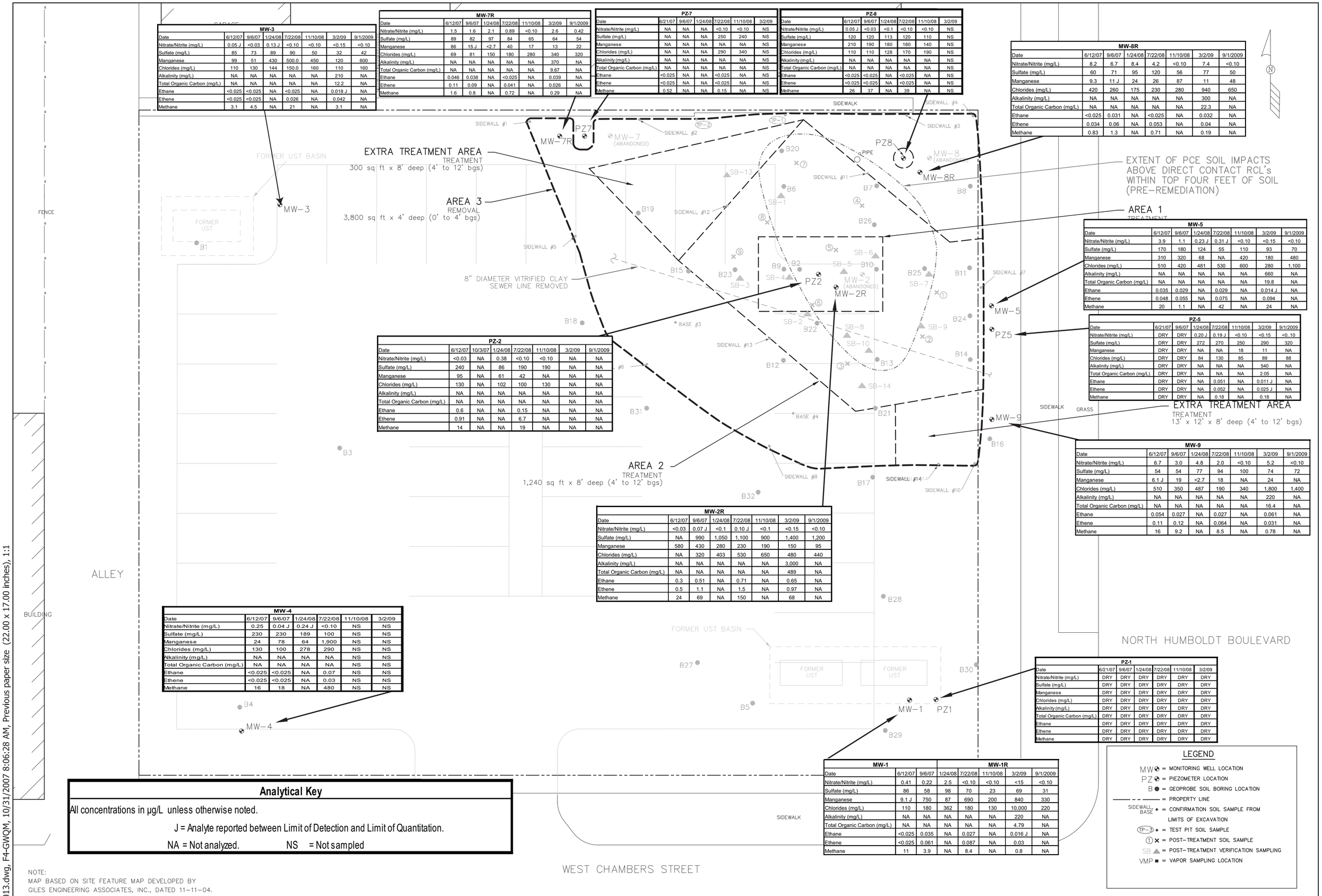
3009 North Humboldt Boulevard, Milwaukee, Wisconsin

Groundwater Quality Map (09/01/09)

DRAWING NUMBER 9056-013

Figure 6

K:\CTYOFMIL\9056\9056-013.dwg, F4-GWQM, 10/31/2007 8:06:28 AM, Previous paper size (22.00 x 17.00 inches), 1:1



MW-3

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	0.05 J	<0.03	0.13 J	<0.10	<0.10	<0.15	<0.10
Sulfate (mg/L)	85	73	89	90	50	32	42
Manganese	99	51	430	500.0	450	120	600
Chlorides (mg/L)	110	130	144	150.0	160	110	160
Alkalinity (mg/L)	NA	NA	NA	NA	NA	210	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	12.2	NA
Ethane	<0.025	<0.025	NA	<0.025	NA	0.018 J	NA
Ethene	<0.025	<0.025	NA	0.026	NA	0.042	NA
Methane	3.1	4.5	NA	21	NA	3.1	NA

MW-7R

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	1.5	1.6	2.1	0.89	<0.10	2.6	0.42
Sulfate (mg/L)	89	82	97	84	65	64	54
Manganese	86	15 J	<2.7	40	17	13	22
Chlorides (mg/L)	69	81	150	180	280	340	320
Alkalinity (mg/L)	NA	NA	NA	NA	NA	370	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	9.67	NA
Ethane	0.046	0.038	NA	<0.025	NA	0.039	NA
Ethene	0.11	0.09	NA	0.041	NA	0.026	NA
Methane	1.6	0.8	NA	0.72	NA	0.29	NA

PZ-7

Date	6/21/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09
Nitrate/Nitrite (mg/L)	NA	NA	NA	<0.10	<0.10	NS
Sulfate (mg/L)	NA	NA	NA	250	240	NS
Manganese	NA	NA	NA	NA	NA	NS
Chlorides (mg/L)	NA	NA	NA	290	340	NS
Alkalinity (mg/L)	NA	NA	NA	NA	NA	NS
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	NS
Ethane	<0.025	NA	NA	<0.025	NA	NS
Ethene	<0.025	NA	NA	<0.025	NA	NS
Methane	0.52	NA	NA	0.15	NA	NS

PZ-8

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09
Nitrate/Nitrite (mg/L)	0.05 J	<0.03	<0.1	<0.10	<0.10	NS
Sulfate (mg/L)	120	120	113	120	110	NS
Manganese	210	190	180	180	140	NS
Chlorides (mg/L)	110	110	128	170	190	NS
Alkalinity (mg/L)	NA	NA	NA	NA	NA	NS
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	NS
Ethane	<0.025	<0.025	NA	<0.025	NA	NS
Ethene	<0.025	<0.025	NA	<0.025	NA	NS
Methane	26	37	NA	39	NA	NS

MW-8R

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	8.2	6.7	8.4	4.2	<0.10	7.4	<0.10
Sulfate (mg/L)	60	71	95	120	56	77	50
Manganese	9.3	11 J	24	26	87	11	48
Chlorides (mg/L)	420	260	175	230	280	940	650
Alkalinity (mg/L)	NA	NA	NA	NA	NA	300	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	22.3	NA
Ethane	<0.025	0.031	NA	<0.025	NA	0.032	NA
Ethene	0.034	0.06	NA	0.053	NA	0.04	NA
Methane	0.83	1.3	NA	0.71	NA	0.19	NA

MW-5

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	3.9	1.1	0.23 J	0.31 J	<0.10	<0.15	<0.10
Sulfate (mg/L)	170	180	124	55	110	93	70
Manganese	310	320	68	NA	420	180	480
Chlorides (mg/L)	510	420	481	530	600	280	1,100
Alkalinity (mg/L)	NA	NA	NA	NA	NA	660	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	19.8	NA
Ethane	0.035	0.029	NA	0.029	NA	0.014 J	NA
Ethene	0.048	0.055	NA	0.075	NA	0.094	NA
Methane	20	1.1	NA	42	NA	24	NA

PZ-5

Date	6/21/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	DRY	DRY	0.20 J	0.19 J	<0.10	<0.15	<0.10
Sulfate (mg/L)	DRY	DRY	272	270	250	290	320
Manganese	DRY	DRY	NA	NA	18	11	NA
Chlorides (mg/L)	DRY	DRY	84	130	85	89	88
Alkalinity (mg/L)	DRY	DRY	NA	NA	NA	540	NA
Total Organic Carbon (mg/L)	DRY	DRY	NA	NA	NA	2.05	NA
Ethane	DRY	DRY	NA	0.051	NA	0.011 J	NA
Ethene	DRY	DRY	NA	0.052	NA	0.025 J	NA
Methane	DRY	DRY	NA	0.18	NA	0.18	NA

MW-9

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	6.7	3.0	4.8	2.0	<0.10	5.2	<0.10
Sulfate (mg/L)	54	54	77	94	100	74	72
Manganese	6.1 J	19	<2.7	18	NA	24	NA
Chlorides (mg/L)	510	350	487	190	340	1,800	1,400
Alkalinity (mg/L)	NA	NA	NA	NA	NA	220	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	16.4	NA
Ethane	0.054	0.027	NA	0.027	NA	0.061	NA
Ethene	0.11	0.12	NA	0.064	NA	0.031	NA
Methane	16	9.2	NA	8.5	NA	0.78	NA

PZ-2

Date	6/12/07	10/3/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	<0.03	NA	0.38	<0.10	<0.10	NA	NA
Sulfate (mg/L)	240	NA	86	190	190	NA	NA
Manganese	95	NA	61	42	NA	NA	NA
Chlorides (mg/L)	130	NA	102	100	130	NA	NA
Alkalinity (mg/L)	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	NA	NA
Ethane	0.6	NA	NA	0.15	NA	NA	NA
Ethene	0.91	NA	NA	6.7	NA	NA	NA
Methane	14	NA	NA	19	NA	NA	NA

MW-2R

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/2009
Nitrate/Nitrite (mg/L)	<0.03	0.07 J	<0.1	0.10 J	<0.1	<0.15	<0.10
Sulfate (mg/L)	NA	990	1,050	1,100	900	1,400	1,200
Manganese	580	430	280	230	190	150	95
Chlorides (mg/L)	NA	320	403	530	650	480	440
Alkalinity (mg/L)	NA	NA	NA	NA	NA	3,000	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	489	NA
Ethane	0.3	0.51	NA	0.71	NA	0.65	NA
Ethene	0.5	1.1	NA	1.5	NA	0.97	NA
Methane	24	69	NA	150	NA	68	NA

MW-4

Date	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09
Nitrate/Nitrite (mg/L)	0.25	0.04 J	0.24 J	<0.10	NS	NS
Sulfate (mg/L)	230	230	189	100	NS	NS
Manganese	24	78	64	1,900	NS	NS
Chlorides (mg/L)	130	100	278	290	NS	NS
Alkalinity (mg/L)	NA	NA	NA	NA	NS	NS
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NS	NS
Ethane	<0.025	<0.025	NA	0.07	NS	NS
Ethene	<0.025	<0.025	NA	0.03	NS	NS
Methane	16	18	NA	480	NS	NS

PZ-1

Date	6/21/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09
Nitrate/Nitrite (mg/L)	DRY	DRY	DRY	DRY	DRY	DRY
Sulfate (mg/L)	DRY	DRY	DRY	DRY	DRY	DRY
Manganese	DRY	DRY	DRY	DRY	DRY	DRY
Chlorides (mg/L)	DRY	DRY	DRY	DRY	DRY	DRY
Alkalinity (mg/L)	DRY	DRY	DRY	DRY	DRY	DRY
Total Organic Carbon (mg/L)	DRY	DRY	DRY	DRY	DRY	DRY
Ethane	DRY	DRY	DRY	DRY	DRY	DRY
Ethene	DRY	DRY	DRY	DRY	DRY	DRY
Methane	DRY	DRY	DRY	DRY	DRY	DRY

MW-1 / MW-1R

Date	MW-1 6/12/07	MW-1 9/6/07	MW-1R 1/24/08	MW-1R 7/22/08	MW-1R 11/10/08	MW-1R 3/2/09	MW-1R 9/1/2009
Nitrate/Nitrite (mg/L)	0.41	0.22	2.5	<0.10	<0.10	<15	<0.10
Sulfate (mg/L)	86	58	98	70	23	69	31
Manganese	9.1 J	750	87	690	200	840	330
Chlorides (mg/L)	110	180	362	180	130	10,000	220
Alkalinity (mg/L)	NA	NA	NA	NA	NA	220	NA
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	4.79	NA
Ethane	<0.025	0.035	NA	0.027	NA	0.016 J	NA
Ethene	<0.025	0.061	NA	0.087	NA	0.03	NA
Methane	11	3.9	NA	8.4	NA	0.8	NA

Analytical Key

All concentrations in µg/L unless otherwise noted.

J = Analyte reported between Limit of Detection and Limit of Quantitation.

NA = Not analyzed. NS = Not sampled

LEGEND

- MW = MONITORING WELL LOCATION
- PZ = PIEZOMETER LOCATION
- B = GEOPROBE SOIL BORING LOCATION
- = PROPERTY LINE
- SIDEWALL, BASE = CONFIRMATION SOIL SAMPLE FROM LIMITS OF EXCAVATION
- TP-3 = TEST PIT SOIL SAMPLE
- 1 = POST-TREATMENT SOIL SAMPLE
- SB = POST-TREATMENT VERIFICATION SAMPLING
- VMP = VAPOR SAMPLING LOCATION

NOTE:
MAP BASED ON SITE FEATURE MAP DEVELOPED BY GILES ENGINEERING ASSOCIATES, INC., DATED 11-11-04.

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, Wisconsin 53233
Phone: 414-643-4200
Fax: 414-643-4210

SCALE – 1" = 10' (0' 10' 20')

NO	DATE	REVISIONS	BY	APVD

	NAME:	DATE:
DRAWN BY:	SJR	10-16-07
DESIGNED BY:		
CHECKED BY:		
APPROVED BY:		

City of Milwaukee

3009 North Humboldt Boulevard, Milwaukee, Wisconsin

Groundwater Quality Map - Natural Attenuation Parameters

DRAWING NUMBER
9056-013

Figure 7

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TABLE 2

SOIL ANALYTICAL RESULTS (VOCs / Metals)

3009 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN
PROJECT NO. 1E-0304002

PARAMETERS	SOIL SAMPLE ID																																					NR 720 Generic Soil Cleanup RCLs	NR 746 Soil Standards	
	B1	B2	B3	B4	B5	B6		B7		B8		B9		B10		B11		B12		B13		B14		B15		B16		MW1		MW2		MW3		MW4		MW5			Table 1 Product Indicator	Table 2 Direct Contact
Date Sampled	4/21/03	4/21/03	4/21/03	4/21/03	4/21/03	8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		8/8/03		6/20/03		6/20/03		6/20/03		6/20/03		9/24/03				
Sample Depth (feet)	4-6	4-6	6-8	2-4	4-6	2-4	8-10	2-4	9-10	2-4	8-10	0-2	11-12	2-4	8-10	2-3	8-10	2-4	10-11	2-4	8-10	2-4	9-10	2-4	8-10	2-4	10-11	2-4	4-6	2-4	8-10	2-4	4-6	2-4	6-8	2-4	4-6			
PID (Instrument Units)	BDL	BDL	BDL	BDL	BDL	BDL	70	BDL	BDL	BDL	BDL	BDL	160	2	370	BDL	BDL	2	BDL	BDL	BDL	BDL	100	BDL	50	BDL	BDL	BDL	BDL	25	245	BDL	BDL	155	BDL	3.9	4.1	NA	NA	NA
DRO (mg/kg)	23	20	51	122	179	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100	NS	NS
Detected VOCs/PVOCs (ug/kg)																																								
1,2,4-Trimethylbenzene	<18	<17	<18	20j	<17	<18	<19	<27	<19	<17	<18	<17	<17	<18	<18	<18	<19	<17	<17	<18	<17	<18	<19	<18	<19	<18	<16	<17	<19	<18	<18	<17	<17	<18	133	<16	<18	NS	83,000	NS
1,3,5-Trimethylbenzene	<20	<20	<21	<20	<20	<20	<21	<19	<22	<19	<20	<19	<20	<20	<21	<21	<22	<20	<20	<20	<20	<20	<21	<21	<21	<20	<19	<20	<21	<20	<21	<19	<19	<20	38j	<19	<21	NS	11,000	NS
1,2-Dichloropropane	<19	<19	<20	<19	<18	<19	<20	<18	<20	<18	<19	<18	<18	<19	<19	<20	<20	<18	<18	<19	<18	<19	658	<19	<20	<19	<17	<19	<20	<19	<20	<18	<18	<19	<19	<17	<20	NS	NS	NS
Benzene	<16	<15	<16	<16	<15	<16	<17	<15	<17	<15	<16	<15	<15	<16	<16	<16	<17	<15	<15	<16	<15	<16	763	<16	<17	<16	<15	<16	<17	<16	<16	<15	<15	<16	<16	<15	<17	5.5	8,500	1,100
Ethylbenzene	<15	<15	<15	<15	<14	<15	<16	<14	<16	<14	<15	<14	<14	<15	<15	<15	<16	<14	<14	<15	<14	<15	<16	<15	<16	<15	<14	<15	<16	<15	<15	<14	<14	<15	84	<14	<16	2,900	4,600	NS
Methylene chloride	<18	<17	<18	<18	<17	<18	<19	149'	90'	58'	42j'	27j'	<17	26j'	<18	36j'	46j'	46j'	<17	39j'	<17	45j'	<19	44j'	40j'	22'	67'	<18	<19	<18	<18	<17	<17	<18	<18	<18	<19	NS	NS	NS
Naphthalene	<44	<43	<46	164	<43	<44	<47	<43	<47	<42	<44	<42	<43	<44	<46	<46	<47	<43	<43	<44	<43	<44	<46	<45	<47	<45	<41	<44	<47	<44	<46	<42	<43	<44	202	<41	<46	NS	2,700	NS
p-Isopropyltoluene	<18	<18	<19	<18	<18	<18	<19	<18	<20	<18	<18	<18	<18	<18	<19	<19	<20	<18	<18	<18	<18	<18	<19	<19	<19	<19	<17	<18	<19	<18	<19	<17	<18	131	326	<17	<19	NS	NS	NS
Toluene	<17	<17	<18	<17	<17	<17	<18	99	<18	<16	<17	78	<17	<17	<18	<18	<18	<17	<17	<17	<17	<17	<18	<17	<18	<17	<16	<17	<18	<17	<18	<16	<17	41j	52j	<16	<18	1,500	38,000	NS
Xylenes	<46	<45	<48	<46	<44	<48	<49	<44	<49	<44	<46	<44	<44	<48	<47	<48	<49	<45	<44	<46	<44	<46	<48	<47	<48	<47	<43	<45	<48	<46	<48	<44	<44	<46	388	<42	<48	4,100	42,000	NS
cis-1,2-Dichloroethene	<16	<16	<17	<16	<15	<16	<17	<15	<17	<15	<16	<15	<15	<16	<16	<17	<17	<16	4,030	<16	<15	<16	529	<16	<17	<16	316	<16	<17	<16	<17	<15	<15	<16	<16	<15	<17	NS	NS	NS
trans-1,2-Dichloroethene	<15	<15	<15	<15	<14	<15	<16	<14	<16	<14	<15	<14	<14	<15	<15	<15	<16	<14	<14	<15	<14	<15	<16	<15	<16	<15	26j	<15	<16	<15	<15	<14	<14	<15	<15	<14	<18	NS	NS	NS
Tetrachloroethene (PCE)	978	3,070	<19	<18	<17	10,300	113,000	2,620	666	253	95	420	(5,637,000)	3,820	(443,000)	185	331	409	<17	276	(143,000)	202	(85,700)	680	227	<18	<17	39j	<19	10,200	105,000	21j	77	44j	45j	<16	107	NS	NS	NS
PCE TCLP (mg/L)**	–	–	–	–	–	0.48	<0.01	–	–	–	–	–	(3.8)	–	(3.7)	–	–	–	<0.01	–	(1.1)	–	(1.4)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	NS	NS	NS
Trichloroethene (TCE)	382	<20	<21	<20	<20	692	<21	<20	40j	<19	<20	<19	<20	<20	<21	<21	<22	<20	28,300	71	<20	<20	701	<21	<21	<21	<19	<20	<21	<20	<21	<19	<20	<20	<21	<19	<21	NS	NS	NS
TCE TCLP (mg/L)**	–	–	–	–	–	<0.008	<0.008	–	–	–	–	–	<0.008	–	<0.008	–	–	–	0.31	–	<0.008	–	<0.008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	NS	NS	NS
Detected RCRA Metals (mg/kg)																																								
Arsenic	–	–	–	4.1j	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	38	37	0.039*	NS	NS
Barium	–	–	–	106	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	15	13	NS	NS	NS
Cadmium	–	–	–	<0.58	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2.8	3.3	8	NS	NS
Chromium	–	–	–	23	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	19	18	14/16,000**	NS	NS
Lead	–	–	–	89	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	38	34	50*	NS	NS
Mercury	–	–	–	0.28j	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	<0.059	<0.067	NS	NS	NS
Silver	–	–	–	1.1j	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	<0.48	<0.54	NS	NS	NS

PID: Photoionization detector
mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)
ug/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
BDL: Below detection limit
RCL: Residual contaminant level
NS: No established standard
NA: Not Applicable
j: Concentration detected between the laboratory detection limit and quantitation limit

VOCs: Volatile Organic Compounds
PVOCs: Petroleum Volatile Organic Compounds
RCRA: Resource Conservation and Recovery Act
*: Based on human health risk from direct contact exposure at a non-industrial property
**: Separate standards for hexavalent/trivalent chromium
NR: Natural Resources Chapter of the Wisconsin Administrative Code (WAC)
–: Not Analyzed
': Detected in trip blank (49 ug/kg); common laboratory contaminant

TCLP: Toxic Characteristic Leachate Procedure
**: TCLP results reported in aqueous units
mg/L: Milligrams per liter; equivalent to parts per million (ppm)

Results indicated in red/underline exceed the WAC NR 720 RCL

TABLE 2 (continued)

SOIL ANALYTICAL RESULTS (VOCs / Metals)

3009 NORTH HUMBOLDT BOULEVARD
MILWAUKEE, WISCONSIN
PROJECT NO. 1E-0304002

PARAMETERS	SOIL SAMPLE ID																																NR 720 Generic Soil Cleanup RCLs	NR 746 Soil Standards	
	B17		B18		B19		B20		B21		B22		B23		B24		B25		B26		B27		B28		B29		B30		PZ7		PZ8		B31		B32			Table 1 Product Indicator	Table 2 Direct Contact
Date Sampled	8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/5/04		8/31/04		8/31/04		9/10/04		9/10/04				
Sample Depth (feet)	0-2	7-8	0-2	5.5-6.5	2-4	8-9	0-2	7-8	2-4	7-8	2-4	8-9	0-2	7-8	2-4	6.5-7.5	0-2	7-8	2-4	7-8	0-2	7-9	0-2	6.5-8.5	0-2	4-7.5	0-2	5-7	0-2	4-6	2-4	6-8	2-4	4-6	0-2	4-6			
PID (Instrument Units)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2,000	BDL	66	BDL	59	BDL	116	6.7	105	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.8	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA
Detected VOCs/PVOCs (ug/kg)																																							
1,2,4-Trimethylbenzene	24j	<17	<16	<17	<18	<17	<17	<19	<17	<17	<18	<17	<17	<17	<18	<17	<17	<19	<18	<17	--	--	--	--	--	--	--	--	<17	<17	<17	<19	<18	<17	22j	<17	NS	83,000	NS
1,3,5-Trimethylbenzene	<19	<20	<19	<20	<21	<20	<19	<22	<20	<19	<21	<19	<19	<20	<20	<20	<19	<21	<20	<19	--	--	--	--	--	--	--	--	<19	<20	<20	<21	<20	<20	<20	<20	NS	11,000	NS
1,2-Dichloropropane	<18	<18	<18	<19	<20	<18	<18	<21	<19	<18	<19	<18	<18	<19	<19	<18	<18	<20	<19	<18	--	--	--	--	--	--	--	--	<18	<19	<19	<20	<19	<18	<18	<19	NS	NS	NS
Benzene	<15	<15	<15	<15	<16	<15	<15	<17	<15	<15	<16	<15	<15	<16	<16	<15	<15	<17	<16	<15	--	--	--	--	--	--	--	--	<15	<16	<15	<17	<16	<15	<15	<16	5.5	8,500	1,100
Ethylbenzene	<14	<14	<14	<15	<15	<14	19j	<16	<15	<14	<15	<14	<14	<15	<15	<14	<14	<16	<15	<14	--	--	--	--	--	--	--	--	<14	<15	<15	<16	<15	<14	<14	<15	2,900	4,600	NS
Methylene chloride	<17	<17	<16	<17	<18	<17	<17	<19	<17	<17	<18	<17	<17	<18	<18	<17	<17	<19	<18	<17	--	--	--	--	--	--	--	--	44j	39j	48j	47j	36j	35j	41j	<18	NS	NS	NS
Naphthalene	45j	<43	<41	<43	<46	<43	<42	<48	<43	<43	<45	<43	<43	<44	<44	<43	<42	<47	<45	<42	--	--	--	--	--	--	--	--	<43	<44	<43	<47	<45	<43	51j	<44	NS	2,700	NS
p-Isopropyltoluene	<17	<18	<17	<18	<19	<18	<17	<20	<18	<18	<19	<18	<18	<18	<18	<18	<17	<19	<19	<18	--	--	--	--	--	--	--	--	<18	<18	<18	<19	<19	<18	<18	<18	NS	NS	NS
Toluene	42j	<17	<16	<17	<18	<17	<16	<19	<17	<17	<17	<17	<16	<17	<17	<17	<16	<18	<17	<16	--	--	--	--	--	--	--	--	<17	<17	<17	<18	<17	<17	<17	<17	1,500	38,000	NS
Xylenes	58j	<45	<43	<45	<47	<44	<43	<50	<45	<44	<47	<44	<44	<45	<46	<44	<44	<49	<47	<44	--	--	--	--	--	--	--	--	<44	<45	<45	<48	<47	<44	26j	<45	4,100	42,000	NS
cis-1,2-Dichloroethene	<15	<15	<15	<16	<16	<15	<15	<17	<16	<15	<16	185	<15	<16	<16	<15	<15	<17	<16	<15	--	--	--	--	--	--	--	--	<15	<16	<16	<17	<16	<15	<15	<16	NS	NS	NS
trans-1,2-Dichloroethene	<14	<14	<14	<15	<15	<14	<14	<16	<15	<14	<15	<14	<14	<15	<15	<14	<14	<16	<15	<14	--	--	--	--	--	--	--	--	<14	<15	<15	<16	<15	<14	<14	<15	NS	NS	NS
Tetrachloroethene (PCE)	285	<17	48j	144	278	<17	4,260	9,720	<18	2,890	70	52,200	874	(49,100)	217	8,460	11,900	<19	3,860	<17	--	--	--	--	--	--	--	--	729	2,900	551	72	<18	37j	27j	49j	NS	NS	NS
PCE TCLP (mg/L)**	--	--	--	--	--	--	--	--	--	--	--	0.46	--	(1.0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS
Trichloroethene (TCE)	<19	<20	<19	<20	<21	<20	<19	<22	<20	<20	<21	5,960	<19	<20	<20	<20	<19	<21	<20	<19	--	--	--	--	--	--	--	--	<20	<20	<20	<21	<20	<20	<20	<20	NS	NS	NS
TCE TCLP (mg/L)**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS
Detected RCRA Metals (mg/kg)																																							
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.5	2.4	7.9	5.9	2.9	8.3	2	2.4	9	2.6	8.1	2.5	--	--	--	--	0.039*	NS	NS
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	8	123	28	58	32	44	20	26	20	55	16	--	--	--	--	NS	NS	NS
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2j	0.7j	<0.61	0.9j	0.9j	0.9j	1.1j	1	0.9j	<0.58	<0.58	0.9j	--	--	--	--	8	NS	NS
Total Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	20	21	14	12	14	10	8.8	9.6	7.9	14	8.4	--	--	--	--	14/16,000**	NS	NS
Hexavalent Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.11	<0.11	<0.12	<0.12	<1.2	<1.3	<1.1	<0.11	--	--	--	--	--	--	--	--	14	NS	NS
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	22	2.2j	27	168	24	64	26	45	22	69	31	--	--	--	--	50*	NS	NS
Lead TCLP (mg/L)**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.064	--	--	--	--	--	--	--	--	--	--	--	NS	NS	NS
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06j	<0.045	0.08j	<0.048	0.08j	<0.052	0.09j	<0.045	<0.045	<0.046	<0.046	<0.049	--	--	--	--	NS	NS	NS
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1j	0.2j	0.3j	0.2j	<0.11	0.2j	0.1j	<0.11	0.5	0.5	0.5	0.3j	--	--	--	--	NS	NS	NS
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.48	<0.49	<0.53	<0.53	<0.51	<0.58	<0.47	<0.49	<0.50	<0.51	<0.51	<0.54	--	--	--	--	NS	NS	NS

PID: Photoionization detector
mg/kg: Milligrams per kilogram; equivalent to parts per million (ppm)
ug/kg: Micrograms per kilogram; equivalent to parts per billion (ppb)
BDL: Below detection limit
RCL: Residual contaminant level
NS: No established standard
NA: Not Applicable
j: Concentration detected between the laboratory detection limit and quantitation limit

VOCs: Volatile Organic Compounds
PVOCs: Petroleum Volatile Organic Compounds
RCRA: Resource Conservation and Recovery Act
*: Based on human health risk from direct contact exposure at a non-industrial property
*: Separate standards for hexavalent/trivalent chromium
NR: Natural Resources Chapter of the Wisconsin Administrative Code (WAC)
--: Not Analyzed
*: Detected in trip blank (49 ug/kg); common laboratory contaminant

TCLP: Toxic Characteristic Leachate Procedure
**: TCLP results reported in aqueous units
mg/L: Milligrams per liter; equivalent to parts per million (ppm)

Results indicated in red/underline exceed the WAC NR 720 RCL

Table 2A
Soil Quality Results - VOCs
3009 North Humboldt Boulevard, Milwaukee, WI 53212
Sigma Project No. 9056

Soil Sample Location:		TP-1		TP-2		TP-3	Base 1	Base 2	Base 3	Base 4
Sample Depth (feet bgs):		4	8	4	8	8	4	4	4	5
	Date:	12/14/04	12/14/04	12/14/04	12/14/04	12/20/04	12/15/04	12/15/04	12/16/04	12/17/04
Photoionization Detector	ppm	0	2	0	0	14	2	2	0	0
Detected VOCs										
Tetrachloroethene	µg/kg	< 30	3,030	< 28	< 31	150,000 "J"	14,300	35,800	2,200	191
Trichloroethene	µg/kg	<30	<30	<28	<31	<29	<28	<31	<29	68
1,2-Dichlorobenzene	µg/kg	<30	<30	<28	<31	<29	<28	81	<29	<28
cis-1,2-Dichloroethene	µg/kg	<30	<30	<28	<31	<29	<28	<31	<29	<28

Soil Sample Location:		Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9
Sample Depth (feet bgs):		4 - 6	4 - 6	4 - 6	4 - 6	4 - 6	4 - 6	4 - 6	4 - 6	4 - 6
	Date:	12/20/04	12/20/04	12/20/04	12/20/04	12/20/04	12/20/04	12/20/04	12/20/04	12/20/04
Photoionization Detector	ppm	0	0	0	0	0	0	0	7	8
TCLP & Detected VOCs										
TCLP Tetrachloroethene	mg/L	1.0	5.7	0.80	0.68	1.6	0.36	<0.020	<0.020	<0.020
Tetrachloroethene	µg/kg	35,000 "J"	131,000 "J"	58,500 "J"	18,000 "J"	56,000 "J"	13,000 "J"	6,820	51,600 "J"	66,200 "J"
Trichloroethene	µg/kg	41	226	143	30	<30	<30	<30	34	118
Benzene	µg/kg	<30	38	<30	<30	<30	<30	<30	<29	<30
cis-1,2-Dichloroethene	µg/kg	<30	<30	60	<30	<30	<30	<30	<29	<30
1,2-Dichloropropane	µg/kg	34	40	<30	<30	31	<30	<30	<29	<30

Soil Sample Location:		Sidewall 1	Sidewall 2	Sidewall 3	Sidewall 4	Sidewall 5	Sidewall 6	Sidewall 7		Sidewall 8	Sidewall 9	Sidewall 10	Sidewall 11	Sidewall 12	Sidewall 13	Sidewall 14
Sample Depth (feet bgs):		4	4	4	4	4	4	4	8	4	9	4	9	9	9	9
	Date:	12/15/04	12/15/04	12/15/04	12/15/04	12/15/04	12/16/04	12/16/04	12/16/04	12/16/04	12/16/04	12/17/04	12/17/04	12/17/04	12/20/04	12/29/04
Photoionization Detector	ppm	0	0	2	0	0	0	0	0	0	55	0	0	42	3	0
Detected VOCs																
Tetrachloroethene	µg/kg	< 27	2,000	< 28	< 27	562	< 30	387	562	< 30	353,000	57	1,210	98,800	5,530	30,700
Trichloroethene	µg/kg	<27	<28	<28	<27	<28	<30	<29	<31	<30	601	<30	<27	<298	440	221
1,2-Dichlorobenzene	µg/kg	<27	<28	<28	<27	<28	<30	<29	<31	<30	<29	<30	<27	<298	<28	<31
cis-1,2-Dichloroethene	µg/kg	<27	<28	<28	<27	<28	<30	<29	<31	<30	40	<30	<27	<298	68	49

Notes:
1. µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb)
2. feet bgs = feet below original ground surface
3. "J" = estimated concentration (flagged by analytical laboratory)
4. TP 1 - 3 = Test pit samples collected from outside the treatment area. Base 1 - 4 = Base samples collected from shallow excavation area.
5. Sample 1 - 9 = Soil samples collected from within the treatment area.
6. Sidewall 1 - 14 = Soil samples collected from the sidewall of the remediation areas.

Table 2B
Post-Treatment Soil Quality Results - TCLP & VOCs
3009 North Humboldt Boulevard, Milwaukee, WI 53212
Sigma Project No. 9056

Soil Sample Location:		A	B	C	D	E	F
Sample Depth (feet bgs):		4	6	8	8	6	8
	Date:	01/12/05	01/12/05	01/12/05	01/12/05	01/12/05	01/12/05
Photoionization Detector	ppm	4.5	4.2	5.0	9.4	2.9	17.0
TCLP & Detected VOCs							
TCLP Tetrachloroethene	mg/L	NA	NA	NA	NA	NA	NA
Tetrachloroethene	µg/kg	92,100	71,100 "J"	95,500	119,000	65,000	145,000
Trichloroethene	µg/kg	<631	75	38	55	<312	<3,030
Dichlorodifluoromethane	µg/kg	<1,260	150	<64	<62	<625	<6,060
cis-1,2-Dichloroethene	µg/kg	<631	<31	<32	173	<312	<3,030
Methylene Chloride	µg/kg	<1,260	1,500	561	223	<625	<6,060

Soil Sample Location:		H	I	J	K	L	Landfill Acceptance Limits
Sample Depth (feet bgs):		8	8	4	4	6	
	Date:	01/12/05	01/12/05	01/12/05	01/12/05	01/12/05	
Photoionization Detector	ppm	6.4	2.4	4.9	3.7	23.2	---
TCLP & Detected VOCs							
TCLP Tetrachloroethene	mg/L	NA	NA	NA	NA	NA	0.7
Tetrachloroethene	µg/kg	223,000 "J"	124,000 "J"	134,000	119,000	120,000	33,000
Trichloroethene	µg/kg	<620	<310	<611	<620	<3,000	---
Dichlorodifluoromethane	µg/kg	<1,240	<620	<1,220	<1,240	<6,010	---
cis-1,2-Dichloroethene	µg/kg	<620	<310	<611	<620	<3,000	---
Methylene Chloride	µg/kg	<1,240	<620	<1,220	<1,240	<6,010	---

Notes:
1. mg/L - milligrams per liter (equivalent to parts per million, ppm)
2. µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb)
3. feet bgs = feet below soil treatment ground surface, which corresponds to approximately 4 feet below original ground surface grade
4. "J" = estimated concentration (flagged by analytical laboratory)
5. Landfill Acceptance Limits are those established by WDNR in September 8, 2004 letter to City of Milwaukee

Table 2C
Soil Quality Results - Post-treatment Verification Sampling
3009 North Humboldt Boulevard, Milwaukee, WI 53212
Sigma Project No. 9056

Soil Sample Location:		SB-1			SB-2			SB-3				SB-4				
Sample Depth (feet bgs):		6-8	8-10	14-16	4-6	8-10	16-18	6-8	10-12	16-18	24-26	4-6	8-10	16-18	24-26	34-36
	Date:	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/28/05	5/29/05	5/30/05	5/31/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05
Detected VOCs																
Benzene	µg/kg	<29	<30	<27	<600	<29	<31	<600	<590	<28	<27	<600	<600	<27	<27	<27
1,2-Dichlorobenzene	µg/kg	<29	<30	<27	<600	<29	<31	<600	<590	<28	<27	<600	<600	<27	<27	<27
cis-1,2-Dichloroethene	µg/kg	<29	<30	<27	<600	140	<31	<600	<590	<28	<27	<600	<600	<27	<27	<27
Methylene Chloride	µg/kg	170	<60	210	<1,200	320	<62	<1,200	<1,200	<56	<55	<1,200	<1,200	**140**	<55	<54
Tetrachloroethene	µg/kg	**20,000**	**20,000**	<27	**99,000**	**90,000**	**73**	**180,000**	**28,000**	<28	**210**	**79,000**	**72,000**	**28**	**170**	**31**
Tetrachloroethene (TCLP)	mg/L	NA	NA	NA	NA	**1.5**	NA	NA	NA	NA	NA	NA	**1.2**	NA	NA	NA
Trichloroethene	µg/kg	140	60	<27	<600	250	<31	<600	<590	<28	<27	<600	<600	<27	<27	<27

Soil Sample Location:		SB-4					SB-5					SB-6			
Sample Depth (feet bgs):		4-6	8-10	16-18	24-26	34-36	4-6	8-10	16-18	24-26	34-36	4-6	8-10	16-18	24-26
	Date:	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05
Detected VOCs															
Benzene	µg/kg	<600	<600	<27	<27	<27	<300	<150	<28	<27	<27	<600	<150	<27	<27
1,2-Dichlorobenzene	µg/kg	<600	<600	<27	<27	<27	<300	<150	<28	<27	<27	<600	<150	<27	<27
cis-1,2-Dichloroethene	µg/kg	<600	<600	<27	<27	<27	<300	<150	<28	<27	<27	<600	<150	<27	<27
Methylene Chloride	µg/kg	<1,200	<1,200	**140**	<55	<54	<600	<290	**69**	**110**	**940**	<1,200	<300	<55	120
Tetrachloroethene	µg/kg	**79,000**	**72,000**	**28**	**170**	**31**	**75,000**	**22,000**	**68**	**110**	**410**	**93,000**	**29,000**	<27	<27
Tetrachloroethene (TCLP)	mg/L	NA	**1.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	µg/kg	<600	<600	<27	<27	<27	**310**	<150	<28	<27	<27	<600	<150	<27	<27

Soil Sample Location:		SB-7				SB-8				SB-9			SB-10			
Sample Depth (feet bgs):		4-6	8-10	16-18	24-26	4-6	8-10	16-18	24-26	6-8	8-10	14-16	4-6	8-10	16-18	24-26
	Date:	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05
Detected VOCs																
Benzene	µg/kg	<590	<590	<27	<27	<600	**1,300**	<27	<27	**34**	<27	<30	<30	<540	<28	<27
1,2-Dichlorobenzene	µg/kg	<590	<590	<27	<27	<600	<540	<27	<27	**36**	<27	<30	<30	<540	<28	<27
cis-1,2-Dichloroethene	µg/kg	<590	<590	<27	<27	<600	<540	<27	<27	**560**	<27	<30	<30	<540	<28	<27
Methylene Chloride	µg/kg	<1,200	<1,200	**79**	<54	<1,200	<1,100	<54	<54	<60	<54	**71**	<60	<1,100	<56	<54
Tetrachloroethene	µg/kg	**73,000**	**19,000**	**350**	**71**	**91,000**	**240,000**	**460**	**84**	**80,000**	**86,000**	<30	**63,000**	**160,000**	**530**	**47**
Tetrachloroethene (TCLP)	mg/L	NA	**0.32**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	µg/kg	**1,600**	<590	<27	<27	<600	<540	<27	<27	**1,100**	**520**	<30	**61**	<540	<28	<27

Soil Sample Location:		SB-13			SB-14			NR 720	NR 746	NR 746
Sample Depth (feet bgs):		6-8	10-12	14-16	6-8	10-12	14-16	RCL	Table 1	Table 2
	Date:	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05	5/27/05		SSL	SSL
Detected VOCs										
Benzene	µg/kg	<590	<29	<28	<590	<29	<29	5.5	8,500	1,100
1,2-Dichlorobenzene	µg/kg	<590	<29	<28	<590	<29	<29	NS	NS	NS
cis-1,2-Dichloroethene	µg/kg	<590	<29	<28	<590	<29	<29	NS	NS	NS
Methylene Chloride	µg/kg	<1,200	<58	<55	<1,200	<59	**370**	NS	NS	NS
Tetrachloroethene	µg/kg	**120,000**	**35,000**	<55	**60,000**	**48,000**	**13,000**	NS	NS	NS
Tetrachloroethene (TCLP)	mg/L	**2.3**	NA	NA	NA	NA	NA	NS	NS	NS
Trichloroethene	µg/kg	<590	<29	<28	<590	**140**	**110**	NS	NS	NS

Notes:
1. µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb)
2. mg/L = milligrams per liter
3. feet bgs = feet below original ground surface
4. "J" = estimated concentration (flagged by analytical laboratory)
5. NA = Not Analyzed
6. NS = No Standard

Table 2D
Soil Quality Results - Off-Site Geoprobe Borings
3009 North Humboldt Boulevard, Milwaukee, WI 53212
Sigma Project No. 9056

Soil Sample Location:		OSGP-1		GP-1		GP-2	
Sample Depth (feet bgs):		4-6	8-10	4-6	8-10	4-6	8-10
	Date:	02/16/05	02/16/05	05/24/05	05/24/05	05/24/05	05/24/05
Detected VOCs							
Benzene	µg/kg	<30	<25	<30	<30	<28	<28
1,2-Dichlorobenzene	µg/kg	<30	<25	<30	<30	<28	<28
cis-1,2-Dichloroethene	µg/kg	<30	<25	<30	<30	<28	<28
Methylene Chloride	µg/kg	<60	<50	<60	<61	<56	<57
Tetrachloroethene	µg/kg	<30	<25	<30	<30	**110**	**56**
Trichloroethene	µg/kg	<30	<25	<30	<30	<28	<28

Table 3
Groundwater Quality Results
3009 North Humboldt Avenue
Sigma Project No. 9056

Well Location:		MW-1						MW-1R					MW-2			MW-2R							MW-3											NR 140	NR 140
Analytes	Date:	6/27/03	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	6/27/03	10/7/03	7/23/04	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/3/09	9/1/09	6/27/03	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	ES	PAL
PVOCs & Detected VOCs																																		
Benzene	µg/L	<0.27	<0.27	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA	<5.4	<0.27	***0.86***	<23.5	<23.5	<47	<20	<20	<25	<32	<0.27	<0.27	<0.27	0.21 J	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA	5	0.5
Chloromethane	µg/L	<1	<1	<1	<1	<1	<1	<1	<0.30	<0.30	<0.30	NA	<1	<1	<1	<50	<50	<100	<30	<30	<38	<48	<1	<1	<1	<1	<1	<1	<1	<0.30	<0.30	<0.30	NA	3	0.3
cis-1,2-Dichloroethene	µg/L	<0.27	<0.27	<0.27	<0.50	<0.68	<0.68	<0.68	<0.50	<0.50	<0.50	NA	<5.4	<0.27	4.3	<34	**820**	**9,400**	**8,600**	**9,800**	**11,000**	**11,000**	<0.27	<0.27	0.36 J	0.54 J	1.3 "J"	1.09 "J"	0.82 J	1.3 J	0.84 J	<0.50	NA	70	7
trans-1,2-Dichloroethene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	<0.50	<0.50	<50	<50	<50	<50	<50	**120 J**	93	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	100	20
Tetrachloroethene	µg/L	<0.31	<0.31	***1.1***	**10**	***2.63***	***4.3***	***1.35 J***	***2.3***	***0.61 J***	***0.83 J***	NA	**2,440**	**4,020**	**28,100**	**790**	**180**	<52	<50	<50	<62	<80	<0.31	<0.31	**19**	***1.4 J***	***2.94***	***1.6***	***1.61***	***1.0 J***	<0.50	<0.50	NA	5	0.5
Trichloroethene	µg/L	<0.34	<0.34	<0.34	***0.74***	<0.44	<0.44	<0.44	<0.20	0.29 J	<0.20	NA	<6.8	**5.2**	**23**	**780**	**5,200**	**197**	**420**	**370**	**200**	**320**	<0.34	<0.34	<0.34	***0.81***	***1.41***	***0.83 "J"***	***0.97 J***	***1.0***	0.42 J	0.43 J	NA	5	0.5
Vinyl Chloride	µg/L	<0.27	<0.27	<0.27	<0.50	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA	<5.4	<0.27	<0.27	<23.5	<23.5	<47	<20	<20	<25	<32	<0.27	<0.27	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA	0.2	0.02
Dissolved Metals																																				
Arsenic	µg/L	NA	NA	NA	NA	NA	0.9 "J"	***1.1***	***3.4***	0.79	NA	NA	NA	NA	NA	NA	**12**	**24**	**39**	**35**	NA	NA	NA	NA	NA	NA	NA	<0.6	NA	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	94	91	110	67	NA	NA	NA	NA	NA	NA	147	140	98	120	NA	NA	NA	NA	NA	NA	NA	108	NA	NA	NA	NA	NA	2,000	400
Chromium	µg/L	NA	NA	NA	NA	NA	<0.8	1.7	0.40	0.26 J	NA	NA	NA	NA	NA	NA	<0.8	***13***	9.4	***12***	NA	NA	NA	NA	NA	NA	NA	<0.8	NA	NA	NA	NA	NA	100	10
Chromium (hexavalent)	µg/L	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Natural Attenuation Parameters																																				
Nitrate/Nitrite	mg/L	NA	NA	NA	NA	0.41	0.22	***2.5***	<0.10	<0.10	<15	<0.10	NA	NA	NA	<0.03	0.07 "J"	<0.1	0.10 J	<0.1	<0.15	<0.10	NA	NA	NA	NA	0.05 "J"	<0.03	0.13 J	<0.10	<0.10	<0.15	<0.10	10	2
Sulfate	mg/L	NA	NA	NA	NA	86	58	98	70	23	69	31	NA	NA	NA	NA	990	1,050	1,100	900	1,400	1,200	NA	NA	NA	NA	85	73	89	90	50	32	42		
Chlorides	mg/L	NA	NA	NA	NA	110	180	362	180	130	10,000	220	NA	NA	NA	NA	320	403	530	650	480	440	NA	NA	NA	NA	110	130	144	150	160	110	160		
Alkalinity	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	220	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	210	NA	
Total Organic Carbon	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	489	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.2	NA	
Dissolved Manganese	µg/L	NA	NA	NA	NA	9.1 "J"	750	87	690	200	840	330	NA	NA	NA	580	430	280	230	190	150	95	NA	NA	NA	NA	99	51	430	500	450	120	600		
Dissolved Gasses																																				
Ethane	µg/L	NA	NA	NA	NA	<0.025	0.035	NA	0.027	NA	0.016 J	NA	NA	NA	NA	0.3	0.51	NA	0.71	NA	0.650	NA	NA	NA	NA	NA	<0.025	<0.025	NA	<0.025	NA	0.018 J	NA		
Ethene	µg/L	NA	NA	NA	NA	<0.025	0.061	NA	0.087	NA	0.030	NA	NA	NA	NA	0.5	1.1	NA	1.5	NA	0.970	NA	NA	NA	NA	NA	<0.025	<0.025	NA	0.026	NA	0.042	NA		
Methane	µg/L	NA	NA	NA	NA	11	3.9	NA	8,400	NA	0.800	NA	NA	NA	NA	24	69	NA	150	NA	68	NA	NA	NA	NA	NA	3.1	4.5	NA	21	NA	3.1	NA		
In-Situ Parameters																																				
Dissolved Oxygen	mg/L	NA	NA	NA	NA	0.35	0.2	0.37	0.38	0.35	0.37	0.32	NA	NA	NA	0.11	0.18	0.13	0.17	0.18	0.16	0.19	NA	NA	NA	NA	0.16	0.28	0.17	0.20	0.22	0.29	0.21		
pH	S.U.	NA	NA	NA	NA	7	7	7	7	7	7	7	NA	NA	NA	7	7	7	8	8	8	8	NA	NA	NA	NA	7	7	7	7	7	7	7		
Redox	(mV)	NA	NA	NA	NA	141	249	126	44	36	194	83	NA	NA	NA	-12	-51	-16	-268	-198	-260	-223	NA	NA	NA	NA	127	289	113	52	55	199	82		
Temperature	(°C)	NA	NA	NA	NA	10.4	18.2	9.7	13.3	13	10.6	13	NA	NA	NA	10.8	13.7	9.9	13.7	13.4	10.6	13.5	NA	NA	NA	NA	9.9	14.7	8.9	13.1	12.8	11.2	12.9		
Ferrous Iron	(mg/L)	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	2.0	3.0	2.0	1.8	1.6	1.6	0.0	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Notes:
2. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
3. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
8. "J" = Estimated value. Analyte detected at a level less than the reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
9. Blank results: 5/31/05 - All VOCs reported below laboratory detection limits.
11. Exceedances: **bold, box** = Concentration exceeds NR 140 ES
bold, italics = Concentration exceeds NR 140 PAL

Table 3
Groundwater Quality Results
3009 North Humboldt Boulevard
Sigma Project No. 9056

Well Location:		MW-4								MW-5										MW-7	MW-7R							NR 140	NR 140
Analytes	Date:	6/27/03	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	10/7/03	7/23/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	9/13/04	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	ES	PAL
PVOCs & Detected VOCs																													
Benzene	µg/L	<0.27	<0.27	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.27	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20	<0.29	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA	5	0.5
Chloromethane	µg/L	<1	<1	<1	<1	<1	<1	<1	<0.30	<1	<1	<1	<1	<1	<1	<0.30	<0.30	<0.30	<1.0	<1	<1	***2.21 "J"***	<1	<0.30	<0.30	<0.30	NA	3	0.3
cis-1,2-Dichloroethene	µg/L	<0.27	<0.27	0.77 J	<0.50	<0.68	<0.68	<0.68	0.75 J	<0.27	<0.27	<0.50	<0.68	<0.68	<0.68	2.8	<0.50	1.0 J	2.4	<0.29	<0.68	<0.68	<0.68	<0.50	0.91 J	0.59 J	NA	70	7
trans-1,2-Dichloroethene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	100	20
Tetrachloroethene	µg/L	<0.31	<0.31	***3.9***	<0.50	***0.90 "J"***	***0.72 "J"***	<0.52	***0.78 J***	<0.31	**64**	**33**	**60**	**44**	**138**	**99**	**120**	**61**	**61**	<0.70	**9.9**	**44**	**54**	**94**	**33**	**50**	NA	5	0.5
Trichloroethene	µg/L	<0.34	<0.34	<0.34	<0.20	<0.44	<0.44	<0.44	***0.63 J***	<0.34	***0.54 J***	0.39	***2.12***	***2.08***	***1.86***	***2.3***	***1.6***	***0.81***	***3***	<0.27	***0.53 "J"***	<0.44	***0.92 J***	***0.97***	***1.9***	***1.1***	NA	5	0.5
Vinyl Chloride	µg/L	<0.27	<0.27	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.27	<0.27	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20	<0.29	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	NA	0.2	0.02
Dissolved Metals																													
Arsenic	µg/L	NA	NA	NA	NA	NA	1.4 "J"	1.5	2.7	NA	NA	NA	NA	<0.6	NA	NA	NA	NA	NA	NA	NA	<0.6	NA	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	85	110	150	NA	NA	NA	NA	100	NA	NA	NA	NA	NA	NA	NA	54	NA	NA	NA	NA	NA	2,000	400
Chromium	µg/L	NA	NA	NA	NA	NA	<0.8	1.8	0.89	NA	NA	NA	NA	<0.8	NA	NA	NA	NA	NA	NA	NA	<0.8	NA	NA	NA	NA	NA	100	10
Chromium (hexavalent)	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Natural Attenuation Parameters																													
Nitrate/Nitrite	mg/L	NA	NA	NA	NA	0.25	0.04 "J"	0.24 J	<0.10	NA	NA	NA	***3.9***	1.1	0.23 J	0.31 J	<0.10	<0.15	<0.10	NA	1.5	1.6	***2.1***	0.89	<0.10	***2.6***	0.42	10	2
Sulfate	mg/L	NA	NA	NA	NA	230	230	189	100	NA	NA	NA	170	180	124	55	110	93	70	NA	89	82	97	84	65	64	54		
Chlorides	mg/L	NA	NA	NA	NA	130	100	278	290	NA	NA	NA	510	420	481	530	600	280	1,100	NA	69	81	150	180	280	340	320		
Alkalinity	mg/L	NA	NA	NA	NA	N A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	660	NA	NA	NA	NA	NA	NA	NA	370	NA		
Total Organic Carbon	mg/L	NA	NA	NA	NA	N A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.8	NA	NA	NA	NA	NA	NA	NA	9.67	NA		
Dissolved Manganese	µg/L	NA	NA	NA	NA	24	78	64	1900	NA	NA	NA	310	320	68	NA	420	180	480	NA	86	15 "J"	<2.7	40	17	13	22		
Dissolved Gasses																													
Ethane	µg/L	NA	NA	NA	NA	<0.025	<0.025	NA	0.067	NA	NA	NA	0.035	0.029	NA	0.029	NA	0.014 J	NA	NA	0.046	0.038	NA	<0.025	NA	0.039	NA		
Ethene	µg/L	NA	NA	NA	NA	<0.025	<0.025	NA	0.034	NA	NA	NA	0.048	0.055	NA	0.075	NA	0.094	NA	NA	0.110	0.090	NA	0.041	NA	0.026	NA		
Methane	µg/L	NA	NA	NA	NA	16	18	NA	480	NA	NA	NA	20	1.1	NA	42	NA	24	NA	NA	1.6	0.8	NA	0.720	NA	0.290	NA		
In-Situ Parameters																													
Dissolved Oxygen	mg/L	NA	NA	NA	NA	2.47	0.37	2.2	2.29	NA	NA	NA	0.12	0.16	0.17	0.19	0.22	0.33	0.17	NA	6.28	0.95	4.3	2.0	1.82	0.44	1.90		
pH	S.U.	NA	NA	NA	NA	7	7	7	7	NA	NA	NA	7	7	7	7	7	7	7	NA	7	7	7	7	7	7	7		
Redox	(mV)	NA	NA	NA	NA	115	268	101	61	NA	NA	NA	163	218	126	57	61	181	100	NA	150	220	168	38	39	179	79		
Temperature	(°C)	NA	NA	NA	NA	10.6	15.3	9	14.7	NA	NA	NA	10.5	15	9.2	13.5	13.3	10	13.4	NA	11.3	15.7	10.1	15.1	14.6	10.7	14.9		
Ferrous Iron	(mg/L)	NA	NA	NA	NA	0.0	0.0	0.0	0.0	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Notes:
2. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
3. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
8. "J" = Estimated value. Analyte detected at a level less than the reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
9. Blank results: 5/31/05 - All VOCs reported below laboratory detection limits.
11. Exceedances: **bold, box** = Concentration exceeds NR 140 ES
bold, italics = Concentration exceeds NR 140 PAL

Table 3
Groundwater Quality Results
3009 North Humboldt Boulevard
Sigma Project #9056

Well Location:		MW-8	MW-8R							MW-9							PZ-1								NR 140	NR 140
Analytes	Date:	9/13/04	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	9/13/04	6/21/07	9/6/07	1/24/08	7/22/08	1/24/08	11/10/08	3/2/09	ES	PAL
PVOCs & Detected VOCs																										
Benzene	µg/L	<0.29	<0.47	<0.47	<0.47	<0.40	<0.20	<0.20	NA	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20	0.35 J	DRY	DRY	NA	DRY	DRY	DRY	DRY	5	0.5
Chloromethane	µg/L	<1	<1	<1	<1	<0.60	<0.30	<0.30	NA	<1	<1	<1	<0.30	<0.30	<0.30	<0.30	<1	DRY	DRY	NA	DRY	DRY	DRY	DRY	3	0.3
cis-1,2-Dichloroethene	µg/L	<0.29	<0.68	<0.68	<0.68	<1.0	1.5 J	<0.50	NA	1.63 "J"	2.77	2.18 J	3.5	2.8	3.9	33	<0.29	DRY	DRY	NA	DRY	DRY	DRY	DRY	70	7
trans-1,2-Dichloroethene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	DRY	DRY	NA	DRY	DRY	DRY	DRY	100	20
Tetrachloroethene	µg/L	<0.70	**57**	**45**	**36**	**19**	**30**	**41**	NA	**95**	**85**	**28.6**	**37**	**190**	**29**	**61**	<0.70	DRY	DRY	NA	DRY	DRY	DRY	DRY	5	0.5
Trichloroethene	µg/L	<0.27	<0.44	<0.44	<0.44	<0.40	**2.7**	0.44 J	NA	***1.66***	***2.48***	***1.7***	***2.8***	**5.2**	***2.3***	***73***	<0.27	DRY	DRY	NA	DRY	DRY	DRY	DRY	5	0.5
Vinyl Chloride	µg/L	<0.29	<0.47	<0.47	<0.47	<0.40	<0.20	<0.20	NA	<0.47	<0.47	<0.47	<0.20	<0.20	<0.20	<0.20	<0.27	DRY	DRY	NA	DRY	DRY	DRY	DRY	0.2	0.02
Dissolved Metals																										
Arsenic	µg/L	NA	NA	**15**	***3.0***	***5.4***	***5.0***	NA	NA	NA	**17**	***8.5***	***5.5***	NA	NA	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY	10	1
Barium	µg/L	NA	NA	28	93	68	61	NA	NA	NA	<10	6.3	30	NA	NA	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY	2,000	400
Chromium	µg/L	NA	NA	***14***	5.0	7.8	1.9	NA	NA	NA	***19***	***16***	2.4	NA	NA	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY	100	10
Chromium (hexavalent)	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	<2.0	NA	NA	NA	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY	100	10
Natural Attenuation Parameters																										
Nitrate/Nitrite	mg/L	NA	***8.2***	***6.7***	***8.4***	***4.2***	<0.10	***7.4***	<0.10	***6.7***	***3.0***	***4.8***	***2.0***	<0.10	***5.2***	<0.10	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY	10	2
Sulfate	mg/L	NA	60	71	95	120	56	77	50	54	54	77	94	100	74	72	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Chlorides	mg/L	NA	420	260	175	230	280	940	650	510	350	487	190	340	1,800	1,400	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Alkalinity	mg/L	NA	NA	NA	NA	NA	NA	300	NA	NA	NA	NA	NA	NA	220	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Total Organic Carbon	mg/L	NA	NA	NA	NA	NA	NA	22.3	NA	NA	NA	NA	NA	NA	16.4	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Dissolved Manganese	µg/L	NA	9.3	11 "J"	24	26	87	11	48	6.1 "J"	19	<2.7	18	NA	24	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Dissolved Gasses																										
Ethane	µg/L	NA	<0.025	0.031	NA	<0.025	NA	0.032	NA	0.054	0.027	NA	0.027	NA	0.061	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Ethene	µg/L	NA	0.034	0.060	NA	0.053	NA	0.040	NA	0.11	0.12	NA	0.064	NA	0.031	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Methane	µg/L	NA	0.83	1.3	NA	0.710	NA	0.190	NA	16	9.2	NA	8.5	NA	0.780	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
In-Situ Parameters																										
Dissolved Oxygen	mg/L	NA	4.18	0.19	3.66	0.35	0.37	0.32	0.39	0.24	0.18	0.29	0.56	0.60	0.56	0.49	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
pH	S.U.	NA	7	7	7	7	7	7	7	11	11.5	10	8.0	8.0	7.0	7.0	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Redox	(mV)	NA	144	211	156	39	40	197	68	44	157	51	55	55	183	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Temperature	(°C)	NA	10.9	15.6	9.7	13.1	12.9	10.9	12.9	12.0	16.5	10.9	16.3	15.4	10.8	15.9	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		
Ferrous Iron	(mg/L)	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	DRY	DRY	NA	DRY	DRY	DRY	DRY		

Notes:
2. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
3. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
8. "J" = Estimated value. Analyte detected at a level less than the reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
9. Blank results: 5/31/05 - All VOCs reported below laboratory detection limits.
11. Exceedances: **bold, box** = Concentration exceeds NR 140 ES
bold, italics = Concentration exceeds NR 140 PAL

Table 3
Groundwater Quality Results
3009 North Humboldt Boulevard
Sigma Project #9056

Well Location:		PZ-2							PZ-5								PZ-7							PZ-8								NR 140	NR 140
Analytes	Date:	6/12/07	10/3/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/1/09	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	9/13/04	5/31/05	6/12/07	9/6/07	1/24/08	7/22/08	11/10/08	3/2/09	ES	PAL
PVOCs & Detected VOCs																																
Benzene	µg/L	<0.47	<0.47	<0.47	<0.40	<0.40	<0.20	<0.20	DRY	DRY	DRY	<0.47	<0.20	<0.20	<0.20	NA	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	NA	<0.29	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	NA	5	0.5
Chloromethane	µg/L	<1	<1	<1	<0.60	<0.60	<0.30	<0.30	DRY	DRY	DRY	<1	<0.30	<0.30	<0.30	NA	<1	<1	<1	<1	<0.30	<0.30	NA	<1	<1	<1	<1	<1	<0.30	<0.30	NA	3	0.3
cis-1,2-Dichloroethene	µg/L	<0.68	2.7	<0.68	<1.0	<1.0	2.7	0.82 J	DRY	DRY	DRY	<0.68	<0.50	<0.50	<0.50	NA	<0.50	<0.68	<0.68	<0.68	<0.50	<0.50	NA	<0.29	<0.50	<0.68	<0.68	<0.68	<0.50	<0.50	NA	70	7
trans-1,2-Dichloroethene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	DRY	DRY	DRY	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA		
Tetrachloroethene	µg/L	***1.52 "J"***	***0.70 "J"***	***1.01 J***	<1.0	<1.0	<0.50	***0.7 J***	DRY	DRY	DRY	***1.94***	***1.3 J***	***1.7***	***1.6 J***	NA	<0.50	<0.52	<0.52	<0.52	***0.69 J***	<0.50	NA	<0.70	<0.50	<0.52	<0.52	<0.52	<0.50	<0.50	NA	5	0.5
Trichloroethene	µg/L	***0.60 "J"***	***4.4***	***0.58 J***	***0.68***	***0.52 J***	0.41 J	0.39 J	DRY	DRY	DRY	<0.44	<0.20	<0.20	0.43 J	NA	<0.50	<0.44	<0.44	<0.44	<0.20	<0.20	NA	<0.27	<0.20	<0.44	<0.44	<0.44	<0.20	<0.20	NA	5	0.5
Vinyl Chloride	µg/L	<0.47	<0.47	<0.47	<0.40	<0.40	<0.20	<0.20	DRY	DRY	DRY	<0.47	<0.20	<0.20	<0.20	NA	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	NA	<0.29	<0.20	<0.47	<0.47	<0.47	<0.20	<0.20	NA	0.2	0.02
Dissolved Metals																																
Arsenic	µg/L	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.6	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	63	NA	NA	NA	NA	2,000	400
Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.8	NA	NA	NA	NA	100	10
Chromium (hexavalent)	µg/L	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Natural Attenuation Parameters																																
Nitrate/Nitrite	mg/L	<0.03	NA	0.38	<0.10	<0.10	NA	NA	DRY	DRY	DRY	0.20 J	0.19 J	<0.10	<0.15	<0.10	NA	NA	NA	NA	<0.10	<0.10	NA	NA	NA	0.05 "J"	<0.03	<0.1	<0.10	<0.10	NA	10	2
Sulfate	mg/L	240	NA	86	190	190	NA	NA	DRY	DRY	DRY	272	270	250	290	320	NA	NA	NA	NA	250	240	NA	NA	NA	120	120	113	120	110	NA		
Chlorides	mg/L	130	NA	102	100	130	NA	NA	DRY	DRY	DRY	84	130	85	89	88	NA	NA	NA	NA	290	340	NA	NA	NA	110	110	128	170	190	NA		
Alkalinity	mg/L	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	NA	NA	NA	540	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Total Organic Carbon	mg/L	NA	NA	NA	NA	NA	NA	NA	DRY	DRY	DRY	NA	NA	NA	2.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Dissolved Manganese	µg/L	95	NA	61	42	NA	NA	NA	DRY	DRY	DRY	NA	NA	18	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	210	190	180	180	140	NA		
Dissolved Gasses																																
Ethane	µg/L	0.6	NA	NA	0.150	NA	NA	NA	DRY	DRY	DRY	NA	0.051	NA	0.011 J	NA	NA	<0.025	NA	NA	<0.025	NA	NA	NA	NA	<0.025	<0.025	NA	<0.025	NA	NA		
Ethene	µg/L	0.91	NA	NA	6.7	NA	NA	NA	DRY	DRY	DRY	NA	0.052	NA	0.025 J	NA	NA	<0.025	NA	NA	<0.025	NA	NA	NA	NA	<0.025	<0.025	NA	<0.025	NA	NA		
Methane	µg/L	14	NA	NA	19.0	NA	NA	NA	DRY	DRY	DRY	NA	0.18	NA	0.18	NA	NA	0.52	NA	NA	0.15	NA	NA	NA	NA	26	37	NA	39	NA	NA		
In-Situ Parameters																																
Dissolved Oxygen	mg/L	0.8	0.18	0.91	0.77	0.65	0.69	0.60	NA	NA	NA	0.72	0.42	0.43	0.87	0.41	NA	0.17	NA	0.18	0.20	0.22	NA	NA	NA	0.14	0.2	0.19	0.40	0.45	NA		
pH	S.U.	7	NA	7	7	7	7	NA	NA	NA	NA	7	7	7	7	7	NA	NA	NA	NA	7	7	NA	NA	NA	7	7	7	7	7	NA		
Redox	(mV)	-284	NA	-186	-32	-38	-14	NA	NA	NA	NA	65	NA	NA	157	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	199	136	36	42	NA		
Temperature	(°C)	10.5	13.7	9.3	12.9	12.6	10.4	NA	NA	NA	NA	NA	11.6	11.4	10.6	11.4	NA	10.9	NA	9.6	11.8	NA	NA	NA	NA	10.9	13.4	9.6	11.7	12.6	NA		
Ferrous Iron	(mg/L)	NA	NA	NA	1.6	1.2	1.2	NA	NA	NA	NA	0.0	NA	NA	0.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	NA		

Notes:
2. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
3. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
5. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
8. "J" = Estimated value. Analyte detected at a level less than the reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
9. Blank results: 5/31/05 - All VOCs reported below laboratory detection limits.
11. Exceedances: **bold, box** = Concentration exceeds NR 140 ES
bold, italics = Concentration exceeds NR 140 PAL

Table 1
Static Groundwater Elevations
3009 North Humboldt Avenue
Sigma Project No. 9056

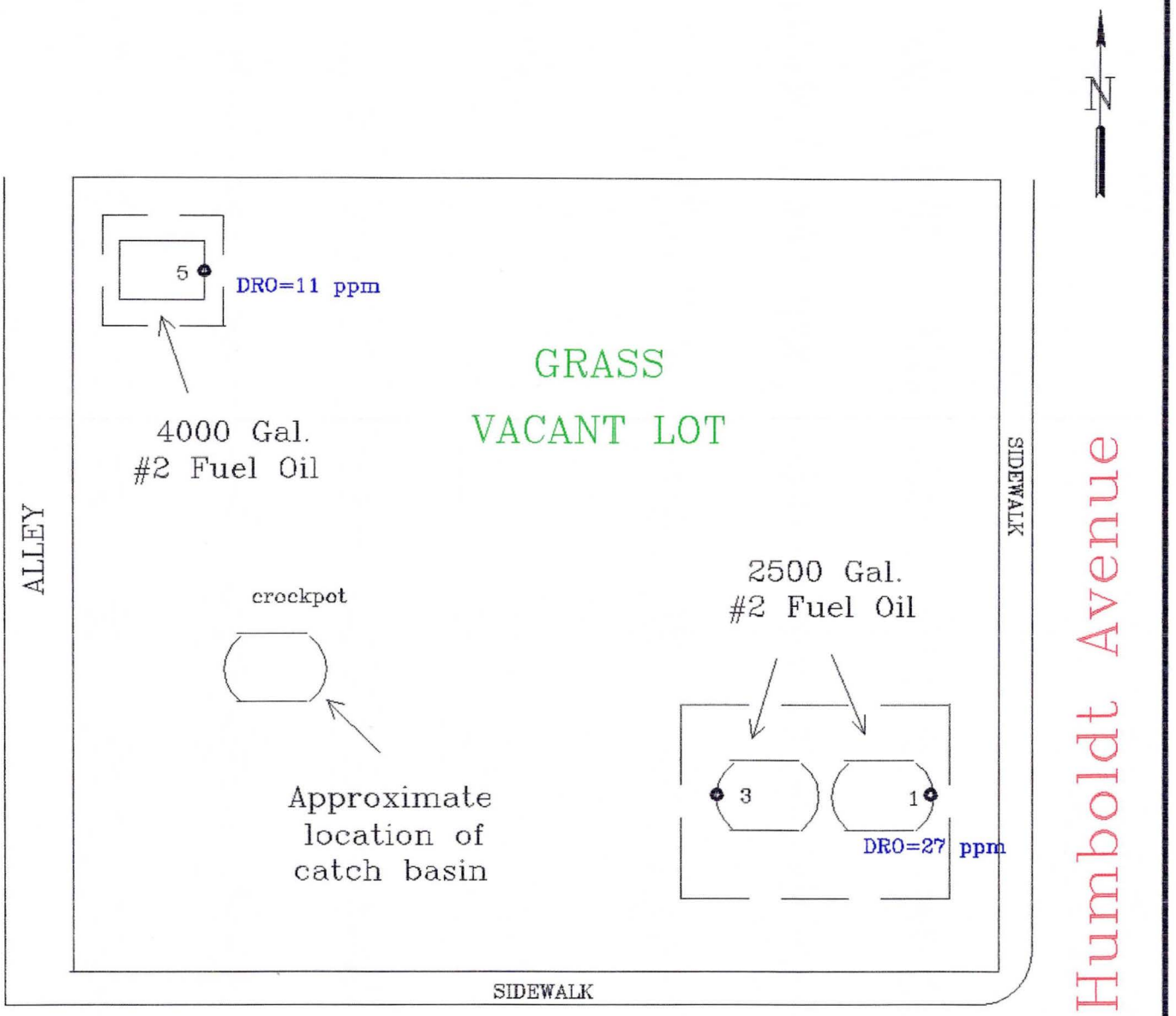
Well ID	Date	Ground Surface Elevation (feet benchmark)	Top of Casing Elevation (feet benchmark)	Depth to Groundwater (feet from toc)	Depth of Well (feet from toc)	Elevation (feet benchmark)	Comments
MW-1	6/27/03		102.59	8.60	14.40	93.99	
	8/8/03			9.92		92.67	
	10/7/03			12.95		89.64	
	7/23/04			7.04		95.55	
	9/13/04			9.90		92.69	
	5/31/05			10.87		91.72	
	6/12/07			6.61		95.98	
	9/6/07			7.22		95.37	
MW-1R	1/24/08	101.07	100.60	5.55	13.65	95.05	Well resurveyed
	7/22/08			5.30		95.30	following post-
	11/0/08			6.05		94.55	construction top of
	3/2/09			5.29		95.31	casing adjustment
	9/1/09			5.96		94.64	
MW-2	6/27/03		104.87	12.39		92.48	
	8/8/03			13.31		91.56	
	10/7/03			15.05		89.82	
	7/23/04			10.98		93.89	
	9/13/04			13.02		91.85	
MW-2R	6/12/07	102.09	104.60	9.93	21.33	94.94	
	9/6/07			10.08		94.79	
	10/3/07			10.79		94.08	
	1/24/08	102.06	101.76	7.85	18.00	93.91	Well resurveyed
	7/22/08			7.10		94.66	following post-
	11/10/08			8.74		93.02	construction top of
	3/3/09			7.50		94.26	casing adjustment
	9/1/09			8.60		93.16	
MW-3	6/27/03		106.14	7.58	22.30	98.56	
	8/8/03			8.27		97.87	
	10/7/03			9.45		96.69	
	7/23/04			10.15		95.99	
	9/13/04			7.81		98.33	
	5/13/05			7.03		99.11	
	6/12/07			6.30		99.84	
	9/6/07			6.75		99.39	
	1/24/08	103.40	102.83	3.70	18.55	99.13	Well resurveyed
	7/22/08			2.27		100.56	following post-
	11/10/08			3.90		98.93	construction top of
	3/2/09			2.82		100.01	casing adjustment
	9/1/09			3.80		99.03	
MW-4	6/27/03		104.94	11.41	22.60	93.53	
	8/8/03			12.20		92.74	
	10/7/03			13.51		91.43	
	7/23/04			8.23		96.71	
	9/13/04			12.29		92.65	
	5/31/05			11.68		93.26	
	6/12/07			10.37		94.57	
	9/6/07			10.69		94.25	
	1/24/08	102.66	102.01	7.33	19.30	94.68	Well resurveyed
	7/22/08			6.23		95.78	following post-
	11/10/08	well covered by concrete		NM			construction top of
	3/2/09			NM			casing adjustment
	9/1/09			NM			
MW-5	10/7/03		102.94	13.57	21.90	89.37	
	7/23/04			11.28		91.66	
	9/13/04			11.64		91.30	
	5/31/05			10.44		92.50	
	6/12/07			8.69		94.25	
	9/6/07		102.76	8.24		94.52	
	1/24/08	100.64	100.32	6.36	17.35	93.96	Well resurveyed
	7/22/08			5.38		94.94	following post-
	11/10/08			7.85		92.47	construction top of
	3/2/09			4.50		95.82	casing adjustment
	9/1/09			7.87		92.45	

Notes:
2. feet benchmark = feet above/below the site-specific benchmark
3. feet from toc = feet below top of casing
4. feet bgs = feet below ground surface

Table 1
Static Groundwater Elevations
3009 North Humboldt Avenue
Sigma Project No. 9056

Well ID	Date	Ground Surface Elevation (feet benchmark)	Top of Casing Elevation (feet benchmark)	Depth to Groundwater (feet from toc)	Depth of Well (feet from toc)	Groundwater Elevation (feet benchmark)	Comments
MW-7	9/13/04		102.50	8.04		94.46	
MW-7R	6/12/07	102.75	105.28	8.24	16.95	97.04	
	9/6/07			8.18		97.10	
	1/24/08	103.18	102.88	5.63	14.05	97.25	Well resurveyed
	7/22/08			5.04		97.84	following post-
	11/10/08			6.70		96.18	construction top of
	3/2/09			5.10		97.78	casing adjustment
	9/1/09			6.90		95.98	
MW-8	9/13/04		101.74	10.16		91.58	
MW-8R	6/12/07	101.67	104.23	6.25	16.15	97.98	
	9/6/07			5.93		95.81	
	1/24/08	102.59	102.21	5.81	12.10	96.40	Well resurveyed
	7/22/08			3.73		98.48	following post-
	11/10/08			8.25		93.96	construction top of
	3/2/09			4.30		97.91	casing adjustment
	9/1/09			8.78		93.43	
MW-9	6/12/07	100.13	102.68	4.81	16.31	97.87	
	9/6/07			6.02		96.66	
	1/24/08	100.63	100.45	3.70	8.05	96.75	Well resurveyed
	7/22/08			4.02		96.43	following post-
	11/10/08			7.15		93.30	construction top of
	3/2/09			3.90		96.55	casing adjustment
	9/1/09			7.36		93.09	
PZ-1	9/13/04		102.02	40.31	41.65	61.71	
	5/31/05			41.50	41.65	60.52	
	6/12/07			dry	41.59		
	9/6/07			dry	42.70		
	1/24/08	101.20	101.00	NM			Well resurveyed
	7/22/08			dry	40.25		following post-
	11/10/08			dry			construction top of
	3/2/09			dry			casing adjustment
	9/1/09			NM			
PZ-2	6/12/07	102.20	105.01	13.10	29.94	91.91	
	9/6/07			14.58		90.43	
	10/3/07			14.83		90.18	
	1/24/08	102.09	101.75	13.75	24.55	88.00	Well resurveyed
	7/22/08			13.35		88.40	following post-
	11/10/08			14.55		87.20	construction top of
	3/3/09			14.10		87.65	casing adjustment
	9/1/09			14.77		86.98	
PZ-5	9/13/04		102.75	dry			
	5/31/05			dry			
	6/12/07			dry	42.31		
	9/6/07			dry	42.43		
	1/24/08	100.70	100.50	38.33	39.75	62.17	Well resurveyed
	7/22/08			38.65		61.85	following post-
	11/10/08			38.00		62.50	construction top of
	3/2/09			37.91		62.59	casing adjustment
	9/1/09			39.24		61.26	
PZ-7	9/13/04		102.33	dry	34.70		
	5/31/05			34.27	34.70	68.06	
	6/12/07			34.03	34.65	68.30	
	9/6/07			38.07	38.90	64.26	
	1/24/08	103.23	102.74	33.87	34.55	68.87	Well resurveyed
	7/22/08			33.88		68.86	following post-
	11/10/08			33.66		69.08	construction top of
	3/2/09			NM		NM	casing adjustment
	9/1/09			NM			
PZ-8	5/31/05		101.43	10.72	25.00	90.71	
	6/12/07			8.72	24.97	92.71	
	9/6/07		100.96	13.00	29.16	87.96	
	1/24/08	102.59	102.28	9.88	25.00	92.40	Well resurveyed
	7/22/08			9.25		93.03	following post-
	11/10/08			11.00		91.28	construction top of
	3/2/09			NM		NM	casing adjustment
	9/1/09			11.80		90.48	

Notes:
2. feet benchmark = feet above/below the site-specific benchmark
3. feet from toc = feet below top of casing
4. feet bgs = feet below ground surface



Legend	Project	Adelman Cleaners 3009 N. Humboldt Avenue Milwaukee, WI 53202
● Laboratory Sample — — — Excavation Limits 0 20 ft.	Vijay & Associates, Inc. 614 W. Brown Deer Road, Milwaukee, WI 53217 Phone: (414)-352-9491 Fax: (414)-351-1417	
	Figure 2. Site Map	
	Drawn: LL	Date: 11/21/95

Table 1. Laboratory Results of Soil Sample, taken 11/17/95					
Parameter	Sample ID and approximate depth				
	1 (7 ft)	3 (7 ft)	5 (10 ft)	Crockpot	NR 700 RCL[1]
DRO (ppm)	27	ND	11	NA	100 or 250[2]
VOCs (ppb)					
Benzene	NA	NA	NA	ND	5.5
Bromobenzene	NA	NA	NA	ND	
Bromodichloromethane	NA	NA	NA	ND	
n-Butylbenzene	NA	NA	NA	ND	
sec-Butylbenzene	NA	NA	NA	ND	
tert-Butylbenzene	NA	NA	NA	ND	
Carbon tetrachloride	NA	NA	NA	ND	
Chlorobenzene	NA	NA	NA	ND	
Chloroethane	NA	NA	NA	ND	
Chloroform	NA	NA	NA	ND	
Chloromethane	NA	NA	NA	ND	
2-Chlorotoluene	NA	NA	NA	ND	
4-Chlorotoluene	NA	NA	NA	ND	
Dibromochloromethane	NA	NA	NA	ND	
1,2-Dibromo-3-chloropropane	NA	NA	NA	ND	
1,2-Dibromoethane	NA	NA	NA	ND	
1,2-Dichlorobenzene	NA	NA	NA	ND	
1,3-Dichlorobenzene	NA	NA	NA	ND	
1,4-Dichlorobenzene	NA	NA	NA	ND	
Dichlorodifluoromethane	NA	NA	NA	ND	
1,1-Dichloroethane	NA	NA	NA	ND	
1,2-Dichloroethane	NA	NA	NA	ND	4.9
1,1-Dichloroethene	NA	NA	NA	ND	
cis-1,2-Dichloroethene	NA	NA	NA	ND	
trans-1,2-Dichloroethene	NA	NA	NA	ND	
1,2-Dichloropropane	NA	NA	NA	ND	

Table 1. Laboratory Results of Soil Samples					
Parameter	Sample ID				
	1	3	5		Crockpot
VOCs (ppb), cont.					
1,3-Dichloropropane	NA	NA	NA	ND	
2,2-Dichloropropane	NA	NA	NA	ND	
Di-Isopropyl-Ether	NA	NA	NA	ND	
Ethyl Benzene	NA	NA	NA	ND	2900
Hexachlorobutadiene	NA	NA	NA	ND	
Isopropylbenzene	NA	NA	NA	ND	
p-Isopropyltoluene	NA	NA	NA	ND	
Methylene chloride	NA	NA	NA	ND	
Methyl-tert-Butylether	NA	NA	NA	ND	
Naphthalene	NA	NA	NA	ND	
n-Propylbenzene	NA	NA	NA	ND	
1,1-2,2-Tetrachloroethane	NA	NA	NA	ND	
Tetrachloroethene	NA	NA	NA	ND	
Toluene	NA	NA	NA	ND	1500
1,2,3-Trichlorobenzene	NA	NA	NA	ND	
1,2,4-Trichlorobenzene	NA	NA	NA	ND	
1,1,1-Trichlorotheane	NA	NA	NA	ND	
1,1,2-Trichloroethane	NA	NA	NA	ND	
Trichloroethene	NA	NA	NA	ND	
Trichlorofluoromethane	NA	NA	NA	ND	
1,2,4-Trimethylbenzene	NA	NA	NA	ND	
1,3,5-Trimethylbenzene	NA	NA	NA	ND	
Vinyl Chloride	NA	NA	NA	ND	
Total Xylenes	NA	NA	NA	ND	4100

Table 1. Laboratory Results of Soil Samples					
Parameter	Sample ID				
	1	3	5	Crockpot	NR 700 RCL[1]
PCBs (ppb)					
PCB 1016	NA	NA	NA	ND	
PCB 1221	NA	NA	NA	ND	
PCB 1232	NA	NA	NA	ND	
PCB 1242	NA	NA	NA	ND	
PCB 1248	NA	NA	NA	ND	
PCB 1254	NA	NA	NA	ND	
PCB 1260	NA	NA	NA	ND	
RCRA metals, ppm					
Arsenic	NA	NA	NA	**3.9**	0.039
Barium	NA	NA	NA	110	
Cadmium	NA	NA	NA	ND	8
Chromium	NA	NA	NA	**30**	14
Lead	NA	NA	NA	**23**	50
Mercury	NA	NA	NA	ND	
Selenium	NA	NA	NA	ND	
Silver	NA	NA	NA	ND	
Percent Solids	69	74	73	73	

Appendix B: Soil Boring Logs and Borehole Abandonment Forms

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-01

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

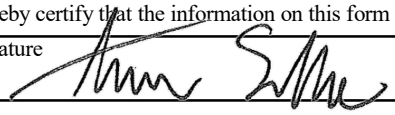
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,621 N, 2,530,252 E Ⓢ/C/N
SW 1/4 of SE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 3' 37.998" Long 87° 53' 51.988"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 34		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0 1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular sand, medium plasticity, brown (10YR 4/3), no odor, moist.	CL-ML			<1	3.75					
			2.0 2.5	**SILTY SAND (ML)**, few fine sand, mostly silt, low plasticity, yellowish brown (10YR 5/6), no odor, wet.	ML				1.5					Sample GP-01 (2'-4')
			3.0 3.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace subangular gravel, trace coarse angular sand, low plasticity, yellowish brown (10YR 5/6), no odor, moist.	CL-ML			<1	4.5					
			4.0	End of boring at 4 feet bgs.					4.5					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm TRC Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-02

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,542 N, 2,530,252 E Ⓢ/C/N
SW 1/4 of SE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 3' 37.223" Long 87° 53' 52.011"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 33		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium angular sand, medium plasticity, brown (10YR 5/3), no odor, moist.				<1	0.75					
			1.5		CL-ML									
			2.0	As above, dark yellowish brown (10YR 4/6).					0.75					Sample GP-02 (2'-4')
			2.5	**GRAVEL (GW)** well graded, medium, rounded, light brownish gray (10YR 6/2), no odor, moist.	GW									
			3.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium angular sand, medium plasticity, dark yellowish brown (10YR 4/6), no odor, moist.	CL-ML			<1	1.5					
			3.5											
GP	48 44		4.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subrounded sand, low plasticity, grayish brown (10YR 5/2), no odor, moist.					2					
			4.5											
			5.0					<1	4.5					
			5.5											
			6.0						>4.5					
			6.5											
			7.0		CL-ML			<1	>4.5					
			7.5	As above, with trace medium subrounded gravel.										
GP	48 48		8.0						>4.5					
			8.5											
			9.0					<1	>4.5					
			9.5											
			10.0											

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Signature	Firm	Tel:
	TRC	Fax:

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Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-02 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			10.5						>4.5					
			11.0					<1	>4.5					Sample GP-02 (10'-12')
			11.5											
GP	48		12.0						>4.5					
	48		12.5											
			13.0		CL-ML			<1	>4.5					
			13.5											
			14.0						>4.5					
			14.5											
			15.0					<1	>4.5					
			15.5											
			16.0	End of boring at 16 feet bgs.					>4.5					

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-03

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

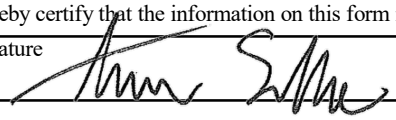
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,442 N, 2,530,267 E Ⓢ/C/N
NW 1/4 of NE 1/4 of Section 21, T 7 N, R 22 E
Lat 43° 3' 36.227" Long 87° 53' 51.852"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 32		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**FILL**, old asphalt, black (10YR 2/1), McAdams asphalt odor.				31.5						
			1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace angular medium gravel, low plasticity, yellowish brown (10YR 5/4), no odor, moist.	CL-ML				1.5					Sample GP-03 (2'-4')
			2.5											
			3.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular sand, trace fine angular gravel, low plasticity, brown (7.5YR 5/3), no odor, moist.				<1	4.5					
			3.5											
GP	48 48		4.0						4.5					
			4.5	As above, no gravel.										
			5.0					<1	4.5					
			5.5		CL-ML									
			6.0						4.5					
			6.5											
			7.0					<1	4.5					
			7.5											
GP	48 48		8.0	**SANDY CLAY (CL)**, mostly clay, few fine sand, low plasticity, brown (7.5YR 5/3), no odor, wet.	CL				4.5					
			8.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular sand, low plasticity, brown (7.5YR 5/3), no odor, moist.										
			9.0		CL-ML			<1	3.5					
			9.5											
			10.0											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm TRC Tel: Fax:

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Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-03 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			10.5						3.5					
			11.0					<1	4.5					Sample GP-03 (10'-12')
			11.5											
GP	48		12.0	As above, faint creosote odor.					4					
	48		12.5											
			13.0		CL-ML			<1	>4.5					
			13.5											
			14.0						>4.5					Sample GP-03 (12'-16')
			14.5											
			15.0					<1	>4.5					
			15.5											
			16.0	End of boring at 16 feet bgs.					>4.5					

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-04

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,459 N, 2,530,151 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 21, T 7 N, R 22 E
Lat 43° 3' 36.422" Long 87° 53' 53.401"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 18		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**FILL**, well graded sand and gravel, brown (10YR 4/3), no odor, wet.				<1						
			1.5	As above, light yellowish brown (10YR 6/4), moist.										
			2.0											Sample GP-04 (2'-4')
			2.5											
			3.0					<1						
			3.5											
			4.0											
GP	48 48		4.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular sand, low plasticity, brown (7.5YR 4/3), no odor, moist.					4.5					
			5.0					<1	4.5					
			5.5											
			6.0		CL-ML				4.5					
			6.5											
			7.0					<1	4.5					Sample GP-04 (6'-'8)
			7.5											
			8.0	End of boring at 8 feet bgs.					4.5					

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Signature [signature] Firm TRC Tel: Fax:

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Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-05

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,444 N, 2,530,181 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 21, T 7 N, R 22 E
Lat 43° 3' 36.267" Long 87° 53' 53.011"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 48		0.5	**TOPSOIL**, black (10YR 2/1), no odor, moist.										
			1.0	**FILL**, silty clay, trace medium sand, trace coal, low plasticity, dark yellowish brown (10YR 3/6), no odor, moist.				<1	2					
			1.5											
			2.0						2					Sample GP-05 (2'-4')
			2.5											
			3.0					<1	2					
			3.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace fine subrounded gravel, low plasticity, brown (7.5YR 5/4), no odor, moist.	CL-ML									
GP	48 48		4.0						1					
			4.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium subangluar gravel, low plasticiy, reddish brown (5YR 5/4), no odor, moist.				<1	4					
			5.0											
			5.5											
			6.0						4.5					
			6.5											
			7.0		CL-ML			<1	4.5					
			7.5											
GP	48 48		8.0	As above, with trace coarse subangular sand, reddish gray (5YR 5/2).					>4.5					
			8.5											
			9.0					<1	>4.5					
			9.5											
			10.0											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

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	TRC	Fax:

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SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-05 Use only as an attachment to Form 4400-122. Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			10.5						>4.5					
			11.0					<1	>4.5					
			11.5											
GP	48		12.0						>4.5					Sample GP-05 (10'-12')
	48		12.5											
			13.0		CL-ML			<1	>4.5					
			13.5											
			14.0						>4.5					
			14.5											
			15.0					<1	>4.5					
			15.5											
			16.0	End of boring at 16 feet bgs.					>4.5					

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-06

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,610 N, 2,530,177 E Ⓢ/C/N
SE 1/4 of SW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 3' 37.907" Long 87° 53' 52.999"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 34		0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, medium plasticity, brown (10YR 5/3), no odor, moist.	CL-ML			<1 <1	2 2 2.25					Sample GP-06 (2'-4')
				End of boring at 4 feet bgs.					1.75					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm TRC Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-07

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

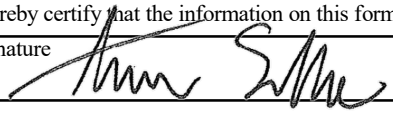
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 393,564 N, 2,530,180 E Ⓢ/C/N
SE 1/4 of SW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 3' 37.458" Long 87° 53' 52.984"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 28		0.5	**TOPSOIL**, black (10YR 2/1), no odor, moist.										
			1.0	**FILL**, mostly silty clay, few well graded angular sand and gravel, low plasticity, brown (10YR 5/3), no odor, moist.				<1	1.5					
			1.5											
			2.0						2.5					Sample GP-07 (2'-4')
			2.5											
			3.0					<1	2.5					
			3.5											
GP	48 36		4.0						2					
			4.5											
			5.0	**SAND (SP)**, poorly graded sand, brown (7.5YR 5/4), no odor, wet.	SP			<1	2					
			5.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, trace fine subangular gravel, low plasticity, brown (7.5YR 5/4), no odor, moist.										
			6.0						4.5					
			6.5		CL-ML									
			7.0					<1	4.5					Sample GP-07 (6'-'8)
			7.5											
			8.0	End of boring at 8 feet bgs.					4.5					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm TRC Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-08

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/23/2020	3/23/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E Ⓢ/C/N
SE 1/4 of SW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 3' 37.02" Long 87° 53' 53.35"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 35		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, trace fine subrounded gravel, low plasticity, brown (10YR 5/3), no odor, moist.				<1	1.25					
			1.5											
			2.0						2					Sample GP-08 (2'-4')
			2.5		CL-ML									
			3.0					<1	3					
			3.5	As above, with few silt, wet.										
			4.0	As above, with trace silt, moist.										
GP	48 48		4.5						>4.5					
			5.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, low plasticity, reddish brown (5YR 5/4), no odor, moist.				<1	>4.5					
			5.5											
			6.0	As above, with trace fine subangular gravel, brown (7.5YR 5/3).					>4.5					
			6.5											
			7.0		CL-ML			<1	>4.5					
			7.5											
GP	48 48		8.0	As above, no gravel, reddish brown (5YR 5/3).					>4.5					
			8.5											
			9.0					<1	>4.5					
			9.5											
			10.0											

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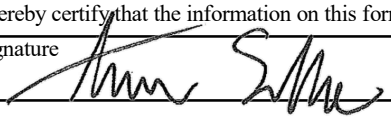
Signature  Firm TRC Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-08 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
GP	48 48		10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0		CL-ML			<1 <1	>4.5 >4.5 >4.5 >4.5 3					Sample GP-08 (10'-12')
			14.5 15.0 15.5	**SAND (SP)**, medium, poorly graded, light yellowish brown (10YR 6/4), no odor, moist.	SP			<1						
			16.0	End of boring at 16 feet bgs.										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-09

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,092 N, 2,530,094 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 22.192" Long 87° 53' 52.605"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 36		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**FILL**, well graded sand and gravel, yellow (10YR 7/6), no odor, moist.										
			1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, low plasticity, brown (10YR 5/3), no odor, moist.				<1						
			2.0						2.25					Sample GP-09 (2'-4')
			2.5		CL-ML									
			3.0					<1	2.5					
			3.5											
GP	48 30		4.0						2.75					
			4.5	**GRAVEL (GW)**, well graded, medium, subangular, light brown (10YR 6/3), no odor, moist.	GW									
			5.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium subangular gravel, trace coarse subangular sand, medium plasticity, yellowish brown (10YR 5/4), no odor, moist.	CL-ML			<1	.5					
			5.5											
			6.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, low plasticity, yellowish brown (10YR 5/4), no odor, moist.					4.5					
			6.5		CL-ML									
			7.0					<1	1.25					Sample GP-09 (6'-'8)
			7.5											
			8.0	End of boring at 8 feet bgs.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	TRC	Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-10

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

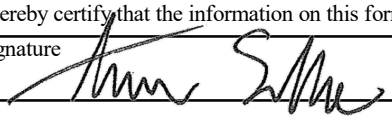
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,053 N, 2,530,098 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 21.8" Long 87° 53' 52.562"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 32		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, medium plasticity, brown (10YR 4/3), no odor, moist.	CL-ML			<1						
			1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium subrounded sand, low plasticity, yellowish brown (10YR 5/4), no odor, moist.										
			2.0						3					Sample GP-10 (2'-4')
			2.5											
			3.0		CL-ML			<1	3					
			3.5											
GP	48 36		4.0						2.5					
			4.5											
			5.0	**SILT (ML)**, mostly silt, trace clay, trace coarse subangular sand, low plasticity, yellowish brown (10YR 5/4), no odor, moist.				<1	3.25					
			5.5											
			6.0						2					
			6.5		ML									
			7.0					<1	1					Sample GP-10 (6'-'8)
			7.5											
			8.0	End of boring at 8 feet bgs.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm TRC Tel: Fax:

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Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-11

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 397,979 N, 2,530,114 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 21.067" Long 87° 53' 52.374"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 46		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular sand, low plasticity, brown (10YR 5/3), no odor, moist.				<1	1.75					
			1.5											
			2.0		CL-ML				1.5					Sample GP-11 (2'-4')
			2.5											
			3.0					<1	1					
			3.5											
			4.0											
GP	48 13		4.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, low plasticity, brown (10YR 5/3), no odor, moist.					1.25					
			5.0		CL-ML			<1						
			5.5											
			6.0											
			6.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, low plasticity, grayish brown (10YR 5/2), no odor, moist.										
			7.0		CL-ML			<1						Sample GP-11 (6'-'8)
			7.5											
			8.0											
GP	48 38		8.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular gravel, grayish brown (10YR 5/2), no odor, moist.	CL-ML				2.5					
			9.0	**SAND (SW)**, sand, dark grayish brown (10YR 4/2), no odor, wet.				<1	1.0					
			9.5		SW									
			10.0											

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Signature [signature] Firm TRC Tel: Fax:

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Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-11 Use only as an attachment to Form 4400-122.

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			10.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular sand and gravel, grayish brown (10YR 5/2), no odor, moist.					1.5					
			11.0		CL-ML			<1	2.5					
			11.5											
			12.0	End of boring at 12 feet bgs.					4.5					
			12.5											
			13.0											
			13.5											
			14.0											
			14.5											
			15.0											
			15.5											
			16.0											

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Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 397,903 N, 2,530,109 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 20.315" Long 87° 53' 52.46"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 48		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse angular gravel, low plasticity, brown (10YR 4/3), no odor, moist.	CL-ML			<1	2.75					
			1.5											
			2.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse gravel, low plasticity, brown (10YR 5/3), no odor, moist.					0.75					Sample GP-12 (2'-4')
			2.5		CL-ML									
			3.0					<1	2.5					
			3.5											
			4.0	End of boring at 4 feet bgs.					1.75					

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Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-13

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 397,830 N, 2,530,111 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 19.601" Long 87° 53' 52.458"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 43		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subrounded sand, low plasticity, dark grayish brown (10YR 4/2), no odor, moist.	CL-ML			<1	3					
			1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium subangular sand, low plasticity, brown (10YR 5/3), no odor, moist.										
			2.0						3					Sample GP-13 (2'-4')
			2.5		CL-ML									
			3.0					<1	2.75					
			3.5											
			4.0	End of boring at 4 feet bgs.					2.25					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	TRC	Fax:

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SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-14

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 397,872 N, 2,530,176 E Ⓢ/C/N
NW 1/4 of NE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 19.992" Long 87° 53' 51.576"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 40		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0 1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, trace fine subangular gravel, low plasticity, very dark grayish brown (10YR 3/2), no odor, moist.	CL-ML			<1	2.25					
			2.0 2.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace angular sand and gravel, low plasticity, light yellowish brown (10YR 6/4), no odor, moist.	CL-ML				2					Sample GP-14 (2'-4')
			3.0 3.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace fine subangular sand, low plasticity, dark yellowish brown (10YR 4/6), no odor, moist.	CL-ML			<1	2					
			4.0	End of boring at 4 feet bgs.					1.5					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm TRC Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-15

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 397,978 N, 2,530,176 E Ⓢ/C/N
NW 1/4 of NE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 21.038" Long 87° 53' 51.535"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 44		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, trace fine subrounded gravel, low plasticity, dark yellowish brown (10YR 4/4), no odor, moist.	CL-ML			<1	3.25					
			1.5											
			2.0						3.25					Sample GP-15 (2'-4')
			2.5	**SILTY CLAY (CL-ML)**, mostly clay, little silt, trace medium subrounded sand, low plasticity, grayish brown (10YR 5/2), no odor, moist.				<1	1.75					
			3.0											
			3.5											
GP	48 33		4.0	As above, brown (10YR 5/3).					1.5					
			4.5											
			5.0		CL-ML			<1	1.5					
			5.5											
			6.0						3					
			6.5											
			7.0					<1	3					Sample GP-15 (6'-'8)
			7.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium subangular sand, trace fine subangular gravel, low plasticity, very dark grayish brown (10YR 3/2), no odor, moist.	CL-ML									
GP	48 41		8.0						2					
			8.5	**SAND (SW)**, well graded, medium, subrounded, few silt, trace fine subrounded gravel, yellowish brown (10YR 5/4), no odor, wet.	SW			<1	1.75					
			9.0											
			9.5											
			10.0											

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-15 Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			10.5		SW			<1	4.5					
			11.0											
			11.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, trace fine subangular gravel, low plasticity, grayish brown (10YR 5/2), no odor, moist.	CL-ML									
			12.0	End of boring at 12 feet bgs.										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-16

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

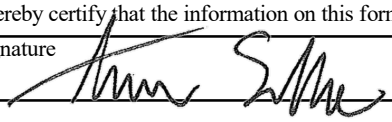
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,069 N, 2,530,173 E Ⓢ/C/N
NW 1/4 of NE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 21.944" Long 87° 53' 51.541"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 41		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium subangular sand, trace medium angular gravel, medium plasticity, yellowish brown (10YR 5/4), no odor, moist.				<1	2.5					
			1.5											
			2.0						2.5					Sample GP-16 (2'-4')
			2.5											
			3.0		CL-ML			<1	3.5					
			3.5											
GP	48 26		4.0						0.75					
			4.5											
			5.0					<1	1.25					
			5.5											
			6.0	**SILT (ML)**, mostly silt, trace clay, trace fine sand, trace medium subrounded gravel, low plasticity, gray (10YR 5/1), no odor, wet.					1.75					
			6.5											
			7.0		ML			<1	1					Sample GP-16 (6'-'8)
			7.5											
			8.0	End of boring at 8 feet bgs.					1.75					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm TRC Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-17

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,192 N, 2,530,173 E Ⓢ/C/N
NW 1/4 of NE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 23.154" Long 87° 53' 51.502"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 45		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0 1.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, medium plasticity, brown (10YR 5/3), no odor, moist.				<1/<1	2.75					
			2.0 2.5		CL-ML				2					Sample GP-17 (2'-4')
			3.0					<1/<1	3					
			3.5 4.0	End of boring at 4 feet bgs.					1					

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Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-18

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,273 N, 2,530,171 E Ⓢ/C/N
NW 1/4 of NE 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 23.954" Long 87° 53' 51.504"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 38		0.5	**TOPSOIL**, very dark grayish brown (10YR 3/2), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subrounded sand, medium plasticity, dark grayish brown (10YR 4/2), no odor, moist.				<1/<1	1.5					
			2.0						2					Sample GP-18 (2'-4')
			3.0		CL-ML			<1/<1	1.75					
GP	48 38		4.0	As above, yellowish brown (10YR 5/6).					2					
			5.0					<1/<1	1.75					
			6.0						1.25					
			6.5	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace fine sand, low plasticity, mottled dark gray (10YR 4/1) to dark reddish brown (5YR 3/4), no odor, moist.										
			7.0		CL-ML			<1/<1	1					Sample GP-18 (6'-'8)
			7.5	As above, with few fine subrounded gravel.										
GP	48 35		8.0	**SILT (ML)**, mostly silt, trace clay, trace fine sand, low plasticity, brown (10YR 5/3), no odor, wet.					1.25					
			8.5		ML									
			9.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace subrounded gravel, low plasticity, yellowish brown (10YR 5/4), no odor, moist.				<1/<1	1.5					
			9.5		CL-ML									
			10.0											

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Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-18 Use only as an attachment to Form 4400-122.

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			10.5		CL-ML				2.5					
			11.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace subangular gravel, low plasticity, grayish brown (10YR 5/2), no odor, moist.	CL-ML			<1/<1	4.5					
			11.5											
			12.0	End of boring at 12 feet bgs.					4.5					

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-19

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

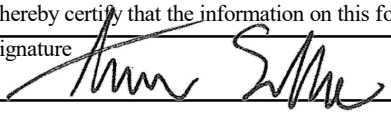
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,301 N, 2,530,098 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 24.252" Long 87° 53' 52.476"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 44		0.5	**TOPSOIL**, dark gray (10YR 4/1), no odor, moist. **SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subrounded sand, medium plasticity, dark brown (10YR 3/3), no odor, moist.				<1/<1	1.75					
			1.0											
			1.5											
			2.0						1.5					Sample GP-19 (2'-4')
			2.5	As above, with trace fine subrounded gravel, pale brown (10YR 6/3).	CL-ML									
			3.0					<1/<1	2.5					
			3.5											
			4.0	As above, few sand, few gravel.										
GP	48 48		4.5						2.25					
			5.0	**SANDY CLAY (CL)**, mostly clay, little medium subrounded sand, trace fine subrounded gravel, pale brown (10YR 6/3), no odor, moist.				<1/<1	1.25					
			5.5											
			6.0						1.25					
			6.5											
			7.0		CL			<1/<1	2.25					Sample GP-19 (6'-'8)
			7.5											
GP	48 48		8.0						1.5					
			8.5											
			9.0					<1/<1	2.5					
			9.5											
			10.0											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm TRC Tel: Fax:

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SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-19 Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			10.5						2.5					
			11.0		CL			<1/<1	2.75					
			11.5											
			12.0	End of boring at 12 feet bgs.					4.5					

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-20

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,264 N, 2,530,097 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 23.89" Long 87° 53' 52.504"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 42		0.5	**TOPSOIL**, black (10YR 2/1), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace medium angular sand, trace medium subrounded gravel, medium plasticity, brown (10YR 5/3), no odor, moist.	CL-ML			<1/<1	0.75					
			1.5											
			2.0						2.25					Sample GP-20 (2'-4')
			2.5											
			3.0	**SILT (ML)**, mostly silt, trace clay, trace medium subrounded gravel, light yellowish brown (10YR 6/4), no odor, moist.	ML			<1/<1	2.5					
			3.5											
			4.0	End of boring at 4 feet bgs.					2.25					

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SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-21

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,188 N, 2,530,099 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 23.131" Long 87° 53' 52.504"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 44		0.5	**TOPSOIL**, black (10YR 2/1), no odor, moist.										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse sand, medium plasticity, very dark gray (10YR 3/1), no odor, moist.				<1/<1	0.5					
			1.5											
			2.0		CL-ML				2					Sample GP-21 (2'-4')
			2.5	As above, brown (10YR 5/3).										
			3.0					<1/<1	2.5					
			3.5	As above, with few medium sand, few fine subrounded gravel.										
			4.0	End of boring at 4 feet bgs.					2					

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Signature	Firm	Tel:
	TRC	Fax:

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Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Humboldt Blvd, from North Ave to Keefe Ave.		GP-22

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Bendorf Probe Technologies	3/24/2020	3/24/2020	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 398,141 N, 2,530,083 E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 16, T 7 N, R 22 E
Lat 43° 4' 22.671" Long 87° 53' 52.738"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
GP	48 32		0.5	**CONCRETE**, white (10YR 8/1).										
			1.0	**SILTY CLAY (CL-ML)**, mostly clay, trace silt, trace coarse subangular sand, medium plasticity, dark yellowish brown (10YR 3/6), no odor, moist.				<1/<1	1					
			1.5											
			2.0						1					Sample GP-22 (2'-4')
			2.5	As above, brown (10YR 5/3).										
			3.0		CL-ML			<1/<1	1.5					
			3.5	As above, with trace coarse subangular gravel, grayish brown (10YR 5/2).										
GP	48 42		4.0						4					
			4.5											
			5.0					<1/<1	2					
			5.5	**SILT (ML)**, mostly silt, little clay, low plasticity, mottled brown (10YR 4/3) to gray (10YR 5/1), no odor, moist.										
			6.0						2					
			6.5		ML									
			7.0	As above, gray (10YR 5/1), wet.				<1/<1	3.75					Sample GP-22 (6'-'8)
			7.5											
			8.0	End of boring at 8 feet bgs.					2					

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm TRC Tel: Fax:

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-01

Latitude / Longitude (see instructions): 43.06055 ° N, -87.89777 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SW	SE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-02

Latitude / Longitude (see instructions): 43.06034 ° N, -87.89778 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SW	SE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
16.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	16.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:

Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-03

Latitude / Longitude (see instructions): 43.06006 ° N, -87.89774 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NW	NE	21	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
16.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	16.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-04

Latitude / Longitude (see instructions): 43.06012 ° N, -87.89817 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	21	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
8.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	8.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-05

Latitude / Longitude (see instructions): 43.06007 ° N, -87.89806 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	21	7	☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
16.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	16.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:
Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-06

Latitude / Longitude (see instructions): 43.06053 ° N, -87.89806 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-07

Latitude / Longitude (see instructions): 43.06041 ° N, -87.89805 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
8.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	8.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:
Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-08

Latitude / Longitude (see instructions): 43.06028 ° N, -87.89815 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
SE	SW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/23/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
16.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	16.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/23/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:

Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-09

Latitude / Longitude (see instructions): 43.07283 ° N, -87.89795 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
8.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	8.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-10

Latitude / Longitude (see instructions): 43.07272 ° N, -87.89793 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
8.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	8.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-11

Latitude / Longitude (see instructions): 43.07252 ° N, -87.89788 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
16.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	16.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:
Date Signed:

DNR Use Only
Date Received:
Noted By:
Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-12

Latitude / Longitude (see instructions): 43.07231 ° N, -87.89791 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-13

Latitude / Longitude (see instructions): 43.07211 ° N, -87.89791 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-14

Latitude / Longitude (see instructions): 43.07222 ° N, -87.89766 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NW	NE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-15

Latitude / Longitude (see instructions): 43.07251 ° N, -87.89765 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NW	NE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
12.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:
Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-16

Latitude / Longitude (see instructions): 43.07276 ° N / -87.89765 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NW	NE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
8.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	8.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-17

Latitude / Longitude (see instructions): 43.07310 ° N, -87.89764 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NW	NE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return this form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-18

Latitude / Longitude (see instructions): 43.07332 ° N, -87.89764 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NW	NE	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
12.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code
West Bend	WI	53090

Signature of Person Doing Work:
Date Signed:

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-19

Latitude / Longitude (see instructions): 43.07340 ° N, -87.89791 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
12.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12.0	0.5 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-20

Latitude / Longitude (see instructions): 43.07330 ° N, -87.89792 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-21

Latitude / Longitude (see instructions): 43.07309 ° N, -87.89792 ° W

Format Code: ☒ DD ☐ DDM

Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner: WisDOT

Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
4.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	4.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-5 (R 4/2015)

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☐ Verification Only of Fill and Seal

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	()	GP-22

Latitude / Longitude (see instructions): 43.07296 ° N, -87.89798 ° W
Format Code: ☒ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
NE	NW	16	7	22 ☒ E ☐ W

or Gov't Lot #

Well Street Address

Well City, Village or Town	Well ZIP Code
Milwaukee	53212

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Soil Boring	

2. Facility / Owner Information

Facility Name: Humboldt Blvd, from North Ave to Keefe Ave.
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner: WisDOT
Mailing Address of Present Owner: P.O. Box 7965 5th Floor South S513.12

City of Present Owner	State	ZIP Code
Madison	WI	53707-7965

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/24/2020

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft)	Casing Diameter (in.)
8.0	

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Chips	Surface	8.0	0.25 sacks	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Probe Technologies		03/24/2020

Street or Route	Telephone Number
7781 Pathfinder Lane	262-470-4768

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
West Bend	WI	53090		

DNR Use Only

Date Received	Noted By

Comments:

Appendix C: Photographic Log

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
1	3/23/2020

Description
GP-01, facing north.

Photo No.	Date
2	3/23/2020

Description
GP-02, facing north.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
3	3/23/2020

Description
GP-03, facing west.

Photo No.	Date
4	3/23/2020

Description
GP-04 in the red circle, facing west.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
5	3/23/2020

Description
GP-05, facing south.

Photo No.	Date
6	3/23/2020

Description
GP-06, facing north.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
7	3/23/2020

Description
GP-07, facing north.

Photo No.	Date
8	3/23/2020

Description
GP-08, facing west.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
9	3/24/2020

Description
GP-09, facing west.

Photo No.	Date
10	3/24/2020

Description
GP-10, facing north.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
11	3/24/2020

Description
GP-11, facing north.

Photo No.	Date
12	3/24/2020

Description
GP-12 in the red circle, facing northeast.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
13	3/24/2020

Description
GP-13, facing northeast.

Photo No.	Date
14	3/24/2020

Description
GP-14 in the red circle, facing north.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
15	3/24/2020

Description
GP-15, facing south.

Photo No.	Date
16	3/24/2020

Description
GP-16, facing south.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
17	3/24/2020

Description
GP-17 in the red circle, facing south.

Photo No.	Date
18	3/24/2020

Description
GP-18, facing south.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
19	3/24/2020

Description
GP-19, facing south.

Photo No.	Date
20	3/24/2020

Description
GP-20, facing south.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
21	3/24/2020

Description
GP-21, facing south.

Photo No.	Date
22	3/24/2020

Description
GP-22, facing west.

Photographic Log

Client Name:	Site Location:	Project No.:
Wisconsin Department of Transportation	N. Humboldt Blvd. Milwaukee, Wisconsin	WisDOT ID: 2667-03-71 TRC No. 382056

Photo No.	Date
23	3/24/2020

Description
Active groundwater monitoring well located in the street. Facing east.

Appendix D: Laboratory Analytical Reports

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-179774-1
Client Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

For:
TRC Environmental Corporation.
150 N. Patrick Blvd.
Suite 180
Brookfield, Wisconsin 53045

Attn: Aaron Sobbe

Sandie Fredrick

Authorized for release by:
4/3/2020 8:13:22 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 500-179774-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-179774-1

Comments
No additional comments.

Receipt
The samples were received on 3/24/2020 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method 8260B: The extraction LCS associated with preparation batch 535627 had Bromochloromethane and Dibromomethane recoveries above control limits. The instrument LCS associated with analytical batch 536092 had all recoveries within control limits. These analytes were non-detect in the samples; therefore re-analysis was not performed. The data have been reported and qualified. GP-01 (2'-4') (500-179774-1), GP-02 (2'-4') (500-179774-2), GP-02 (10'-12') (500-179774-3), GP-03 (10'-12') (500-179774-5), GP-03 (12'-16') (500-179774-6), GP-04 (2'-4') (500-179774-7), GP-04 (6'-8') (500-179774-8), GP-05 (2'-4') (500-179774-9), GP-05 (10'-12') (500-179774-10), GP-06 (2'-4') (500-179774-11), GP-07 (2'-4') (500-179774-12), GP-07 (6'-8') (500-179774-13), GP-08 (2'-4') (500-179774-14), GP-08 (10'-12') (500-179774-15) and (LCS 500-535627/22-A)

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 536092 were outside control limits for Vinyl chloride, Chloromethane and Dichlorodifluoromethane. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The method blank for analytical batch 536092 contained Naphthalene above the Method dectection limit (MDL) but below reporting limit (RL). Naphthalene was non-dectect in the samples: therefore, no re-analysis was done and the data has been reported.

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

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

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

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

Detection Summary

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-01 (2'-4') — Lab Sample ID: 500-179774-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.9		0.48	0.22	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-02 (2'-4') — Lab Sample ID: 500-179774-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.4		0.50	0.23	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-02 (10'-12') — Lab Sample ID: 500-179774-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.7		0.56	0.26	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-03 (2'-4') — Lab Sample ID: 500-179774-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.4		0.52	0.24	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-03 (10'-12') — Lab Sample ID: 500-179774-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.1		0.55	0.26	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-03 (12'-16') — Lab Sample ID: 500-179774-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.7		0.53	0.25	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-04 (2'-4') — Lab Sample ID: 500-179774-7

No Detections.

Client Sample ID: GP-04 (6'-8') — Lab Sample ID: 500-179774-8

No Detections.

Client Sample ID: GP-05 (2'-4') — Lab Sample ID: 500-179774-9

No Detections.

Client Sample ID: GP-05 (10'-12') — Lab Sample ID: 500-179774-10

No Detections.

Client Sample ID: GP-06 (2'-4') — Lab Sample ID: 500-179774-11

No Detections.

Client Sample ID: GP-07 (2'-4') — Lab Sample ID: 500-179774-12

No Detections.

Client Sample ID: GP-07 (6'-8') — Lab Sample ID: 500-179774-13

No Detections.

Client Sample ID: GP-08 (2'-4') — Lab Sample ID: 500-179774-14

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation.
Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-08 (10'-12')
Lab Sample ID: 500-179774-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.9		1.1	0.39	mg/Kg	1	☼	6010C	Total/NA
Barium	62		1.1	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.17	J B	0.23	0.041	mg/Kg	1	☼	6010C	Total/NA
Chromium	27		1.1	0.56	mg/Kg	1	☼	6010C	Total/NA
Copper	30		1.1	0.32	mg/Kg	1	☼	6010C	Total/NA
Lead	7.8		0.56	0.26	mg/Kg	1	☼	6010C	Total/NA
Nickel	33		1.1	0.33	mg/Kg	1	☼	6010C	Total/NA
Silver	0.24	J	0.56	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	52		2.3	0.99	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0077	J	0.019	0.0063	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010C	Metals (ICP)	SW846	TAL CHI
7471B	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3050B	Preparation, Metals	SW846	TAL CHI
3541	Automated Soxhlet Extraction	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI
7471B	Preparation, Mercury	SW846	TAL CHI
WI DRO PREP	Wisconsin Extraction (Diesel Range Organics)	WI-DRO	TAL CHI
WI GRO	Closed System Purge and Trap	WI-GRO	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

Laboratory References:

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

Sample Summary

Client: TRC Environmental Corporation.
Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-179774-1	GP-01 (2'-4')	Solid	03/23/20 09:25	03/24/20 08:50	
500-179774-2	GP-02 (2'-4')	Solid	03/23/20 09:50	03/24/20 08:50	
500-179774-3	GP-02 (10'-12')	Solid	03/23/20 10:10	03/24/20 08:50	
500-179774-4	GP-03 (2'-4')	Solid	03/23/20 10:45	03/24/20 08:50	
500-179774-5	GP-03 (10'-12')	Solid	03/23/20 11:20	03/24/20 08:50	
500-179774-6	GP-03 (12'-16')	Solid	03/23/20 11:30	03/24/20 08:50	
500-179774-7	GP-04 (2'-4')	Solid	03/23/20 11:55	03/24/20 08:50	
500-179774-8	GP-04 (6'-8')	Solid	03/23/20 12:05	03/24/20 08:50	
500-179774-9	GP-05 (2'-4')	Solid	03/23/20 12:40	03/24/20 08:50	
500-179774-10	GP-05 (10'-12')	Solid	03/23/20 12:50	03/24/20 08:50	
500-179774-11	GP-06 (2'-4')	Solid	03/23/20 13:30	03/24/20 08:50	
500-179774-12	GP-07 (2'-4')	Solid	03/23/20 13:45	03/24/20 08:50	
500-179774-13	GP-07 (6'-8')	Solid	03/23/20 14:00	03/24/20 08:50	
500-179774-14	GP-08 (2'-4')	Solid	03/23/20 14:20	03/24/20 08:50	
500-179774-15	GP-08 (10'-12')	Solid	03/23/20 14:40	03/24/20 08:50	

Client Sample ID: GP-01 (2'-4')
Lab Sample ID: 500-179774-1
Date Collected: 03/23/20 09:25 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 88.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.2		16	9.2	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
Methyl tert-butyl ether	<25		63	25	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
Naphthalene	<21		63	21	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
Toluene	<9.3		16	9.3	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
1,2,4-Trimethylbenzene	<23		63	23	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
1,3,5-Trimethylbenzene	<24		63	24	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50
Xylenes, Total	<14		32	14	ug/Kg	☼	03/23/20 09:25	03/31/20 12:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 09:25*	*03/31/20 12:54*	*50*
Dibromofluoromethane (Surr)	*107*		*75 - 120*	*03/23/20 09:25*	*03/31/20 12:54*	*50*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*	*03/23/20 09:25*	*03/31/20 12:54*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*03/23/20 09:25*	*03/31/20 12:54*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.9**		0.48	0.22	mg/Kg	☼	03/30/20 07:39	03/30/20 18:39	1

Client Sample ID: GP-02 (2'-4')
Lab Sample ID: 500-179774-2
Date Collected: 03/23/20 09:50 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 85.5**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.7		17	9.7	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
Ethylbenzene	<12		17	12	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
Methyl tert-butyl ether	<26		66	26	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
Naphthalene	<22		66	22	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
Toluene	<9.8		17	9.8	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50
Xylenes, Total	<15		33	15	ug/Kg	☼	03/23/20 09:50	03/31/20 13:18	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*	*03/23/20 09:50*	*03/31/20 13:18*	*50*
Dibromofluoromethane (Surr)	*108*		*75 - 120*	*03/23/20 09:50*	*03/31/20 13:18*	*50*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*	*03/23/20 09:50*	*03/31/20 13:18*	*50*
Toluene-d8 (Surr)	*103*		*75 - 120*	*03/23/20 09:50*	*03/31/20 13:18*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**8.4**		0.50	0.23	mg/Kg	☼	03/30/20 07:39	03/30/20 18:43	1

Client Sample ID: GP-02 (10'-12')
Lab Sample ID: 500-179774-3
Date Collected: 03/23/20 10:10 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.4		16	9.4	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50

Client Sample ID: GP-02 (10'-12')
Lab Sample ID: 500-179774-3
Date Collected: 03/23/20 10:10 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<12		16	12	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50
Naphthalene	<22		64	22	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50
Toluene	<9.5		16	9.5	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50
Xylenes, Total	<14		32	14	ug/Kg	☼	03/23/20 10:10	03/31/20 13:42	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 10:10*	*03/31/20 13:42*	*50*
Dibromofluoromethane (Surr)	*107*		*75 - 120*	*03/23/20 10:10*	*03/31/20 13:42*	*50*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*	*03/23/20 10:10*	*03/31/20 13:42*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*03/23/20 10:10*	*03/31/20 13:42*	*50*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<0.64		1.9	0.64	mg/Kg	☼	03/23/20 10:10	04/01/20 02:21	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.7**		0.56	0.26	mg/Kg	☼	03/30/20 07:39	03/30/20 18:47	1

Client Sample ID: GP-03 (2'-4')
Lab Sample ID: 500-179774-4
Date Collected: 03/23/20 10:45 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.0**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.7		17	9.7	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
Ethylbenzene	<12		17	12	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
Methyl tert-butyl ether	<26		66	26	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
Naphthalene	<22		66	22	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
Toluene	<9.7		17	9.7	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50
Xylenes, Total	<15		33	15	ug/Kg	☼	03/31/20 21:05	04/02/20 01:19	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/31/20 21:05*	*04/02/20 01:19*	*50*
Toluene-d8 (Surr)	*94*		*75 - 120*	*03/31/20 21:05*	*04/02/20 01:19*	*50*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/31/20 21:05*	*04/02/20 01:19*	*50*
Dibromofluoromethane (Surr)	*100*		*75 - 120*	*03/31/20 21:05*	*04/02/20 01:19*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.4**		0.52	0.24	mg/Kg	☼	03/30/20 07:39	03/30/20 18:59	1

Client Sample ID: GP-03 (10'-12')
Lab Sample ID: 500-179774-5
Date Collected: 03/23/20 11:20 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.0**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.5		16	9.5	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
Methyl tert-butyl ether	<26		65	26	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
Naphthalene	<22		65	22	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
Toluene	<9.6		16	9.6	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50
Xylenes, Total	<14		33	14	ug/Kg	☼	03/23/20 11:20	03/31/20 14:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 11:20*	*03/31/20 14:06*	*50*
Dibromofluoromethane (Surr)	*105*		*75 - 120*	*03/23/20 11:20*	*03/31/20 14:06*	*50*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*	*03/23/20 11:20*	*03/31/20 14:06*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*03/23/20 11:20*	*03/31/20 14:06*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.1		0.55	0.26	mg/Kg	☼	03/30/20 07:39	03/30/20 19:03	1

Client Sample ID: GP-03 (12'-16')
Lab Sample ID: 500-179774-6
Date Collected: 03/23/20 11:30 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 85.2**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.9		17	9.9	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
Ethylbenzene	<12		17	12	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
Methyl tert-butyl ether	<27		68	27	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
Naphthalene	<23		68	23	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
Toluene	<10		17	10	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
1,2,4-Trimethylbenzene	<24		68	24	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
1,3,5-Trimethylbenzene	<26		68	26	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50
Xylenes, Total	<15		34	15	ug/Kg	☼	03/23/20 11:30	03/31/20 14:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 11:30*	*03/31/20 14:30*	*50*
Dibromofluoromethane (Surr)	*108*		*75 - 120*	*03/23/20 11:30*	*03/31/20 14:30*	*50*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*03/23/20 11:30*	*03/31/20 14:30*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*03/23/20 11:30*	*03/31/20 14:30*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.7		0.53	0.25	mg/Kg	☼	03/30/20 07:39	03/30/20 19:07	1

Client Sample ID: GP-04 (2'-4')
Lab Sample ID: 500-179774-7
Date Collected: 03/23/20 11:55 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 89.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.1		16	9.1	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50

Client Sample ID: GP-04 (2'-4')

Lab Sample ID: 500-179774-7
Date Collected: 03/23/20 11:55 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 89.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<11		16	11	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50
Methyl tert-butyl ether	<25		62	25	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50
Naphthalene	<21		62	21	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50
Toluene	<9.1		16	9.1	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50
1,2,4-Trimethylbenzene	<22		62	22	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50
1,3,5-Trimethylbenzene	<24		62	24	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50
Xylenes, Total	<14		31	14	ug/Kg	☼	03/23/20 11:55	03/31/20 14:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 11:55*	*03/31/20 14:54*	*50*
Dibromofluoromethane (Surr)	*107*		*75 - 120*	*03/23/20 11:55*	*03/31/20 14:54*	*50*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*03/23/20 11:55*	*03/31/20 14:54*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*03/23/20 11:55*	*03/31/20 14:54*	*50*

Client Sample ID: GP-04 (6'-8')

Lab Sample ID: 500-179774-8
Date Collected: 03/23/20 12:05 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 84.2**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		17	10	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
Ethylbenzene	<13		17	13	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
Methyl tert-butyl ether	<27		69	27	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
Naphthalene	<23		69	23	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
Toluene	<10		17	10	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
1,2,4-Trimethylbenzene	<25		69	25	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
1,3,5-Trimethylbenzene	<26		69	26	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50
Xylenes, Total	<15		35	15	ug/Kg	☼	03/23/20 12:05	03/31/20 15:18	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 12:05*	*03/31/20 15:18*	*50*
Dibromofluoromethane (Surr)	*108*		*75 - 120*	*03/23/20 12:05*	*03/31/20 15:18*	*50*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*	*03/23/20 12:05*	*03/31/20 15:18*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*03/23/20 12:05*	*03/31/20 15:18*	*50*

Client Sample ID: GP-05 (2'-4')

Lab Sample ID: 500-179774-9
Date Collected: 03/23/20 12:40 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 87.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.3		16	9.3	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
Naphthalene	<21		64	21	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
Toluene	<9.4		16	9.4	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50
Xylenes, Total	<14		32	14	ug/Kg	☼	03/23/20 12:40	03/31/20 15:42	50

Client Sample ID: GP-05 (2'-4')

Lab Sample ID: 500-179774-9
Date Collected: 03/23/20 12:40 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 87.6**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/23/20 12:40*	*03/31/20 15:42*	*50*
Dibromofluoromethane (Surr)	*109*		*75 - 120*	*03/23/20 12:40*	*03/31/20 15:42*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*	*03/23/20 12:40*	*03/31/20 15:42*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*03/23/20 12:40*	*03/31/20 15:42*	*50*

Client Sample ID: GP-05 (10'-12')

Lab Sample ID: 500-179774-10
Date Collected: 03/23/20 12:50 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 85.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.7		17	9.7	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
Ethylbenzene	<12		17	12	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
Methyl tert-butyl ether	<26		67	26	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
Naphthalene	<22		67	22	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
Toluene	<9.8		17	9.8	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
1,2,4-Trimethylbenzene	<24		67	24	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
1,3,5-Trimethylbenzene	<25		67	25	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50
Xylenes, Total	<15		33	15	ug/Kg	☼	03/23/20 12:50	03/31/20 16:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 12:50*	*03/31/20 16:06*	*50*
Dibromofluoromethane (Surr)	*107*		*75 - 120*	*03/23/20 12:50*	*03/31/20 16:06*	*50*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*03/23/20 12:50*	*03/31/20 16:06*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*03/23/20 12:50*	*03/31/20 16:06*	*50*

Client Sample ID: GP-06 (2'-4')

Lab Sample ID: 500-179774-11
Date Collected: 03/23/20 13:30 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 88.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.2		16	9.2	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
Ethylbenzene	<11		16	11	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
Methyl tert-butyl ether	<25		63	25	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
Naphthalene	<21		63	21	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
Toluene	<9.2		16	9.2	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
1,2,4-Trimethylbenzene	<22		63	22	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
1,3,5-Trimethylbenzene	<24		63	24	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50
Xylenes, Total	<14		31	14	ug/Kg	☼	03/23/20 13:30	03/31/20 16:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*	*03/23/20 13:30*	*03/31/20 16:30*	*50*
Dibromofluoromethane (Surr)	*110*		*75 - 120*	*03/23/20 13:30*	*03/31/20 16:30*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*	*03/23/20 13:30*	*03/31/20 16:30*	*50*
Toluene-d8 (Surr)	*100*		*75 - 120*	*03/23/20 13:30*	*03/31/20 16:30*	*50*

Client Sample ID: GP-07 (2'-4')

Lab Sample ID: 500-179774-12
Date Collected: 03/23/20 13:45
Matrix: Solid
Date Received: 03/24/20 08:50
Percent Solids: 91.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<8.1		14	8.1	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
Ethylbenzene	<10		14	10	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
Methyl tert-butyl ether	<22		55	22	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
Naphthalene	<18		55	18	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
Toluene	<8.1		14	8.1	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
1,2,4-Trimethylbenzene	<20		55	20	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
1,3,5-Trimethylbenzene	<21		55	21	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50
Xylenes, Total	<12		28	12	ug/Kg	☼	03/23/20 13:45	03/31/20 16:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/23/20 13:45*	*03/31/20 16:54*	*50*
Dibromofluoromethane (Surr)	*107*		*75 - 120*	*03/23/20 13:45*	*03/31/20 16:54*	*50*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*03/23/20 13:45*	*03/31/20 16:54*	*50*
Toluene-d8 (Surr)	*100*		*75 - 120*	*03/23/20 13:45*	*03/31/20 16:54*	*50*

Client Sample ID: GP-07 (6'-8')

Lab Sample ID: 500-179774-13
Date Collected: 03/23/20 14:00
Matrix: Solid
Date Received: 03/24/20 08:50
Percent Solids: 87.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.3		16	9.3	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
Naphthalene	<21		64	21	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
Toluene	<9.4		16	9.4	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50
Xylenes, Total	<14		32	14	ug/Kg	☼	03/23/20 14:00	03/31/20 17:18	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*	*03/23/20 14:00*	*03/31/20 17:18*	*50*
Dibromofluoromethane (Surr)	*109*		*75 - 120*	*03/23/20 14:00*	*03/31/20 17:18*	*50*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*	*03/23/20 14:00*	*03/31/20 17:18*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*03/23/20 14:00*	*03/31/20 17:18*	*50*

Client Sample ID: GP-08 (2'-4')

Lab Sample ID: 500-179774-14
Date Collected: 03/23/20 14:20
Matrix: Solid
Date Received: 03/24/20 08:50
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		18	10	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
Methyl tert-butyl ether	<28		72	28	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
Naphthalene	<24		72	24	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
Toluene	<11		18	11	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
1,2,4-Trimethylbenzene	<26		72	26	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50
Xylenes, Total	<16		36	16	ug/Kg	☼	03/23/20 14:20	03/31/20 17:42	50

Client Sample ID: GP-08 (2'-4')

Lab Sample ID: 500-179774-14
Date Collected: 03/23/20 14:20 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 82.5**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/23/20 14:20*	*03/31/20 17:42*	*50*
Dibromofluoromethane (Surr)	*111*		*75 - 120*	*03/23/20 14:20*	*03/31/20 17:42*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*	*03/23/20 14:20*	*03/31/20 17:42*	*50*
Toluene-d8 (Surr)	*100*		*75 - 120*	*03/23/20 14:20*	*03/31/20 17:42*	*50*

Client Sample ID: GP-08 (10'-12')

Lab Sample ID: 500-179774-15
Date Collected: 03/23/20 14:40 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 83.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		18	10	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Bromobenzene	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Bromochloromethane	<30	*	70	30	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Bromodichloromethane	<26		70	26	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Bromoform	<34		70	34	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Bromomethane	<56		210	56	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Chlorobenzene	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Chloroethane	<35		70	35	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Chloroform	<26		140	26	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Chloromethane	<22	F1	70	22	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
4-Chlorotoluene	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
cis-1,2-Dichloroethene	<29		70	29	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Dibromochloromethane	<34		70	34	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2-Dibromoethane	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Dibromomethane	<19	*	70	19	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2-Dichlorobenzene	<23		70	23	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,4-Dichlorobenzene	<26		70	26	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Dichlorodifluoromethane	<47	F1	210	47	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2-Dichloroethane	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
2,2-Dichloropropane	<31		70	31	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1-Dichloropropene	<21		70	21	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Hexachlorobutadiene	<31		70	31	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Isopropyl ether	<19		70	19	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Methylene Chloride	<110		350	110	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Methyl tert-butyl ether	<28		70	28	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Naphthalene	<23		70	23	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50

Client Sample ID: GP-08 (10'-12') **Lab Sample ID: 500-179774-15**
Date Collected: 03/23/20 14:40 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 83.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
sec-Butylbenzene	<28		70	28	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Styrene	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1,1,2-Tetrachloroethane	<32		70	32	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Toluene	<10		18	10	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
trans-1,2-Dichloroethene	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1,1-Trichloroethane	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Trichloroethene	<11		35	11	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,2,4-Trimethylbenzene	<25		70	25	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
1,3,5-Trimethylbenzene	<27		70	27	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Vinyl chloride	<18	F1	70	18	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50
Xylenes, Total	<15		35	15	ug/Kg	☼	03/23/20 14:40	03/31/20 18:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*	*03/23/20 14:40*	*03/31/20 18:06*	*50*
Dibromofluoromethane (Surr)	*110*		*75 - 120*	*03/23/20 14:40*	*03/31/20 18:06*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*	*03/23/20 14:40*	*03/31/20 18:06*	*50*
Toluene-d8 (Surr)	*100*		*75 - 120*	*03/23/20 14:40*	*03/31/20 18:06*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<43		200	43	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
1,2-Dichlorobenzene	<47		200	47	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
1,3-Dichlorobenzene	<45		200	45	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
1,4-Dichlorobenzene	<51		200	51	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
1-Methylnaphthalene	<9.7		80	9.7	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,2'-oxybis[1-chloropropane]	<46		200	46	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,4,5-Trichlorophenol	<91		390	91	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,4,6-Trichlorophenol	<140		390	140	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,4-Dichlorophenol	<94		390	94	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,4-Dimethylphenol	<150		390	150	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,4-Dinitrophenol	<700		800	700	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,4-Dinitrotoluene	<63		200	63	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2,6-Dinitrotoluene	<78		200	78	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2-Chloronaphthalene	<44		200	44	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2-Chlorophenol	<68		200	68	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2-Methylnaphthalene	<7.3		80	7.3	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2-Methylphenol	<64		200	64	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2-Nitroaniline	<53		200	53	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
2-Nitrophenol	<94		390	94	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
3 & 4 Methylphenol	<66		200	66	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1

Client Sample ID: GP-08 (10'-12') **Lab Sample ID: 500-179774-15**
Date Collected: 03/23/20 14:40 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 83.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<56		200	56	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
3-Nitroaniline	<120		390	120	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4,6-Dinitro-2-methylphenol	<320		800	320	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4-Bromophenyl phenyl ether	<52		200	52	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4-Chloro-3-methylphenol	<130		390	130	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4-Chloroaniline	<190		800	190	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4-Chlorophenyl phenyl ether	<46		200	46	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4-Nitroaniline	<170		390	170	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
4-Nitrophenol	<380		800	380	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Acenaphthene	<7.1		39	7.1	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Acenaphthylene	<5.2		39	5.2	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Anthracene	<6.6		39	6.6	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzo[a]anthracene	<5.3		39	5.3	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzo[a]pyrene	<7.7		39	7.7	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzo[b]fluoranthene	<8.6		39	8.6	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzo[g,h,i]perylene	<13		39	13	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzo[k]fluoranthene	<12		39	12	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzoic acid	<390		2000	390	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Benzyl alcohol	<390		800	390	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Bis(2-chloroethoxy)methane	<40		200	40	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Bis(2-chloroethyl)ether	<59		200	59	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Bis(2-ethylhexyl) phthalate	<73		200	73	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Butyl benzyl phthalate	<75		200	75	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Carbazole	<99		200	99	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Chrysene	<11		39	11	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Dibenz(a,h)anthracene	<7.7		39	7.7	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Dibenzofuran	<46		200	46	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Diethyl phthalate	<67		200	67	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Dimethyl phthalate	<52		200	52	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Di-n-butyl phthalate	<60		200	60	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Di-n-octyl phthalate	<65		200	65	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Fluoranthene	<7.4		39	7.4	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Fluorene	<5.6		39	5.6	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Hexachlorobenzene	<9.2		80	9.2	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Hexachlorobutadiene	<62		200	62	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Hexachlorocyclopentadiene	<230		800	230	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Hexachloroethane	<60		200	60	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Indeno[1,2,3-cd]pyrene	<10		39	10	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Isophorone	<45		200	45	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Naphthalene	<6.1		39	6.1	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Nitrobenzene	<9.9		39	9.9	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
N-Nitrosodi-n-propylamine	<48		80	48	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
N-Nitrosodiphenylamine	<47		200	47	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Pentachlorophenol	<640		800	640	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Phenanthrene	<5.5		39	5.5	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Phenol	<88		200	88	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1
Pyrene	<7.9		39	7.9	ug/Kg	☼	03/30/20 18:18	04/01/20 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*31 - 143*	*03/30/20 18:18*	*04/01/20 01:32*	*1*

Client Sample ID: GP-08 (10'-12')
Date Collected: 03/23/20 14:40
Date Received: 03/24/20 08:50

Lab Sample ID: 500-179774-15
Matrix: Solid
Percent Solids: 83.7

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*43 - 145*	*03/30/20 18:18*	*04/01/20 01:32*	*1*
2-Fluorophenol (Surr)	*86*		*31 - 166*	*03/30/20 18:18*	*04/01/20 01:32*	*1*
Nitrobenzene-d5 (Surr)	*77*		*37 - 147*	*03/30/20 18:18*	*04/01/20 01:32*	*1*
Phenol-d5 (Surr)	*82*		*30 - 153*	*03/30/20 18:18*	*04/01/20 01:32*	*1*
Terphenyl-d14 (Surr)	*99*		*42 - 157*	*03/30/20 18:18*	*04/01/20 01:32*	*1*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<0.70		2.1	0.70	mg/Kg	☼	03/23/20 14:40	04/01/20 02:55	50

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.9		20	6.9	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1
PCB-1221	<8.6		20	8.6	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1
PCB-1232	<8.5		20	8.5	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1
PCB-1242	<6.4		20	6.4	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1
PCB-1248	<7.7		20	7.7	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1
PCB-1254	<4.2		20	4.2	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1
PCB-1260	<9.6		20	9.6	ug/Kg	☼	03/30/20 15:53	03/31/20 09:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*49 - 129*	*03/30/20 15:53*	*03/31/20 09:13*	*1*
DCB Decachlorobiphenyl	*95*		*37 - 121*	*03/30/20 15:53*	*03/31/20 09:13*	*1*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.9		4.8	1.9	mg/Kg	☼	03/26/20 11:52	03/26/20 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*74*		*44 - 148*	*03/26/20 11:52*	*03/26/20 18:02*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.9**		1.1	0.39	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Barium	**62**		1.1	0.13	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Cadmium	**0.17**	**J B**	0.23	0.041	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Chromium	**27**		1.1	0.56	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Copper	**30**		1.1	0.32	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Lead	**7.8**		0.56	0.26	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Nickel	**33**		1.1	0.33	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Selenium	<0.66		1.1	0.66	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Silver	**0.24**	**J**	0.56	0.15	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1
Zinc	**52**		2.3	0.99	mg/Kg	☼	03/30/20 07:39	03/30/20 19:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0077**	**J**	0.019	0.0063	mg/Kg	☼	03/31/20 13:15	04/01/20 09:41	1

Definitions/Glossary

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

GC/MS VOA

Prep Batch: 535627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-1	GP-01 (2'-4')	Total/NA	Solid	5035	
500-179774-2	GP-02 (2'-4')	Total/NA	Solid	5035	
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	WI GRO	
500-179774-5	GP-03 (10'-12')	Total/NA	Solid	5035	
500-179774-6	GP-03 (12'-16')	Total/NA	Solid	5035	
500-179774-7	GP-04 (2'-4')	Total/NA	Solid	5035	
500-179774-8	GP-04 (6'-8')	Total/NA	Solid	5035	
500-179774-9	GP-05 (2'-4')	Total/NA	Solid	5035	
500-179774-10	GP-05 (10'-12')	Total/NA	Solid	5035	
500-179774-11	GP-06 (2'-4')	Total/NA	Solid	5035	
500-179774-12	GP-07 (2'-4')	Total/NA	Solid	5035	
500-179774-13	GP-07 (6'-8')	Total/NA	Solid	5035	
500-179774-14	GP-08 (2'-4')	Total/NA	Solid	5035	
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	WI GRO	
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-535627/22-A	Lab Control Sample	Total/NA	Solid	5035	
500-179774-15 MS	GP-08 (10'-12')	Total/NA	Solid	WI GRO	
500-179774-15 MSD	GP-08 (10'-12')	Total/NA	Solid	WI GRO	

Analysis Batch: 536092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-1	GP-01 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-2	GP-02 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	8260B	535627
500-179774-5	GP-03 (10'-12')	Total/NA	Solid	8260B	535627
500-179774-6	GP-03 (12'-16')	Total/NA	Solid	8260B	535627
500-179774-7	GP-04 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-8	GP-04 (6'-8')	Total/NA	Solid	8260B	535627
500-179774-9	GP-05 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-10	GP-05 (10'-12')	Total/NA	Solid	8260B	535627
500-179774-11	GP-06 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-12	GP-07 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-13	GP-07 (6'-8')	Total/NA	Solid	8260B	535627
500-179774-14	GP-08 (2'-4')	Total/NA	Solid	8260B	535627
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	8260B	535627
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	8260B	535627
MB 500-536092/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-535627/22-A	Lab Control Sample	Total/NA	Solid	8260B	535627
LCS 500-536092/5	Lab Control Sample	Total/NA	Solid	8260B	
500-179774-15 MS	GP-08 (10'-12')	Total/NA	Solid	8260B	535627
500-179774-15 MSD	GP-08 (10'-12')	Total/NA	Solid	8260B	535627

Prep Batch: 536217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-4	GP-03 (2'-4')	Total/NA	Solid	5030B	

Analysis Batch: 536376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-4	GP-03 (2'-4')	Total/NA	Solid	8260B	536217
MB 500-536376/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-536376/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 536022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	3541	
MB 500-536022/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-536022/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 536113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-536022/1-A	Method Blank	Total/NA	Solid	8270D	536022
LCS 500-536022/2-A	Lab Control Sample	Total/NA	Solid	8270D	536022

Analysis Batch: 536182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	8270D	536022

GC VOA

Prep Batch: 535627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	WI GRO	
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	WI GRO	
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-535627/23-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 500-535627/24-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 536061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	WI-GRO	535627
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	WI-GRO	535627
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	WI-GRO	535627
LCS 500-535627/23-A	Lab Control Sample	Total/NA	Solid	WI-GRO	535627
LCSD 500-535627/24-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	535627

GC Semi VOA

Prep Batch: 535546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	WI DRO PREP	
MB 500-535546/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-535546/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-535546/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

Analysis Batch: 535582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	WI-DRO	535546
MB 500-535546/1-A	Method Blank	Total/NA	Solid	WI-DRO	535546
LCS 500-535546/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	535546
LCSD 500-535546/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	535546

Prep Batch: 536000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	3541	
MB 500-536000/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-536000/3-A	Lab Control Sample	Total/NA	Solid	3541	

GC Semi VOA

Analysis Batch: 536109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	8082A	536000
MB 500-536000/1-A	Method Blank	Total/NA	Solid	8082A	536000
LCS 500-536000/3-A	Lab Control Sample	Total/NA	Solid	8082A	536000

Metals

Prep Batch: 535919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-1	GP-01 (2'-4')	Total/NA	Solid	3050B	
500-179774-2	GP-02 (2'-4')	Total/NA	Solid	3050B	
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	3050B	
500-179774-4	GP-03 (2'-4')	Total/NA	Solid	3050B	
500-179774-5	GP-03 (10'-12')	Total/NA	Solid	3050B	
500-179774-6	GP-03 (12'-16')	Total/NA	Solid	3050B	
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	3050B	
MB 500-535919/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-535919/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 536055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-1	GP-01 (2'-4')	Total/NA	Solid	6010C	535919
500-179774-2	GP-02 (2'-4')	Total/NA	Solid	6010C	535919
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	6010C	535919
500-179774-4	GP-03 (2'-4')	Total/NA	Solid	6010C	535919
500-179774-5	GP-03 (10'-12')	Total/NA	Solid	6010C	535919
500-179774-6	GP-03 (12'-16')	Total/NA	Solid	6010C	535919
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	6010C	535919
MB 500-535919/1-A	Method Blank	Total/NA	Solid	6010C	535919
LCS 500-535919/2-A	Lab Control Sample	Total/NA	Solid	6010C	535919

Prep Batch: 536149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	7471B	
MB 500-536149/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-536149/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 536337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	7471B	536149
MB 500-536149/12-A	Method Blank	Total/NA	Solid	7471B	536149
LCS 500-536149/13-A	Lab Control Sample	Total/NA	Solid	7471B	536149

General Chemistry

Analysis Batch: 535705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-1	GP-01 (2'-4')	Total/NA	Solid	Moisture	
500-179774-2	GP-02 (2'-4')	Total/NA	Solid	Moisture	
500-179774-3	GP-02 (10'-12')	Total/NA	Solid	Moisture	
500-179774-4	GP-03 (2'-4')	Total/NA	Solid	Moisture	
500-179774-5	GP-03 (10'-12')	Total/NA	Solid	Moisture	
500-179774-6	GP-03 (12'-16')	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 535705 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179774-7	GP-04 (2'-4')	Total/NA	Solid	Moisture	
500-179774-8	GP-04 (6'-8')	Total/NA	Solid	Moisture	
500-179774-9	GP-05 (2'-4')	Total/NA	Solid	Moisture	
500-179774-10	GP-05 (10'-12')	Total/NA	Solid	Moisture	
500-179774-11	GP-06 (2'-4')	Total/NA	Solid	Moisture	
500-179774-12	GP-07 (2'-4')	Total/NA	Solid	Moisture	
500-179774-13	GP-07 (6'-8')	Total/NA	Solid	Moisture	
500-179774-14	GP-08 (2'-4')	Total/NA	Solid	Moisture	
500-179774-15	GP-08 (10'-12')	Total/NA	Solid	Moisture	
500-179774-1 DU	GP-01 (2'-4')	Total/NA	Solid	Moisture	

Surrogate Summary

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-179774-1	GP-01 (2'-4')	88	107	96	102
500-179774-2	GP-02 (2'-4')	87	108	97	103
500-179774-3	GP-02 (10'-12')	88	107	97	102
500-179774-4	GP-03 (2'-4')	88	100	105	94
500-179774-5	GP-03 (10'-12')	88	105	98	102
500-179774-6	GP-03 (12'-16')	88	108	99	101
500-179774-7	GP-04 (2'-4')	88	107	99	102
500-179774-8	GP-04 (6'-8')	88	108	99	101
500-179774-9	GP-05 (2'-4')	89	109	103	99
500-179774-10	GP-05 (10'-12')	88	107	101	101
500-179774-11	GP-06 (2'-4')	88	110	103	100
500-179774-12	GP-07 (2'-4')	89	107	101	100
500-179774-13	GP-07 (6'-8')	90	109	101	99
500-179774-14	GP-08 (2'-4')	89	111	103	100
500-179774-15	GP-08 (10'-12')	87	110	103	100
500-179774-15 MS	GP-08 (10'-12')	92	113	105	100
500-179774-15 MSD	GP-08 (10'-12')	91	112	103	100
LB3 500-535627/21-A	Method Blank	89	111	105	99
LCS 500-535627/22-A	Lab Control Sample	90	112	104	98
LCS 500-536092/5	Lab Control Sample	91	106	98	101
LCS 500-536376/4	Lab Control Sample	88	97	99	95
MB 500-536092/7	Method Blank	87	109	100	100
MB 500-536376/7	Method Blank	89	99	102	91

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(31-143)	(43-145)	(31-166)	(37-147)	(30-153)	(42-157)
500-179774-15	GP-08 (10'-12')	83	81	86	77	82	99
LCS 500-536022/2-A	Lab Control Sample	120	98	87	89	88	118
MB 500-536022/1-A	Method Blank	110	104	85	89	80	127

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(49-129)	(37-121)
500-179774-15	GP-08 (10'-12')	92	95
LCS 500-536000/3-A	Lab Control Sample	100	110
MB 500-536000/1-A	Method Blank	102	111

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		C9
Lab Sample ID	Client Sample ID	(44-148)
500-179774-15	GP-08 (10'-12')	74
LCS 500-535546/2-A	Lab Control Sample	74
LCSD 500-535546/3-A	Lab Control Sample Dup	72
MB 500-535546/1-A	Method Blank	76

Surrogate Legend

C9 = n-Nonane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LB3 500-535627/21-A
Matrix: Solid
Analysis Batch: 536092

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535627

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromochloromethane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromodichloromethane	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Benzene	<7.3		13	7.3	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromoform	<24		50	24	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromomethane	<40		150	40	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Carbon tetrachloride	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chlorobenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chloroethane	<25		50	25	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chloroform	<19		100	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chloromethane	<16		50	16	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
2-Chlorotoluene	<16		50	16	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
4-Chlorotoluene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Dibromochloromethane	<24		50	24	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dibromoethane	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Dibromomethane	<14		50	14	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1-Dichloroethane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dichloroethane	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1-Dichloroethene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dichloropropane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,3-Dichloropropane	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
2,2-Dichloropropane	<22		50	22	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1-Dichloropropene	<15		50	15	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Hexachlorobutadiene	<22		50	22	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Isopropylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Isopropyl ether	<14		50	14	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Methylene Chloride	<82		250	82	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Naphthalene	<17		50	17	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
n-Butylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
N-Propylbenzene	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
p-Isopropyltoluene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
sec-Butylbenzene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Styrene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
tert-Butylbenzene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Tetrachloroethene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Toluene	<7.4		13	7.4	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50

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

Lab Sample ID: LB3 500-535627/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536092 — **Prep Batch: 535627**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Trichloroethene	<8.2		25	8.2	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Trichlorofluoromethane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Vinyl chloride	<13		50	13	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Xylenes, Total	<11		25	11	ug/Kg		03/26/20 21:15	03/31/20 18:30	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/26/20 21:15*	*03/31/20 18:30*	*50*
Dibromofluoromethane (Surr)	*111*		*75 - 120*	*03/26/20 21:15*	*03/31/20 18:30*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/26/20 21:15*	*03/31/20 18:30*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*03/26/20 21:15*	*03/31/20 18:30*	*50*

Lab Sample ID: LCS 500-535627/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536092 — **Prep Batch: 535627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	2840		ug/Kg		114	70 - 122
Bromochloromethane	2500	3240	*	ug/Kg		130	65 - 122
Bromodichloromethane	2500	3000		ug/Kg		120	69 - 120
Benzene	2500	2890		ug/Kg		116	70 - 120
Bromoform	2500	3040		ug/Kg		122	56 - 132
Bromomethane	2500	3060		ug/Kg		122	40 - 152
Carbon tetrachloride	2500	2770		ug/Kg		111	59 - 133
Chlorobenzene	2500	2940		ug/Kg		118	70 - 120
Chloroethane	2500	2310		ug/Kg		92	48 - 136
Chloroform	2500	2930		ug/Kg		117	70 - 120
Chloromethane	2500	1610		ug/Kg		64	56 - 152
2-Chlorotoluene	2500	2590		ug/Kg		104	70 - 125
4-Chlorotoluene	2500	2580		ug/Kg		103	68 - 124
cis-1,2-Dichloroethene	2500	3120		ug/Kg		125	70 - 125
cis-1,3-Dichloropropene	2500	2800		ug/Kg		112	64 - 127
Dibromochloromethane	2500	3080		ug/Kg		123	68 - 125
1,2-Dibromo-3-Chloropropane	2500	2570		ug/Kg		103	56 - 123
1,2-Dibromoethane	2500	2960		ug/Kg		118	70 - 125
Dibromomethane	2500	3130	*	ug/Kg		125	70 - 120
1,2-Dichlorobenzene	2500	2910		ug/Kg		116	70 - 125
1,3-Dichlorobenzene	2500	2850		ug/Kg		114	70 - 125
1,4-Dichlorobenzene	2500	2790		ug/Kg		112	70 - 120
Dichlorodifluoromethane	2500	1100		ug/Kg		44	40 - 159
1,1-Dichloroethane	2500	2740		ug/Kg		110	70 - 125

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

Lab Sample ID: LCS 500-535627/22-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092 **Prep Batch: 535627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	2500	3020		ug/Kg		121	68 - 127
1,1-Dichloroethene	2500	2540		ug/Kg		102	67 - 122
1,2-Dichloropropane	2500	2830		ug/Kg		113	67 - 130
1,3-Dichloropropane	2500	2790		ug/Kg		112	62 - 136
2,2-Dichloropropane	2500	2590		ug/Kg		104	58 - 139
1,1-Dichloropropene	2500	2600		ug/Kg		104	70 - 121
Ethylbenzene	2500	2850		ug/Kg		114	70 - 123
Hexachlorobutadiene	2500	2390		ug/Kg		96	51 - 150
Isopropylbenzene	2500	2550		ug/Kg		102	70 - 126
Methylene Chloride	2500	2990		ug/Kg		120	69 - 125
Methyl tert-butyl ether	2500	3000		ug/Kg		120	55 - 123
Naphthalene	2500	2810		ug/Kg		112	53 - 144
n-Butylbenzene	2500	2440		ug/Kg		97	68 - 125
N-Propylbenzene	2500	2530		ug/Kg		101	69 - 127
p-Isopropyltoluene	2500	2620		ug/Kg		105	70 - 125
sec-Butylbenzene	2500	2540		ug/Kg		102	70 - 123
Styrene	2500	2810		ug/Kg		112	70 - 120
tert-Butylbenzene	2500	2700		ug/Kg		108	70 - 121
1,1,1,2-Tetrachloroethane	2500	3130		ug/Kg		125	70 - 125
1,1,2,2-Tetrachloroethane	2500	2700		ug/Kg		108	62 - 140
Tetrachloroethene	2500	2690		ug/Kg		108	70 - 128
Toluene	2500	2730		ug/Kg		109	70 - 125
trans-1,2-Dichloroethene	2500	2880		ug/Kg		115	70 - 125
trans-1,3-Dichloropropene	2500	2720		ug/Kg		109	62 - 128
1,2,3-Trichlorobenzene	2500	2840		ug/Kg		114	51 - 145
1,2,4-Trichlorobenzene	2500	2790		ug/Kg		111	57 - 137
1,1,1-Trichloroethane	2500	2730		ug/Kg		109	70 - 125
1,1,2-Trichloroethane	2500	2830		ug/Kg		113	71 - 130
Trichloroethene	2500	3040		ug/Kg		122	70 - 125
Trichlorofluoromethane	2500	2290		ug/Kg		91	55 - 128
1,2,3-Trichloropropane	2500	2680		ug/Kg		107	50 - 133
1,2,4-Trimethylbenzene	2500	2620		ug/Kg		105	70 - 123
1,3,5-Trimethylbenzene	2500	2620		ug/Kg		105	70 - 123
Vinyl chloride	2500	1840		ug/Kg		74	64 - 126
Xylenes, Total	5000	5420		ug/Kg		108	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*
Dibromofluoromethane (Surr)	*112*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Sample ID: 500-179774-15 MS **Client Sample ID: GP-08 (10'-12')**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092 **Prep Batch: 535627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	<25		3500	3570		ug/Kg	☼	102	70 - 122

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

Lab Sample ID: 500-179774-15 MS **Client Sample ID: GP-08 (10'-12')**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092 **Prep Batch: 535627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromochloromethane	<30	*	3500	4080		ug/Kg	☼	116	65 - 122
Bromodichloromethane	<26		3500	3670		ug/Kg	☼	105	69 - 120
Benzene	<10		3500	3590		ug/Kg	☼	103	70 - 120
Bromoform	<34		3500	4100		ug/Kg	☼	117	56 - 132
Bromomethane	<56		3500	2330		ug/Kg	☼	66	40 - 152
Carbon tetrachloride	<27		3500	3420		ug/Kg	☼	98	59 - 133
Chlorobenzene	<27		3500	3730		ug/Kg	☼	106	70 - 120
Chloroethane	<35		3500	2270		ug/Kg	☼	65	48 - 136
Chloroform	<26		3500	3620		ug/Kg	☼	103	70 - 120
Chloromethane	<22	F1	3500	751	F1	ug/Kg	☼	21	56 - 152
2-Chlorotoluene	<22		3500	3220		ug/Kg	☼	92	70 - 125
4-Chlorotoluene	<25		3500	3150		ug/Kg	☼	90	68 - 124
cis-1,2-Dichloroethene	<29		3500	3820		ug/Kg	☼	109	70 - 125
cis-1,3-Dichloropropene	<29		3500	3600		ug/Kg	☼	103	64 - 127
Dibromochloromethane	<34		3500	3900		ug/Kg	☼	111	68 - 125
1,2-Dibromo-3-Chloropropane	<140		3500	3540		ug/Kg	☼	101	56 - 123
1,2-Dibromoethane	<27		3500	3850		ug/Kg	☼	110	70 - 125
Dibromomethane	<19	*	3500	3900		ug/Kg	☼	111	70 - 120
1,2-Dichlorobenzene	<23		3500	3660		ug/Kg	☼	105	70 - 125
1,3-Dichlorobenzene	<28		3500	3530		ug/Kg	☼	101	70 - 125
1,4-Dichlorobenzene	<26		3500	3460		ug/Kg	☼	99	70 - 120
Dichlorodifluoromethane	<47	F1	3500	170	J F1	ug/Kg	☼	5	40 - 159
1,1-Dichloroethane	<29		3500	3480		ug/Kg	☼	99	70 - 125
1,2-Dichloroethane	<27		3500	3830		ug/Kg	☼	109	68 - 127
1,1-Dichloroethene	<27		3500	3430		ug/Kg	☼	98	67 - 122
1,2-Dichloropropane	<30		3500	3470		ug/Kg	☼	99	67 - 130
1,3-Dichloropropane	<25		3500	3590		ug/Kg	☼	103	62 - 136
2,2-Dichloropropane	<31		3500	3320		ug/Kg	☼	95	58 - 139
1,1-Dichloropropene	<21		3500	3260		ug/Kg	☼	93	70 - 121
Ethylbenzene	<13		3500	3510		ug/Kg	☼	100	70 - 123
Hexachlorobutadiene	<31		3500	2970		ug/Kg	☼	85	51 - 150
Isopropylbenzene	<27		3500	3140		ug/Kg	☼	90	70 - 126
Methylene Chloride	<110		3500	3780		ug/Kg	☼	108	69 - 125
Methyl tert-butyl ether	<28		3500	3810		ug/Kg	☼	109	55 - 123
Naphthalene	<23		3500	3850		ug/Kg	☼	110	53 - 144
n-Butylbenzene	<27		3500	2990		ug/Kg	☼	85	68 - 125
N-Propylbenzene	<29		3500	3090		ug/Kg	☼	88	69 - 127
p-Isopropyltoluene	<25		3500	3190		ug/Kg	☼	91	70 - 125
sec-Butylbenzene	<28		3500	3100		ug/Kg	☼	88	70 - 123
Styrene	<27		3500	3500		ug/Kg	☼	100	70 - 120
tert-Butylbenzene	<28		3500	3270		ug/Kg	☼	93	70 - 121
1,1,1,2-Tetrachloroethane	<32		3500	3950		ug/Kg	☼	113	70 - 125
1,1,2,2-Tetrachloroethane	<28		3500	3590		ug/Kg	☼	102	62 - 140
Tetrachloroethene	<26		3500	3420		ug/Kg	☼	98	70 - 128
Toluene	<10		3500	3430		ug/Kg	☼	98	70 - 125
trans-1,2-Dichloroethene	<25		3500	3680		ug/Kg	☼	105	70 - 125
trans-1,3-Dichloropropene	<25		3500	3520		ug/Kg	☼	100	62 - 128
1,2,3-Trichlorobenzene	<32		3500	3710		ug/Kg	☼	106	51 - 145
1,2,4-Trichlorobenzene	<24		3500	3470		ug/Kg	☼	99	57 - 137

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

Lab Sample ID: 500-179774-15 MS — **Client Sample ID: GP-08 (10'-12')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536092 — **Prep Batch: 535627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<27		3500	3420		ug/Kg	☼	98	70 - 125
1,1,2-Trichloroethane	<25		3500	3650		ug/Kg	☼	104	71 - 130
Trichloroethene	<11		3500	3750		ug/Kg	☼	107	70 - 125
Trichlorofluoromethane	<30		3500	2380		ug/Kg	☼	68	55 - 128
1,2,3-Trichloropropane	<29		3500	3570		ug/Kg	☼	102	50 - 133
1,2,4-Trimethylbenzene	<25		3500	3210		ug/Kg	☼	92	70 - 123
1,3,5-Trimethylbenzene	<27		3500	3190		ug/Kg	☼	91	70 - 123
Vinyl chloride	<18	F1	3500	1180	F1	ug/Kg	☼	34	64 - 126
Xylenes, Total	<15		7010	6770		ug/Kg	☼	97	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*
Dibromofluoromethane (Surr)	*113*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Sample ID: 500-179774-15 MSD — **Client Sample ID: GP-08 (10'-12')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536092 — **Prep Batch: 535627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	<25		3500	3480		ug/Kg	☼	99	70 - 122	2	30
Bromochloromethane	<30	*	3500	4020		ug/Kg	☼	115	65 - 122	1	30
Bromodichloromethane	<26		3500	3610		ug/Kg	☼	103	69 - 120	2	30
Benzene	<10		3500	3580		ug/Kg	☼	102	70 - 120	0	30
Bromoform	<34		3500	3680		ug/Kg	☼	105	56 - 132	11	30
Bromomethane	<56		3500	2700		ug/Kg	☼	77	40 - 152	15	30
Carbon tetrachloride	<27		3500	3490		ug/Kg	☼	100	59 - 133	2	30
Chlorobenzene	<27		3500	3640		ug/Kg	☼	104	70 - 120	2	30
Chloroethane	<35		3500	2240		ug/Kg	☼	64	48 - 136	2	30
Chloroform	<26		3500	3600		ug/Kg	☼	103	70 - 120	1	30
Chloromethane	<22	F1	3500	733	F1	ug/Kg	☼	21	56 - 152	3	30
2-Chlorotoluene	<22		3500	3230		ug/Kg	☼	92	70 - 125	0	30
4-Chlorotoluene	<25		3500	3160		ug/Kg	☼	90	68 - 124	0	30
cis-1,2-Dichloroethene	<29		3500	3850		ug/Kg	☼	110	70 - 125	1	30
cis-1,3-Dichloropropene	<29		3500	3480		ug/Kg	☼	99	64 - 127	3	30
Dibromochloromethane	<34		3500	3720		ug/Kg	☼	106	68 - 125	5	30
1,2-Dibromo-3-Chloropropane	<140		3500	3120		ug/Kg	☼	89	56 - 123	12	30
1,2-Dibromoethane	<27		3500	3660		ug/Kg	☼	105	70 - 125	5	30
Dibromomethane	<19	*	3500	3740		ug/Kg	☼	107	70 - 120	4	30
1,2-Dichlorobenzene	<23		3500	3610		ug/Kg	☼	103	70 - 125	1	30
1,3-Dichlorobenzene	<28		3500	3470		ug/Kg	☼	99	70 - 125	2	30
1,4-Dichlorobenzene	<26		3500	3410		ug/Kg	☼	97	70 - 120	1	30
Dichlorodifluoromethane	<47	F1	3500	152	J F1	ug/Kg	☼	4	40 - 159	11	30
1,1-Dichloroethane	<29		3500	3460		ug/Kg	☼	99	70 - 125	1	30
1,2-Dichloroethane	<27		3500	3700		ug/Kg	☼	106	68 - 127	4	30
1,1-Dichloroethene	<27		3500	3540		ug/Kg	☼	101	67 - 122	3	30
1,2-Dichloropropane	<30		3500	3390		ug/Kg	☼	97	67 - 130	2	30

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

Lab Sample ID: 500-179774-15 MSD — **Client Sample ID: GP-08 (10'-12')**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536092 — **Prep Batch: 535627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	<25		3500	3360		ug/Kg	☼	96	62 - 136	7	30
2,2-Dichloropropane	<31		3500	3360		ug/Kg	☼	96	58 - 139	1	30
1,1-Dichloropropene	<21		3500	3270		ug/Kg	☼	93	70 - 121	0	30
Ethylbenzene	<13		3500	3490		ug/Kg	☼	100	70 - 123	0	30
Hexachlorobutadiene	<31		3500	3010		ug/Kg	☼	86	51 - 150	1	30
Isopropylbenzene	<27		3500	3190		ug/Kg	☼	91	70 - 126	2	30
Methylene Chloride	<110		3500	3790		ug/Kg	☼	108	69 - 125	0	30
Methyl tert-butyl ether	<28		3500	3680		ug/Kg	☼	105	55 - 123	3	30
Naphthalene	<23		3500	3510		ug/Kg	☼	100	53 - 144	9	30
n-Butylbenzene	<27		3500	3000		ug/Kg	☼	86	68 - 125	0	30
N-Propylbenzene	<29		3500	3120		ug/Kg	☼	89	69 - 127	1	30
p-Isopropyltoluene	<25		3500	3260		ug/Kg	☼	93	70 - 125	2	30
sec-Butylbenzene	<28		3500	3100		ug/Kg	☼	88	70 - 123	0	30
Styrene	<27		3500	3440		ug/Kg	☼	98	70 - 120	2	30
tert-Butylbenzene	<28		3500	3310		ug/Kg	☼	95	70 - 121	1	30
1,1,1,2-Tetrachloroethane	<32		3500	3910		ug/Kg	☼	112	70 - 125	1	30
1,1,2,2-Tetrachloroethane	<28		3500	3290		ug/Kg	☼	94	62 - 140	9	30
Tetrachloroethene	<26		3500	3380		ug/Kg	☼	96	70 - 128	1	30
Toluene	<10		3500	3430		ug/Kg	☼	98	70 - 125	0	30
trans-1,2-Dichloroethene	<25		3500	3640		ug/Kg	☼	104	70 - 125	1	30
trans-1,3-Dichloropropene	<25		3500	3390		ug/Kg	☼	97	62 - 128	4	30
1,2,3-Trichlorobenzene	<32		3500	3620		ug/Kg	☼	103	51 - 145	2	30
1,2,4-Trichlorobenzene	<24		3500	3450		ug/Kg	☼	98	57 - 137	1	30
1,1,1-Trichloroethane	<27		3500	3470		ug/Kg	☼	99	70 - 125	1	30
1,1,2-Trichloroethane	<25		3500	3420		ug/Kg	☼	97	71 - 130	7	30
Trichloroethene	<11		3500	3790		ug/Kg	☼	108	70 - 125	1	30
Trichlorofluoromethane	<30		3500	2420		ug/Kg	☼	69	55 - 128	2	30
1,2,3-Trichloropropane	<29		3500	3310		ug/Kg	☼	94	50 - 133	8	30
1,2,4-Trimethylbenzene	<25		3500	3230		ug/Kg	☼	92	70 - 123	1	30
1,3,5-Trimethylbenzene	<27		3500	3210		ug/Kg	☼	92	70 - 123	1	30
Vinyl chloride	<18	F1	3500	1240	F1	ug/Kg	☼	35	64 - 126	5	30
Xylenes, Total	<15		7010	6680		ug/Kg	☼	95	70 - 125	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*
Dibromofluoromethane (Surr)	*112*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Sample ID: MB 500-536092/7 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			03/31/20 10:29	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			03/31/20 10:29	1
Benzene	<0.15		0.25	0.15	ug/Kg			03/31/20 10:29	1

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

Lab Sample ID: MB 500-536092/7
Matrix: Solid
Analysis Batch: 536092

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.48		1.0	0.48	ug/Kg			03/31/20 10:29	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			03/31/20 10:29	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			03/31/20 10:29	1
Chloroform	<0.37		2.0	0.37	ug/Kg			03/31/20 10:29	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			03/31/20 10:29	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			03/31/20 10:29	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			03/31/20 10:29	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			03/31/20 10:29	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			03/31/20 10:29	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			03/31/20 10:29	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			03/31/20 10:29	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			03/31/20 10:29	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			03/31/20 10:29	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			03/31/20 10:29	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			03/31/20 10:29	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			03/31/20 10:29	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			03/31/20 10:29	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			03/31/20 10:29	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			03/31/20 10:29	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			03/31/20 10:29	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			03/31/20 10:29	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			03/31/20 10:29	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
Naphthalene	0.519	J	1.0	0.33	ug/Kg			03/31/20 10:29	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			03/31/20 10:29	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
Styrene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			03/31/20 10:29	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			03/31/20 10:29	1
Toluene	<0.15		0.25	0.15	ug/Kg			03/31/20 10:29	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			03/31/20 10:29	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			03/31/20 10:29	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			03/31/20 10:29	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			03/31/20 10:29	1

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

Lab Sample ID: MB 500-536092/7
Matrix: Solid
Analysis Batch: 536092

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.16		0.50	0.16	ug/Kg			03/31/20 10:29	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			03/31/20 10:29	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			03/31/20 10:29	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			03/31/20 10:29	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			03/31/20 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*03/31/20 10:29*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*03/31/20 10:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*03/31/20 10:29*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*03/31/20 10:29*	*1*

Lab Sample ID: LCS 500-536092/5
Matrix: Solid
Analysis Batch: 536092

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	46.2		ug/Kg		92	70 - 122
Bromochloromethane	50.0	50.1		ug/Kg		100	65 - 122
Bromodichloromethane	50.0	46.2		ug/Kg		92	69 - 120
Benzene	50.0	47.3		ug/Kg		95	70 - 120
Bromoform	50.0	50.0		ug/Kg		100	56 - 132
Bromomethane	50.0	60.7		ug/Kg		121	40 - 152
Carbon tetrachloride	50.0	52.3		ug/Kg		105	59 - 133
Chlorobenzene	50.0	50.0		ug/Kg		100	70 - 120
Chloroethane	50.0	46.2		ug/Kg		92	48 - 136
Chloroform	50.0	46.4		ug/Kg		93	70 - 120
Chloromethane	50.0	38.4		ug/Kg		77	56 - 152
2-Chlorotoluene	50.0	44.3		ug/Kg		89	70 - 125
4-Chlorotoluene	50.0	43.6		ug/Kg		87	68 - 124
cis-1,2-Dichloroethene	50.0	49.0		ug/Kg		98	70 - 125
cis-1,3-Dichloropropene	50.0	47.0		ug/Kg		94	64 - 127
Dibromochloromethane	50.0	49.5		ug/Kg		99	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	41.1		ug/Kg		82	56 - 123
1,2-Dibromoethane	50.0	48.3		ug/Kg		97	70 - 125
Dibromomethane	50.0	46.9		ug/Kg		94	70 - 120
1,2-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 125
1,3-Dichlorobenzene	50.0	47.3		ug/Kg		95	70 - 125
1,4-Dichlorobenzene	50.0	47.0		ug/Kg		94	70 - 120
Dichlorodifluoromethane	50.0	47.3		ug/Kg		95	40 - 159
1,1-Dichloroethane	50.0	45.5		ug/Kg		91	70 - 125
1,2-Dichloroethane	50.0	46.4		ug/Kg		93	68 - 127
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 122
1,2-Dichloropropane	50.0	44.0		ug/Kg		88	67 - 130
1,3-Dichloropropane	50.0	44.3		ug/Kg		89	62 - 136
2,2-Dichloropropane	50.0	48.3		ug/Kg		97	58 - 139

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

Lab Sample ID: LCS 500-536092/5 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	46.4		ug/Kg		93	70 - 121
Ethylbenzene	50.0	50.1		ug/Kg		100	70 - 123
Hexachlorobutadiene	50.0	44.0		ug/Kg		88	51 - 150
Isopropylbenzene	50.0	45.8		ug/Kg		92	70 - 126
Methylene Chloride	50.0	47.6		ug/Kg		95	69 - 125
Methyl tert-butyl ether	50.0	46.1		ug/Kg		92	55 - 123
Naphthalene	50.0	45.8		ug/Kg		92	53 - 144
n-Butylbenzene	50.0	45.6		ug/Kg		91	68 - 125
N-Propylbenzene	50.0	44.9		ug/Kg		90	69 - 127
p-Isopropyltoluene	50.0	47.2		ug/Kg		94	70 - 125
sec-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 123
Styrene	50.0	46.4		ug/Kg		93	70 - 120
tert-Butylbenzene	50.0	47.6		ug/Kg		95	70 - 121
1,1,1,2-Tetrachloroethane	50.0	52.4		ug/Kg		105	70 - 125
1,1,2,2-Tetrachloroethane	50.0	42.8		ug/Kg		86	62 - 140
Tetrachloroethene	50.0	50.6		ug/Kg		101	70 - 128
Toluene	50.0	46.7		ug/Kg		93	70 - 125
trans-1,2-Dichloroethene	50.0	50.0		ug/Kg		100	70 - 125
trans-1,3-Dichloropropene	50.0	45.6		ug/Kg		91	62 - 128
1,2,3-Trichlorobenzene	50.0	48.0		ug/Kg		96	51 - 145
1,2,4-Trichlorobenzene	50.0	49.2		ug/Kg		98	57 - 137
1,1,1-Trichloroethane	50.0	50.1		ug/Kg		100	70 - 125
1,1,2-Trichloroethane	50.0	45.4		ug/Kg		91	71 - 130
Trichloroethene	50.0	52.1		ug/Kg		104	70 - 125
Trichlorofluoromethane	50.0	52.5		ug/Kg		105	55 - 128
1,2,3-Trichloropropane	50.0	42.5		ug/Kg		85	50 - 133
1,2,4-Trimethylbenzene	50.0	44.2		ug/Kg		88	70 - 123
1,3,5-Trimethylbenzene	50.0	44.9		ug/Kg		90	70 - 123
Vinyl chloride	50.0	44.9		ug/Kg		90	64 - 126
Xylenes, Total	100	93.2		ug/Kg		93	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*
Dibromofluoromethane (Surr)	*106*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: MB 500-536376/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.25	0.15	ug/Kg			04/01/20 23:57	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			04/01/20 23:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			04/01/20 23:57	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			04/01/20 23:57	1
Toluene	<0.15		0.25	0.15	ug/Kg			04/01/20 23:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			04/01/20 23:57	1

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

Lab Sample ID: MB 500-536376/7 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			04/01/20 23:57	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			04/01/20 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*04/01/20 23:57*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 120*		*04/01/20 23:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*04/01/20 23:57*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*04/01/20 23:57*	*1*

Lab Sample ID: LCS 500-536376/4 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.2		ug/Kg		102	70 - 120
Ethylbenzene	50.0	48.5		ug/Kg		97	70 - 123
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	55 - 123
Naphthalene	50.0	58.4		ug/Kg		117	53 - 144
Toluene	50.0	50.0		ug/Kg		100	70 - 125
1,2,4-Trimethylbenzene	50.0	49.9		ug/Kg		100	70 - 123
1,3,5-Trimethylbenzene	50.0	50.8		ug/Kg		102	70 - 123
Xylenes, Total	100	94.2		ug/Kg		94	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*
Dibromofluoromethane (Surr)	*97*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
Toluene-d8 (Surr)	*95*		*75 - 120*

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

Lab Sample ID: MB 500-536022/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536113 — **Prep Batch: 536022**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<36		170	36	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1,2-Dichlorobenzene	<40		170	40	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1,3-Dichlorobenzene	<37		170	37	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1,4-Dichlorobenzene	<43		170	43	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,2'-oxybis[1-chloropropane]	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4,5-Trichlorophenol	<76		330	76	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4,6-Trichlorophenol	<110		330	110	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dichlorophenol	<79		330	79	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dimethylphenol	<130		330	130	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dinitrophenol	<590		670	590	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dinitrotoluene	<53		170	53	ug/Kg		03/30/20 18:18	03/31/20 11:54	1

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

Lab Sample ID: MB 500-536022/1-A
Matrix: Solid
Analysis Batch: 536113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	<65		170	65	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Chloronaphthalene	<37		170	37	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Chlorophenol	<57		170	57	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Methylphenol	<53		170	53	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Nitroaniline	<45		170	45	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Nitrophenol	<79		330	79	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
3 & 4 Methylphenol	<55		170	55	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
3,3'-Dichlorobenzidine	<47		170	47	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
3-Nitroaniline	<100		330	100	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4,6-Dinitro-2-methylphenol	<270		670	270	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Bromophenyl phenyl ether	<44		170	44	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Chloro-3-methylphenol	<110		330	110	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Chloroaniline	<160		670	160	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Chlorophenyl phenyl ether	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Nitroaniline	<140		330	140	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Nitrophenol	<320		670	320	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Acenaphthene	<6.0		33	6.0	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Anthracene	<5.6		33	5.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzoic acid	<330		1700	330	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzyl alcohol	<330		670	330	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Bis(2-chloroethoxy)methane	<34		170	34	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Bis(2-chloroethyl)ether	<50		170	50	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Bis(2-ethylhexyl) phthalate	<61		170	61	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Butyl benzyl phthalate	<63		170	63	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Carbazole	<83		170	83	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Chrysene	<9.1		33	9.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Dibenzofuran	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Diethyl phthalate	<56		170	56	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Dimethyl phthalate	<43		170	43	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Di-n-butyl phthalate	<51		170	51	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Di-n-octyl phthalate	<54		170	54	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Fluoranthene	<6.2		33	6.2	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Fluorene	<4.7		33	4.7	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachlorobenzene	<7.7		67	7.7	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachlorobutadiene	<52		170	52	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachlorocyclopentadiene	<190		670	190	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachloroethane	<51		170	51	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Isophorone	<37		170	37	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Naphthalene	<5.1		33	5.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Nitrobenzene	<8.3		33	8.3	ug/Kg		03/30/20 18:18	03/31/20 11:54	1

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

Lab Sample ID: MB 500-536022/1-A
Matrix: Solid
Analysis Batch: 536113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	<41		67	41	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
N-Nitrosodiphenylamine	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Pentachlorophenol	<530		670	530	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Phenanthrene	<4.6		33	4.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Phenol	<74		170	74	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Pyrene	<6.6		33	6.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*31 - 143*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
2-Fluorobiphenyl (Surr)	*104*		*43 - 145*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
2-Fluorophenol (Surr)	*85*		*31 - 166*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
Nitrobenzene-d5 (Surr)	*89*		*37 - 147*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
Phenol-d5 (Surr)	*80*		*30 - 153*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
Terphenyl-d14 (Surr)	*127*		*42 - 157*	*03/30/20 18:18*	*03/31/20 11:54*	*1*

Lab Sample ID: LCS 500-536022/2-A
Matrix: Solid
Analysis Batch: 536113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 536022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	1330	1310		ug/Kg		98	66 - 117
1,2-Dichlorobenzene	1330	1200		ug/Kg		90	62 - 110
1,3-Dichlorobenzene	1330	1240		ug/Kg		93	65 - 124
1,4-Dichlorobenzene	1330	1210		ug/Kg		91	61 - 110
1-Methylnaphthalene	1330	1380		ug/Kg		103	68 - 111
2,2'-oxybis[1-chloropropane]	1330	804		ug/Kg		60	40 - 124
2,4,5-Trichlorophenol	1330	1220		ug/Kg		91	50 - 120
2,4,6-Trichlorophenol	1330	1320		ug/Kg		99	57 - 120
2,4-Dichlorophenol	1330	1180		ug/Kg		88	58 - 120
2,4-Dimethylphenol	1330	1310		ug/Kg		98	60 - 110
2,4-Dinitrophenol	2670	789		ug/Kg		30	10 - 100
2,4-Dinitrotoluene	1330	1190		ug/Kg		89	69 - 124
2,6-Dinitrotoluene	1330	1370		ug/Kg		103	70 - 123
2-Chloronaphthalene	1330	1310		ug/Kg		98	69 - 114
2-Chlorophenol	1330	1330		ug/Kg		100	64 - 110
2-Methylnaphthalene	1330	1420		ug/Kg		107	69 - 112
2-Methylphenol	1330	1080		ug/Kg		81	60 - 120
2-Nitroaniline	1330	1150		ug/Kg		86	57 - 124
2-Nitrophenol	1330	1310		ug/Kg		98	60 - 120
3 & 4 Methylphenol	1330	1210		ug/Kg		91	57 - 120
3,3'-Dichlorobenzidine	1330	1120		ug/Kg		84	35 - 128
3-Nitroaniline	1330	1180		ug/Kg		89	40 - 122
4,6-Dinitro-2-methylphenol	2670	1240		ug/Kg		47	10 - 110
4-Bromophenyl phenyl ether	1330	1270		ug/Kg		95	68 - 118
4-Chloro-3-methylphenol	1330	1190		ug/Kg		89	65 - 122
4-Chloroaniline	1330	1210		ug/Kg		91	30 - 150
4-Chlorophenyl phenyl ether	1330	1240		ug/Kg		93	62 - 119
4-Nitroaniline	1330	1230		ug/Kg		93	60 - 160

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

Lab Sample ID: LCS 500-536022/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536113 **Prep Batch: 536022**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrophenol	2670	1690		ug/Kg		64	30 - 122
Acenaphthene	1330	1340		ug/Kg		101	65 - 124
Acenaphthylene	1330	1340		ug/Kg		100	68 - 120
Anthracene	1330	1380		ug/Kg		103	70 - 114
Benzo[a]anthracene	1330	1380		ug/Kg		104	67 - 122
Benzo[a]pyrene	1330	1320		ug/Kg		99	65 - 133
Benzo[b]fluoranthene	1330	1230		ug/Kg		92	69 - 129
Benzo[g,h,i]perylene	1330	1460		ug/Kg		109	72 - 131
Benzo[k]fluoranthene	1330	1400		ug/Kg		105	68 - 127
Benzoic acid	2670	1360	J	ug/Kg		51	10 - 100
Benzyl alcohol	1330	1660		ug/Kg		125	21 - 139
Bis(2-chloroethoxy)methane	1330	1110		ug/Kg		83	60 - 112
Bis(2-chloroethyl)ether	1330	1200		ug/Kg		90	55 - 111
Bis(2-ethylhexyl) phthalate	1330	1650		ug/Kg		124	72 - 131
Butyl benzyl phthalate	1330	1490		ug/Kg		112	71 - 129
Carbazole	1330	1490		ug/Kg		112	65 - 142
Chrysene	1330	1410		ug/Kg		105	63 - 120
Dibenz(a,h)anthracene	1330	1440		ug/Kg		108	64 - 131
Dibenzofuran	1330	1230		ug/Kg		92	66 - 115
Diethyl phthalate	1330	1410		ug/Kg		106	58 - 120
Dimethyl phthalate	1330	1360		ug/Kg		102	69 - 116
Di-n-butyl phthalate	1330	1460		ug/Kg		109	65 - 120
Di-n-octyl phthalate	1330	1470		ug/Kg		110	68 - 134
Fluoranthene	1330	1290		ug/Kg		97	62 - 120
Fluorene	1330	1370		ug/Kg		103	62 - 120
Hexachlorobenzene	1330	1400		ug/Kg		105	63 - 124
Hexachlorobutadiene	1330	1230		ug/Kg		92	56 - 120
Hexachlorocyclopentadiene	1330	537	J	ug/Kg		40	10 - 133
Hexachloroethane	1330	1140		ug/Kg		86	60 - 114
Indeno[1,2,3-cd]pyrene	1330	1450		ug/Kg		109	68 - 130
Isophorone	1330	1080		ug/Kg		81	55 - 110
Naphthalene	1330	1310		ug/Kg		98	63 - 110
Nitrobenzene	1330	1120		ug/Kg		84	60 - 116
N-Nitrosodi-n-propylamine	1330	923		ug/Kg		69	56 - 118
N-Nitrosodiphenylamine	1330	1460		ug/Kg		109	65 - 112
Pentachlorophenol	2670	2030		ug/Kg		76	13 - 112
Phenanthrene	1330	1380		ug/Kg		104	62 - 120
Phenol	1330	1130		ug/Kg		85	56 - 122
Pyrene	1330	1400		ug/Kg		105	61 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*120*		*31 - 143*
2-Fluorobiphenyl (Surr)	*98*		*43 - 145*
2-Fluorophenol (Surr)	*87*		*31 - 166*
Nitrobenzene-d5 (Surr)	*89*		*37 - 147*
Phenol-d5 (Surr)	*88*		*30 - 153*
Terphenyl-d14 (Surr)	*118*		*42 - 157*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: LB3 500-535627/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536061 — **Prep Batch: 535627**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<0.50		1.5	0.50	mg/Kg		03/26/20 21:15	04/01/20 01:11	50

Lab Sample ID: LCS 500-535627/23-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536061 — **Prep Batch: 535627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
WI Gasoline Range Organics (C5-C10)	20.0	21.8		mg/Kg		109	80 - 120

Lab Sample ID: LCSD 500-535627/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536061 — **Prep Batch: 535627**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
WI Gasoline Range Organics (C5-C10)	20.0	22.1		mg/Kg		110	80 - 120	1	20

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-536000/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536109 — **Prep Batch: 536000**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		03/30/20 15:53	03/31/20 08:42	1
PCB-1221	<7.3		17	7.3	ug/Kg		03/30/20 15:53	03/31/20 08:42	1
PCB-1232	<7.3		17	7.3	ug/Kg		03/30/20 15:53	03/31/20 08:42	1
PCB-1242	<5.5		17	5.5	ug/Kg		03/30/20 15:53	03/31/20 08:42	1
PCB-1248	<6.6		17	6.6	ug/Kg		03/30/20 15:53	03/31/20 08:42	1
PCB-1254	<3.6		17	3.6	ug/Kg		03/30/20 15:53	03/31/20 08:42	1
PCB-1260	<8.2		17	8.2	ug/Kg		03/30/20 15:53	03/31/20 08:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*102*		*49 - 129*	*03/30/20 15:53*	*03/31/20 08:42*	*1*
DCB Decachlorobiphenyl	*111*		*37 - 121*	*03/30/20 15:53*	*03/31/20 08:42*	*1*

Lab Sample ID: LCS 500-536000/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536109 — **Prep Batch: 536000**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	167	153		ug/Kg		92	57 - 120
PCB-1260	167	154		ug/Kg		92	61 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*100*		*49 - 129*
DCB Decachlorobiphenyl	*110*		*37 - 121*

Client: TRC Environmental Corporation.
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Job ID: 500-179774-1

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Lab Sample ID: MB 500-535546/1-A
Matrix: Solid
Analysis Batch: 535582

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535546

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg		03/26/20 11:52	03/26/20 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*76*		*44 - 148*	*03/26/20 11:52*	*03/26/20 16:43*	*1*

Lab Sample ID: LCS 500-535546/2-A
Matrix: Solid
Analysis Batch: 535582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535546

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
WI Diesel Range Organics (C10-C28)			20.0	18.3		mg/Kg		91	70 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Nonane	*74*		*44 - 148*

Lab Sample ID: LCSD 500-535546/3-A
Matrix: Solid
Analysis Batch: 535582

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
WI Diesel Range Organics (C10-C28)			20.0	20.4		mg/Kg		102	70 - 120	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Nonane	*72*		*44 - 148*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-535919/1-A
Matrix: Solid
Analysis Batch: 536055

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.34		1.0	0.34	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Barium	<0.11		1.0	0.11	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Cadmium	0.0555	J	0.20	0.036	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Chromium	<0.50		1.0	0.50	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Copper	<0.28		1.0	0.28	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Lead	<0.23		0.50	0.23	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Nickel	<0.29		1.0	0.29	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Selenium	<0.59		1.0	0.59	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Silver	<0.13		0.50	0.13	mg/Kg		03/30/20 07:39	03/30/20 17:35	1
Zinc	<0.88		2.0	0.88	mg/Kg		03/30/20 07:39	03/30/20 17:35	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-535919/2-A
Matrix: Solid
Analysis Batch: 536055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.0	9.60		mg/Kg		96	80 - 120
Barium	200	195		mg/Kg		97	80 - 120
Cadmium	5.00	4.61		mg/Kg		92	80 - 120
Chromium	20.0	19.5		mg/Kg		97	80 - 120
Copper	25.0	24.3		mg/Kg		97	80 - 120
Lead	10.0	9.31		mg/Kg		93	80 - 120
Nickel	50.0	48.3		mg/Kg		97	80 - 120
Selenium	10.0	8.58		mg/Kg		86	80 - 120
Silver	5.00	4.72		mg/Kg		94	80 - 120
Zinc	50.0	47.9		mg/Kg		96	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-536149/12-A
Matrix: Solid
Analysis Batch: 536337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0056		0.017	0.0056	mg/Kg		03/31/20 13:15	04/01/20 09:37	1

Lab Sample ID: LCS 500-536149/13-A
Matrix: Solid
Analysis Batch: 536337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 536149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.158		mg/Kg		95	80 - 120

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-01 (2'-4') — Lab Sample ID: 500-179774-1
Date Collected: 03/23/20 09:25 — **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-01 (2'-4') — Lab Sample ID: 500-179774-1
Date Collected: 03/23/20 09:25 — **Matrix: Solid**
Date Received: 03/24/20 08:50 — **Percent Solids: 88.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 09:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 12:54	JDD	TAL CHI
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 18:39	EEN	TAL CHI

Client Sample ID: GP-02 (2'-4') — Lab Sample ID: 500-179774-2
Date Collected: 03/23/20 09:50 — **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-02 (2'-4') — Lab Sample ID: 500-179774-2
Date Collected: 03/23/20 09:50 — **Matrix: Solid**
Date Received: 03/24/20 08:50 — **Percent Solids: 85.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 09:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 13:18	JDD	TAL CHI
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 18:43	EEN	TAL CHI

Client Sample ID: GP-02 (10'-12') — Lab Sample ID: 500-179774-3
Date Collected: 03/23/20 10:10 — **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-02 (10'-12') — Lab Sample ID: 500-179774-3
Date Collected: 03/23/20 10:10 — **Matrix: Solid**
Date Received: 03/24/20 08:50 — **Percent Solids: 86.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			535627	03/23/20 10:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 13:42	JDD	TAL CHI
Total/NA	Prep	WI GRO			535627	03/23/20 10:10	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		50	536061	04/01/20 02:21	WRE	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-02 (10'-12') Lab Sample ID: 500-179774-3

Date Collected: 03/23/20 10:10 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 18:47	EEN	TAL CHI

Client Sample ID: GP-03 (2'-4') Lab Sample ID: 500-179774-4

Date Collected: 03/23/20 10:45 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-03 (2'-4') Lab Sample ID: 500-179774-4

Date Collected: 03/23/20 10:45 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			536217	03/31/20 21:05	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 01:19	JDD	TAL CHI
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 18:59	EEN	TAL CHI

Client Sample ID: GP-03 (10'-12') Lab Sample ID: 500-179774-5

Date Collected: 03/23/20 11:20 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-03 (10'-12') Lab Sample ID: 500-179774-5

Date Collected: 03/23/20 11:20 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 86.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 11:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 14:06	JDD	TAL CHI
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 19:03	EEN	TAL CHI

Client Sample ID: GP-03 (12'-16') Lab Sample ID: 500-179774-6

Date Collected: 03/23/20 11:30 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-03 (12'-16') Lab Sample ID: 500-179774-6

Date Collected: 03/23/20 11:30 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 85.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 11:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 14:30	JDD	TAL CHI
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 19:07	EEN	TAL CHI

Client Sample ID: GP-04 (2'-4') Lab Sample ID: 500-179774-7

Date Collected: 03/23/20 11:55 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-04 (2'-4') Lab Sample ID: 500-179774-7

Date Collected: 03/23/20 11:55 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 89.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 11:55	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 14:54	JDD	TAL CHI

Client Sample ID: GP-04 (6'-8') Lab Sample ID: 500-179774-8

Date Collected: 03/23/20 12:05 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-04 (6'-8') Lab Sample ID: 500-179774-8

Date Collected: 03/23/20 12:05 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 12:05	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 15:18	JDD	TAL CHI

Client Sample ID: GP-05 (2'-4') Lab Sample ID: 500-179774-9

Date Collected: 03/23/20 12:40 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-05 (2'-4') Lab Sample ID: 500-179774-9

Date Collected: 03/23/20 12:40 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 87.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 12:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 15:42	JDD	TAL CHI

Client Sample ID: GP-05 (10'-12') Lab Sample ID: 500-179774-10

Date Collected: 03/23/20 12:50 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-05 (10'-12') Lab Sample ID: 500-179774-10

Date Collected: 03/23/20 12:50 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 85.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 12:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 16:06	JDD	TAL CHI

Client Sample ID: GP-06 (2'-4') Lab Sample ID: 500-179774-11

Date Collected: 03/23/20 13:30 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-06 (2'-4') Lab Sample ID: 500-179774-11

Date Collected: 03/23/20 13:30 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 88.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 13:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 16:30	JDD	TAL CHI

Client Sample ID: GP-07 (2'-4') Lab Sample ID: 500-179774-12

Date Collected: 03/23/20 13:45 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-07 (2'-4')
Lab Sample ID: 500-179774-12
Date Collected: 03/23/20 13:45 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 13:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 16:54	JDD	TAL CHI

Client Sample ID: GP-07 (6'-8')
Lab Sample ID: 500-179774-13
Date Collected: 03/23/20 14:00 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-07 (6'-8')
Lab Sample ID: 500-179774-13
Date Collected: 03/23/20 14:00 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 87.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 14:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 17:18	JDD	TAL CHI

Client Sample ID: GP-08 (2'-4')
Lab Sample ID: 500-179774-14
Date Collected: 03/23/20 14:20 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Client Sample ID: GP-08 (2'-4')
Lab Sample ID: 500-179774-14
Date Collected: 03/23/20 14:20 **Matrix: Solid**
Date Received: 03/24/20 08:50 **Percent Solids: 82.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/23/20 14:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 17:42	JDD	TAL CHI

Client Sample ID: GP-08 (10'-12')
Lab Sample ID: 500-179774-15
Date Collected: 03/23/20 14:40 **Matrix: Solid**
Date Received: 03/24/20 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:27	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-08 (10'-12')
Date Collected: 03/23/20 14:40
Date Received: 03/24/20 08:50

Lab Sample ID: 500-179774-15
Matrix: Solid
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			535627	03/23/20 14:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536092	03/31/20 18:06	JDD	TAL CHI
Total/NA	Prep	3541			536022	03/30/20 18:18	ACK	TAL CHI
Total/NA	Analysis	8270D		1	536182	04/01/20 01:32	NRJ	TAL CHI
Total/NA	Prep	WI GRO			535627	03/23/20 14:40	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		50	536061	04/01/20 02:55	WRE	TAL CHI
Total/NA	Prep	3541			536000	03/30/20 15:53	JP1	TAL CHI
Total/NA	Analysis	8082A		1	536109	03/31/20 09:13	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			535546	03/26/20 11:52	DAK	TAL CHI
Total/NA	Analysis	WI-DRO		1	535582	03/26/20 18:02	AK	TAL CHI
Total/NA	Prep	3050B			535919	03/30/20 07:39	LMN	TAL CHI
Total/NA	Analysis	6010C		1	536055	03/30/20 19:11	EEN	TAL CHI
Total/NA	Prep	7471B			536149	03/31/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	536337	04/01/20 09:41	MJG	TAL CHI

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation. Job ID: 500-179774-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

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

Chain of Custody Record

500-179774 COC

eurofins

Client Information	Sampler: A. Sobbe	Lab PM: Fredrick, Sandie	COC No: 500-79350-36559.1
Client Contact: Aaron Sobbe	Phone:	E-Mail: sandie.fredrick@testamericainc.com	Page: Page 1 of 6
Company: TRC Environmental Corporation.		Analysis Requested	Job #: 500-179774
Address: 150 N. Patrick Blvd. Suite 180	Due Date Requested:		Preservation Codes:
City: Brookfield	TAT Requested (days):		A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: WI, 53045	PO #: Purchase Order Requested		
Phone:	WO #:		Other:
Email: asobbe@trccompanies.com	Project #: 50016869		
Project Name: WisDOT 2667-03-01 Humboldt Ph 2.5 382056	SSOW#:		
Site:			

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PVOCs + naphthalene 8260	Lead 6010	GRO	Total Number of containers	Special Instructions/Note:
				Preservation Code:								
1	GP-01 (2'-4')	3-23-2020	925	G	Solid			X	X			
2	GP-02 (2'-4')		950		Solid			X	X			
3	GP-02 (10'-12')		1010		Solid			X	X	X		
4	GP-03 (2'-4')		1045		Solid			X	X			
5	GP-03 (10'-12')		1120		Solid			X	X			
6	GP-03 (12'-16')		1130		Solid			X	X			
7	GP-04 (2'-4')		1155		Solid			X				
8	GP-04 (6'-8')		1205		Solid			X				
9	GP-05 (2'-4')		1240		Solid			X				
10	GP-05 (10'-12')		1250		Solid			X				
11	GP-06 (2'-4')		1330		Solid			X				

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time:	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	3-23-2020/1700	TRC	[signature]	3/24/20 0850	TA
2	Relinquished by:	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

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

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

Chain of Custody Record

eurofins

Client Information	Sampler: A. Sobbe	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-79350-36559.2
Client Contact: Aaron Sobbe	Phone:	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 2 of 6
Company: TRC Environmental Corporation.		Analysis Requested		Job #: 500-179774
Address: 150 N. Patrick Blvd. Suite 180	Due Date Requested:			Preservation Codes:
City: Brookfield	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: WI, 53045				
Phone:	PO #: Purchase Order Requested			Other:
Email: asobbe@trccompanies.com	WO #:			
Project Name: WisDOT 2567-03-01 Humboldt Ph 2.5 382056	Project #: 50016669			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PAHs + naphthalene 8260	GRO	DRO	VOCs 8260	SVOCs	PCBs	11 RCRA metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
12 GP-07 (2'-4')	3-23-2020	1345	G	Solid			X								
13 GP-07 (6'-8')		1400		Solid			X								
14 GP-08 (2'-4')		1420		Solid			X								
15 GP-08 (10'-12')		1440		Solid				X	X	X	X	X	X		
Trip-01		-	G	Solid						X					
				Solid											
				Solid											
				Solid			3-23-2020								
				Solid											
				Solid											

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	3-23-2020/1700	TRC	[signature]	3/24/20 0850	TA
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

Login Sample Receipt Checklist

Client: TRC Environmental Corporation. Job Number: 500-179774-1

Login Number: 179774 **List Source: Eurofins TestAmerica, Chicago**
List Number: 1
Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	TB not received.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-179841-1
Client Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056
Revision: 1

For:
TRC Environmental Corporation.
150 N. Patrick Blvd.
Suite 180
Brookfield, Wisconsin 53045

Attn: Aaron Sobbe

Sandie Fredrick

Authorized for release by:
4/8/2020 2:24:21 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 500-179841-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-179841-1

Comments
REVISED: Client added PCE to samples 1 & 2.

Receipt
The samples were received on 3/25/2020 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method 5035: sample vial has < 8 grams of soil in 10 ml of methanol. GP-11 (2'-4') (500-179841-5)

Method 8260B: The laboratory control sample (LCS) for 536458 recovered outside control limits for the following analyte: 1,1,1-Trichloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The method blank for analytical batch 536092 contained Naphthalene above the Method dectection limit (MDL) but below reporting limit (RL). Naphthalene was non-dectect in the samples: therefore, no re-analysis was done and the data has been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 536370 were outside control limits for Methy tert-butyl ether. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The extraction LCS associated with preparation batch 535628 had several analytes recoveries above control limits. The instrument LCS associated with analytical batch 536458 had 1,1,1-Trichloroethane above control limits while the rest of the analytes within control limits; therefore re-analysis was not performed. The data have been reported and qualified. GP-09 (2'-4') (500-179841-1), GP-11 (2'-4') (500-179841-5), GP-11 (6'-8') (500-179841-6), GP-12 (2'-4') (500-179841-7), GP-13 (2'-4') (500-179841-8), GP-19 (2'-4') (500-179841-17), GP-19 (6'-8') (500-179841-18), GP-20 (2'-4') (500-179841-19), GP-21 (2'-4') (500-179841-20), GP-22 (2'-4') (500-179841-21), GP-22 (6'-8') (500-179841-22), Trip-02 (500-179841-23), (LCS 500-535628/22-A), (500-179841-A-13-A), (500-179841-A-13-A MS) and (500-179841-A-13-A MSD)

Method 8260B: The extraction LCS associated with preparation batch 535627 had Dibromomethane and Bromochloromethane recoveries above control limits. The instrument LCS associated with analytical batch 536092 had all recoveries within control limits. These analytes were non-detect in the samples; therefore re-analysis was not performed. The data have been reported and qualified. GP-09 (6'-8') (500-179841-2), GP-10 (2'-4') (500-179841-3), GP-10 (6'-8') (500-179841-4) and (LCS 500-535627/22-A)

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

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
Method WI-GRO: Significant peaks, readily distinguished from background, were detected in the following sample within five minutes after the end of the analytical window defined by the last component eluting in the Gasoline Range Organics (GRO) mix (i.e., Naphthalene): GP-10 (6'-8') (500-179841-4).

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

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

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

Job ID: 500-179841-1 (Continued)

Laboratory: Eurofins TestAmerica, Chicago (Continued)

Organic Prep

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

Detection Summary

Client: TRC Environmental Corporation.
Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-09 (2'-4') — Lab Sample ID: 500-179841-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	39		0.56	0.26	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-09 (6'-8') — Lab Sample ID: 500-179841-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.56	0.26	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-10 (2'-4') — Lab Sample ID: 500-179841-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.51	0.24	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-10 (6'-8') — Lab Sample ID: 500-179841-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	22	J	38	11	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	8.2	J	38	7.2	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	18	J	38	5.4	ug/Kg	1	☼	8270D	Total/NA
WI Gasoline Range Organics (C5-C10)	3.3		2.0	0.67	mg/Kg	50	☼	WI-GRO	Total/NA
Arsenic	7.1		1.1	0.38	mg/Kg	1	☼	6010C	Total/NA
Barium	19		1.1	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.15	J	0.22	0.040	mg/Kg	1	☼	6010C	Total/NA
Chromium	13		1.1	0.55	mg/Kg	1	☼	6010C	Total/NA
Copper	20		1.1	0.31	mg/Kg	1	☼	6010C	Total/NA
Lead	12		0.55	0.26	mg/Kg	1	☼	6010C	Total/NA
Nickel	27		1.1	0.32	mg/Kg	1	☼	6010C	Total/NA
Silver	0.22	J	0.55	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	41		2.2	0.97	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.011	J	0.019	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: GP-11 (2'-4') — Lab Sample ID: 500-179841-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.54	0.25	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-11 (6'-8') — Lab Sample ID: 500-179841-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	12		0.50	0.23	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: GP-12 (2'-4') — Lab Sample ID: 500-179841-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	1.0	J	2.5	1.0	mg/Kg	1	☼	WI-DRO	Total/NA

Client Sample ID: GP-13 (2'-4') — Lab Sample ID: 500-179841-8

No Detections.

Client Sample ID: GP-19 (2'-4') — Lab Sample ID: 500-179841-17

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-19 (6'-8') Lab Sample ID: 500-179841-18

No Detections.

Client Sample ID: GP-20 (2'-4') Lab Sample ID: 500-179841-19

No Detections.

Client Sample ID: GP-21 (2'-4') Lab Sample ID: 500-179841-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	4.5		4.0	1.6	mg/Kg	1	☼	WI-DRO	Total/NA

Client Sample ID: GP-22 (2'-4') Lab Sample ID: 500-179841-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	890		73	27	ug/Kg	50	☼	8260B	Total/NA

Client Sample ID: GP-22 (6'-8') Lab Sample ID: 500-179841-22

No Detections.

Client Sample ID: Trip-02 Lab Sample ID: 500-179841-23

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010C	Metals (ICP)	SW846	TAL CHI
7471B	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3050B	Preparation, Metals	SW846	TAL CHI
3541	Automated Soxhlet Extraction	SW846	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI
7471B	Preparation, Mercury	SW846	TAL CHI
WI DRO PREP	Wisconsin Extraction (Diesel Range Organics)	WI-DRO	TAL CHI
WI GRO	Closed System Purge and Trap	WI-GRO	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

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

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

Laboratory References:

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

Sample Summary

Client: TRC Environmental Corporation.
Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-179841-1	GP-09 (2'-4')	Solid	03/24/20 08:30	03/25/20 09:00	
500-179841-2	GP-09 (6'-8')	Solid	03/24/20 08:35	03/25/20 09:00	
500-179841-3	GP-10 (2'-4')	Solid	03/24/20 08:45	03/25/20 09:00	
500-179841-4	GP-10 (6'-8')	Solid	03/24/20 08:55	03/25/20 09:00	
500-179841-5	GP-11 (2'-4')	Solid	03/24/20 09:05	03/25/20 09:00	
500-179841-6	GP-11 (6'-8')	Solid	03/24/20 09:15	03/25/20 09:00	
500-179841-7	GP-12 (2'-4')	Solid	03/24/20 09:45	03/25/20 09:00	
500-179841-8	GP-13 (2'-4')	Solid	03/24/20 09:50	03/25/20 09:00	
500-179841-17	GP-19 (2'-4')	Solid	03/24/20 12:25	03/25/20 09:00	
500-179841-18	GP-19 (6'-8')	Solid	03/24/20 12:35	03/25/20 09:00	
500-179841-19	GP-20 (2'-4')	Solid	03/24/20 12:50	03/25/20 09:00	
500-179841-20	GP-21 (2'-4')	Solid	03/24/20 13:00	03/25/20 09:00	
500-179841-21	GP-22 (2'-4')	Solid	03/24/20 13:20	03/25/20 09:00	
500-179841-22	GP-22 (6'-8')	Solid	03/24/20 13:30	03/25/20 09:00	
500-179841-23	Trip-02	Solid	03/24/20 00:00	03/25/20 09:00	

Client Sample ID: GP-09 (2'-4')

Lab Sample ID: 500-179841-1
Date Collected: 03/24/20 08:30
Matrix: Solid
Date Received: 03/25/20 09:00
Percent Solids: 77.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<12		20	12	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
Ethylbenzene	<15		20	15	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
Methyl tert-butyl ether	<31	*	80	31	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
Naphthalene	<27		80	27	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
Tetrachloroethene	<29		80	29	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
Toluene	<12		20	12	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
1,2,4-Trimethylbenzene	<28		80	28	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
1,3,5-Trimethylbenzene	<30		80	30	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50
Xylenes, Total	<18		40	18	ug/Kg	☼	03/24/20 08:30	04/02/20 01:46	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/24/20 08:30*	*04/02/20 01:46*	*50*
Dibromofluoromethane (Surr)	*99*		*75 - 120*	*03/24/20 08:30*	*04/02/20 01:46*	*50*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*03/24/20 08:30*	*04/02/20 01:46*	*50*
Toluene-d8 (Surr)	*93*		*75 - 120*	*03/24/20 08:30*	*04/02/20 01:46*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**39**		0.56	0.26	mg/Kg	☼	03/30/20 17:03	03/31/20 10:31	1

Client Sample ID: GP-09 (6'-8')

Lab Sample ID: 500-179841-2
Date Collected: 03/24/20 08:35
Matrix: Solid
Date Received: 03/25/20 09:00
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.6		16	9.6	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
Methyl tert-butyl ether	<26		66	26	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
Naphthalene	<22		66	22	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
Tetrachloroethene	<24		66	24	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
Toluene	<9.7		16	9.7	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50
Xylenes, Total	<14		33	14	ug/Kg	☼	03/24/20 08:35	04/02/20 02:13	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*	*03/24/20 08:35*	*04/02/20 02:13*	*50*
Dibromofluoromethane (Surr)	*98*		*75 - 120*	*03/24/20 08:35*	*04/02/20 02:13*	*50*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*03/24/20 08:35*	*04/02/20 02:13*	*50*
Toluene-d8 (Surr)	*93*		*75 - 120*	*03/24/20 08:35*	*04/02/20 02:13*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**15**		0.56	0.26	mg/Kg	☼	03/30/20 17:03	03/31/20 10:35	1

Client Sample ID: GP-10 (2'-4')

Lab Sample ID: 500-179841-3
Date Collected: 03/24/20 08:45 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 88.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.5		16	9.5	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
Methyl tert-butyl ether	<26	*	65	26	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
Naphthalene	<22		65	22	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
Toluene	<9.6		16	9.6	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50
Xylenes, Total	<14		33	14	ug/Kg	☼	03/24/20 08:45	04/02/20 02:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/24/20 08:45*	*04/02/20 02:41*	*50*
Dibromofluoromethane (Surr)	*100*		*75 - 120*	*03/24/20 08:45*	*04/02/20 02:41*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*	*03/24/20 08:45*	*04/02/20 02:41*	*50*
Toluene-d8 (Surr)	*94*		*75 - 120*	*03/24/20 08:45*	*04/02/20 02:41*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**15**		0.51	0.24	mg/Kg	☼	03/30/20 17:03	03/31/20 10:39	1

Client Sample ID: GP-10 (6'-8')

Lab Sample ID: 500-179841-4
Date Collected: 03/24/20 08:55 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.8		17	9.8	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Bromobenzene	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Bromochloromethane	<29	*	67	29	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Bromodichloromethane	<25		67	25	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Bromoform	<32		67	32	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Bromomethane	<53		200	53	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Carbon tetrachloride	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Chlorobenzene	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Chloroethane	<34		67	34	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Chloroform	<25		130	25	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Chloromethane	<21		67	21	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
2-Chlorotoluene	<21		67	21	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
4-Chlorotoluene	<23		67	23	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
cis-1,2-Dichloroethene	<27		67	27	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
cis-1,3-Dichloropropene	<28		67	28	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Dibromochloromethane	<33		67	33	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2-Dibromo-3-Chloropropane	<130		340	130	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2-Dibromoethane	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Dibromomethane	<18	*	67	18	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2-Dichlorobenzene	<22		67	22	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,3-Dichlorobenzene	<27		67	27	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,4-Dichlorobenzene	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Dichlorodifluoromethane	<45		200	45	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,1-Dichloroethane	<27		67	27	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2-Dichloroethane	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50

Client: TRC Environmental Corporation.
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Job ID: 500-179841-1

Client Sample ID: GP-10 (6'-8')
Date Collected: 03/24/20 08:55
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-4
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2-Dichloropropane	<29		67	29	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,3-Dichloropropane	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
2,2-Dichloropropane	<30		67	30	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,1-Dichloropropene	<20		67	20	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Ethylbenzene	<12		17	12	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Hexachlorobutadiene	<30		67	30	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Isopropylbenzene	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Isopropyl ether	<19		67	19	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Methylene Chloride	<110		340	110	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Methyl tert-butyl ether	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Naphthalene	<22		67	22	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
n-Butylbenzene	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
N-Propylbenzene	<28		67	28	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
p-Isopropyltoluene	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
sec-Butylbenzene	<27		67	27	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Styrene	<26		67	26	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
tert-Butylbenzene	<27		67	27	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,1,1,2-Tetrachloroethane	<31		67	31	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,1,2,2-Tetrachloroethane	<27		67	27	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Tetrachloroethene	<25		67	25	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Toluene	<9.9		17	9.9	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
trans-1,2-Dichloroethene	<23		67	23	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
trans-1,3-Dichloropropene	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2,3-Trichlorobenzene	<31		67	31	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2,4-Trichlorobenzene	<23		67	23	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,1,1-Trichloroethane	<25	*	67	25	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,1,2-Trichloroethane	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Trichloroethene	<11		34	11	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Trichlorofluoromethane	<29		67	29	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2,3-Trichloropropane	<28		130	28	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,2,4-Trimethylbenzene	<24		67	24	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
1,3,5-Trimethylbenzene	<25		67	25	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Vinyl chloride	<18		67	18	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50
Xylenes, Total	<15		34	15	ug/Kg	☼	03/24/20 08:55	04/02/20 18:09	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*72 - 124*	*03/24/20 08:55*	*04/02/20 18:09*	*50*
Dibromofluoromethane (Surr)	*106*		*75 - 120*	*03/24/20 08:55*	*04/02/20 18:09*	*50*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*	*03/24/20 08:55*	*04/02/20 18:09*	*50*
Toluene-d8 (Surr)	*97*		*75 - 120*	*03/24/20 08:55*	*04/02/20 18:09*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<42		190	42	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
1,2-Dichlorobenzene	<46		190	46	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
1,3-Dichlorobenzene	<43		190	43	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
1,4-Dichlorobenzene	<49		190	49	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
1-Methylnaphthalene	<9.4		78	9.4	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,2'-oxybis[1-chloropropane]	<45		190	45	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1

Client Sample ID: GP-10 (6'-8')
Date Collected: 03/24/20 08:55
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-4
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<88		380	88	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,4,6-Trichlorophenol	<130		380	130	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,4-Dichlorophenol	<92		380	92	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,4-Dimethylphenol	<150		380	150	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,4-Dinitrophenol	<680		780	680	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,4-Dinitrotoluene	<61		190	61	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2,6-Dinitrotoluene	<76		190	76	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2-Chloronaphthalene	<43		190	43	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2-Chlorophenol	<66		190	66	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2-Methylnaphthalene	<7.1		78	7.1	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2-Methylphenol	<62		190	62	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2-Nitroaniline	<52		190	52	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
2-Nitrophenol	<91		380	91	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
3 & 4 Methylphenol	<64		190	64	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
3,3'-Dichlorobenzidine	<54		190	54	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
3-Nitroaniline	<120		380	120	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4,6-Dinitro-2-methylphenol	<310		780	310	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4-Bromophenyl phenyl ether	<51		190	51	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4-Chloro-3-methylphenol	<130		380	130	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4-Chloroaniline	<180		780	180	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4-Chlorophenyl phenyl ether	<45		190	45	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4-Nitroaniline	<160		380	160	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
4-Nitrophenol	<370		780	370	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Acenaphthene	<6.9		38	6.9	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Acenaphthylene	<5.1		38	5.1	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Anthracene	<6.4		38	6.4	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzo[a]anthracene	<5.2		38	5.2	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzo[a]pyrene	<7.5		38	7.5	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzo[b]fluoranthene	<8.3		38	8.3	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzo[g,h,i]perylene	<12		38	12	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzo[k]fluoranthene	<11		38	11	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzoic acid	<380		1900	380	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Benzyl alcohol	<380		780	380	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Bis(2-chloroethoxy)methane	<39		190	39	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Bis(2-chloroethyl)ether	<58		190	58	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Bis(2-ethylhexyl) phthalate	<71		190	71	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Butyl benzyl phthalate	<73		190	73	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Carbazole	<96		190	96	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Chrysene	**22**	**J**	38	11	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Dibenz(a,h)anthracene	<7.5		38	7.5	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Dibenzofuran	<45		190	45	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Diethyl phthalate	<65		190	65	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Dimethyl phthalate	<50		190	50	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Di-n-butyl phthalate	<59		190	59	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Di-n-octyl phthalate	<63		190	63	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Fluoranthene	**8.2**	**J**	38	7.2	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Fluorene	<5.4		38	5.4	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Hexachlorobenzene	<8.9		78	8.9	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Hexachlorobutadiene	<61		190	61	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1

Client Sample ID: GP-10 (6'-8')
Date Collected: 03/24/20 08:55
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-4
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	<220		780	220	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Hexachloroethane	<59		190	59	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Indeno[1,2,3-cd]pyrene	<10		38	10	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Isophorone	<43		190	43	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Naphthalene	<5.9		38	5.9	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Nitrobenzene	<9.6		38	9.6	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
N-Nitrosodi-n-propylamine	<47		78	47	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
N-Nitrosodiphenylamine	<46		190	46	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Pentachlorophenol	<620		780	620	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Phenanthrene	**18**	**J**	38	5.4	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Phenol	<86		190	86	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1
Pyrene	<7.7		38	7.7	ug/Kg	☼	03/30/20 18:18	04/01/20 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*31 - 143*	*03/30/20 18:18*	*04/01/20 02:00*	*1*
2-Fluorobiphenyl (Surr)	*86*		*43 - 145*	*03/30/20 18:18*	*04/01/20 02:00*	*1*
2-Fluorophenol (Surr)	*91*		*31 - 166*	*03/30/20 18:18*	*04/01/20 02:00*	*1*
Nitrobenzene-d5 (Surr)	*80*		*37 - 147*	*03/30/20 18:18*	*04/01/20 02:00*	*1*
Phenol-d5 (Surr)	*87*		*30 - 153*	*03/30/20 18:18*	*04/01/20 02:00*	*1*
Terphenyl-d14 (Surr)	*103*		*42 - 157*	*03/30/20 18:18*	*04/01/20 02:00*	*1*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	**3.3**		2.0	0.67	mg/Kg	☼	03/24/20 08:55	04/01/20 03:30	50

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.8		19	6.8	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1
PCB-1221	<8.5		19	8.5	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1
PCB-1232	<8.4		19	8.4	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1
PCB-1242	<6.4		19	6.4	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1
PCB-1248	<7.6		19	7.6	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1
PCB-1254	<4.2		19	4.2	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1
PCB-1260	<9.5		19	9.5	ug/Kg	☼	03/31/20 16:25	04/01/20 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*115*		*49 - 129*	*03/31/20 16:25*	*04/01/20 12:02*	*1*
DCB Decachlorobiphenyl	*113*		*37 - 121*	*03/31/20 16:25*	*04/01/20 12:02*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.1**		1.1	0.38	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Barium	**19**		1.1	0.13	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Cadmium	**0.15**	**J**	0.22	0.040	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Chromium	**13**		1.1	0.55	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Copper	**20**		1.1	0.31	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Lead	**12**		0.55	0.26	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Nickel	**27**		1.1	0.32	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Selenium	<0.65		1.1	0.65	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1
Silver	**0.22**	**J**	0.55	0.14	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1

Client Sample ID: GP-10 (6'-8')
Lab Sample ID: 500-179841-4
Date Collected: 03/24/20 08:55 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.9**

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	41		2.2	0.97	mg/Kg	☼	03/30/20 17:03	03/31/20 10:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.019	0.0062	mg/Kg	☼	03/31/20 13:15	04/01/20 09:43	1

Client Sample ID: GP-11 (2'-4')
Lab Sample ID: 500-179841-5
Date Collected: 03/24/20 09:05 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 82.5**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<13		23	13	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
Ethylbenzene	<17		23	17	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
Methyl tert-butyl ether	<36	*	90	36	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
Naphthalene	<30		90	30	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
Toluene	<13		23	13	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
1,2,4-Trimethylbenzene	<32		90	32	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
1,3,5-Trimethylbenzene	<34		90	34	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50
Xylenes, Total	<20		45	20	ug/Kg	☼	03/24/20 09:05	04/02/20 03:08	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*	*03/24/20 09:05*	*04/02/20 03:08*	*50*
Dibromofluoromethane (Surr)	*99*		*75 - 120*	*03/24/20 09:05*	*04/02/20 03:08*	*50*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*	*03/24/20 09:05*	*04/02/20 03:08*	*50*
Toluene-d8 (Surr)	*93*		*75 - 120*	*03/24/20 09:05*	*04/02/20 03:08*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.54	0.25	mg/Kg	☼	03/30/20 17:03	03/31/20 10:47	1

Client Sample ID: GP-11 (6'-8')
Lab Sample ID: 500-179841-6
Date Collected: 03/24/20 09:15 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 87.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<9.4		16	9.4	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
Ethylbenzene	<12		16	12	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
Methyl tert-butyl ether	<25	*	65	25	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
Naphthalene	<22		65	22	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
Toluene	<9.5		16	9.5	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50
Xylenes, Total	<14		32	14	ug/Kg	☼	03/24/20 09:15	04/02/20 03:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*	*03/24/20 09:15*	*04/02/20 03:35*	*50*
Dibromofluoromethane (Surr)	*97*		*75 - 120*	*03/24/20 09:15*	*04/02/20 03:35*	*50*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*03/24/20 09:15*	*04/02/20 03:35*	*50*
Toluene-d8 (Surr)	*94*		*75 - 120*	*03/24/20 09:15*	*04/02/20 03:35*	*50*

Client Sample ID: GP-11 (6'-8')
Lab Sample ID: 500-179841-6
Date Collected: 03/24/20 09:15 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 87.4**

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		0.50	0.23	mg/Kg	☼	03/30/20 17:03	03/31/20 10:51	1

Client Sample ID: GP-12 (2'-4')
Lab Sample ID: 500-179841-7
Date Collected: 03/24/20 09:45 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 87.2**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<11		19	11	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
Ethylbenzene	<14		19	14	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
Methyl tert-butyl ether	<29	*	74	29	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
Naphthalene	<25		74	25	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
Toluene	<11		19	11	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
1,2,4-Trimethylbenzene	<27		74	27	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
1,3,5-Trimethylbenzene	<28		74	28	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50
Xylenes, Total	<16		37	16	ug/Kg	☼	03/24/20 09:45	04/02/20 04:02	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/24/20 09:45*	*04/02/20 04:02*	*50*
Dibromofluoromethane (Surr)	*100*		*75 - 120*	*03/24/20 09:45*	*04/02/20 04:02*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/24/20 09:45*	*04/02/20 04:02*	*50*
Toluene-d8 (Surr)	*95*		*75 - 120*	*03/24/20 09:45*	*04/02/20 04:02*	*50*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	1.0	J	2.5	1.0	mg/Kg	☼	03/26/20 11:52	03/26/20 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*71*		*44 - 148*	*03/26/20 11:52*	*03/26/20 18:55*	*1*

Client Sample ID: GP-13 (2'-4')
Lab Sample ID: 500-179841-8
Date Collected: 03/24/20 09:50 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 81.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<11		18	11	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
Methyl tert-butyl ether	<29	*	73	29	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
Naphthalene	<24		73	24	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
Toluene	<11		18	11	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
1,2,4-Trimethylbenzene	<26		73	26	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
1,3,5-Trimethylbenzene	<28		73	28	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50
Xylenes, Total	<16		36	16	ug/Kg	☼	03/24/20 09:50	04/02/20 04:29	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*	*03/24/20 09:50*	*04/02/20 04:29*	*50*
Dibromofluoromethane (Surr)	*101*		*75 - 120*	*03/24/20 09:50*	*04/02/20 04:29*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/24/20 09:50*	*04/02/20 04:29*	*50*
Toluene-d8 (Surr)	*94*		*75 - 120*	*03/24/20 09:50*	*04/02/20 04:29*	*50*

Client: TRC Environmental Corporation.
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Job ID: 500-179841-1

Client Sample ID: GP-13 (2'-4')

Date Collected: 03/24/20 09:50
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-8

Matrix: Solid
Percent Solids: 81.7

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg	☼	03/26/20 11:52	03/26/20 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*74*		*44 - 148*	*03/26/20 11:52*	*03/26/20 19:21*	*1*

Client Sample ID: GP-19 (2'-4')

Date Collected: 03/24/20 12:25
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-17

Matrix: Solid
Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<11		18	11	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Bromobenzene	<26		74	26	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Bromochloromethane	<32	*	74	32	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Bromodichloromethane	<27	*	74	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Bromoform	<36	*	74	36	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Bromomethane	<59		220	59	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Carbon tetrachloride	<28		74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Chlorobenzene	<28		74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Chloroethane	<37		74	37	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Chloroform	<27	*	150	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Chloromethane	<24		74	24	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
2-Chlorotoluene	<23		74	23	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
4-Chlorotoluene	<26		74	26	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
cis-1,2-Dichloroethene	<30	*	74	30	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
cis-1,3-Dichloropropene	<31		74	31	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Dibromochloromethane	<36		74	36	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2-Dibromoethane	<28		74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Dibromomethane	<20		74	20	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2-Dichlorobenzene	<25		74	25	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,3-Dichlorobenzene	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,4-Dichlorobenzene	<27		74	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Dichlorodifluoromethane	<50		220	50	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1-Dichloroethane	<30		74	30	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2-Dichloroethane	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1-Dichloroethene	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2-Dichloropropane	<32		74	32	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,3-Dichloropropane	<27		74	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
2,2-Dichloropropane	<33		74	33	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1-Dichloropropene	<22	*	74	22	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Hexachlorobutadiene	<33	*	74	33	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Isopropylbenzene	<28		74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Isopropyl ether	<20		74	20	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Methylene Chloride	<120		370	120	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Methyl tert-butyl ether	<29	*	74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Naphthalene	<25		74	25	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
n-Butylbenzene	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
N-Propylbenzene	<30		74	30	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50

Client Sample ID: GP-19 (2'-4')

Lab Sample ID: 500-179841-17
Date Collected: 03/24/20 12:25 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 81.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<27		74	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
sec-Butylbenzene	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Styrene	<28		74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
tert-Butylbenzene	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1,1,2-Tetrachloroethane	<34		74	34	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1,2,2-Tetrachloroethane	<29		74	29	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Tetrachloroethene	<27		74	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Toluene	<11		18	11	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
trans-1,2-Dichloroethene	<26	*	74	26	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
trans-1,3-Dichloropropene	<27		74	27	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2,3-Trichlorobenzene	<34		74	34	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2,4-Trichlorobenzene	<25		74	25	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1,1-Trichloroethane	<28	*	74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,1,2-Trichloroethane	<26		74	26	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Trichloroethene	<12		37	12	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Trichlorofluoromethane	<32		74	32	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2,3-Trichloropropane	<30		150	30	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,2,4-Trimethylbenzene	<26		74	26	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
1,3,5-Trimethylbenzene	<28		74	28	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Vinyl chloride	<19		74	19	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50
Xylenes, Total	<16		37	16	ug/Kg	☼	03/24/20 12:25	04/02/20 19:50	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*72 - 124*	*03/24/20 12:25*	*04/02/20 19:50*	*50*
Dibromofluoromethane (Surr)	*100*		*75 - 120*	*03/24/20 12:25*	*04/02/20 19:50*	*50*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*	*03/24/20 12:25*	*04/02/20 19:50*	*50*
Toluene-d8 (Surr)	*103*		*75 - 120*	*03/24/20 12:25*	*04/02/20 19:50*	*50*

Client Sample ID: GP-19 (6'-8')

Lab Sample ID: 500-179841-18
Date Collected: 03/24/20 12:35 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 91.0**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<8.9		15	8.9	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Bromobenzene	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Bromochloromethane	<26	*	61	26	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Bromodichloromethane	<23	*	61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Bromoform	<29	*	61	29	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Bromomethane	<48		180	48	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Carbon tetrachloride	<23		61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Chlorobenzene	<23		61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Chloroethane	<31		61	31	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Chloroform	<22	*	120	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Chloromethane	<19		61	19	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
2-Chlorotoluene	<19		61	19	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
4-Chlorotoluene	<21		61	21	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
cis-1,2-Dichloroethene	<25	*	61	25	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
cis-1,3-Dichloropropene	<25		61	25	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Dibromochloromethane	<30		61	30	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50

Client Sample ID: GP-19 (6'-8')
Date Collected: 03/24/20 12:35
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-18
Matrix: Solid
Percent Solids: 91.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<120		300	120	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2-Dibromoethane	<23		61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Dibromomethane	<16		61	16	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2-Dichlorobenzene	<20		61	20	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,3-Dichlorobenzene	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,4-Dichlorobenzene	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Dichlorodifluoromethane	<41		180	41	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1-Dichloroethane	<25		61	25	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2-Dichloroethane	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1-Dichloroethene	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2-Dichloropropane	<26		61	26	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,3-Dichloropropane	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
2,2-Dichloropropane	<27		61	27	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1-Dichloropropene	<18	*	61	18	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Ethylbenzene	<11		15	11	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Hexachlorobutadiene	<27	*	61	27	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Isopropylbenzene	<23		61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Isopropyl ether	<17		61	17	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Methylene Chloride	<99		300	99	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Methyl tert-butyl ether	<24	*	61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Naphthalene	<20		61	20	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
n-Butylbenzene	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
N-Propylbenzene	<25		61	25	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
p-Isopropyltoluene	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
sec-Butylbenzene	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Styrene	<23		61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
tert-Butylbenzene	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1,1,2-Tetrachloroethane	<28		61	28	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1,2,2-Tetrachloroethane	<24		61	24	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Tetrachloroethene	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Toluene	<8.9		15	8.9	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
trans-1,2-Dichloroethene	<21	*	61	21	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
trans-1,3-Dichloropropene	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2,3-Trichlorobenzene	<28		61	28	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2,4-Trichlorobenzene	<21		61	21	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1,1-Trichloroethane	<23	*	61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,1,2-Trichloroethane	<21		61	21	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Trichloroethene	<10		30	10	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Trichlorofluoromethane	<26		61	26	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2,3-Trichloropropane	<25		120	25	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,2,4-Trimethylbenzene	<22		61	22	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
1,3,5-Trimethylbenzene	<23		61	23	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Vinyl chloride	<16		61	16	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50
Xylenes, Total	<13		30	13	ug/Kg	☼	03/24/20 12:35	04/02/20 20:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*	*03/24/20 12:35*	*04/02/20 20:16*	*50*
Dibromofluoromethane (Surr)	*105*		*75 - 120*	*03/24/20 12:35*	*04/02/20 20:16*	*50*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*	*03/24/20 12:35*	*04/02/20 20:16*	*50*
Toluene-d8 (Surr)	*98*		*75 - 120*	*03/24/20 12:35*	*04/02/20 20:16*	*50*

Client: TRC Environmental Corporation.
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Job ID: 500-179841-1

Client Sample ID: GP-20 (2'-4')
Date Collected: 03/24/20 12:50
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-19
Matrix: Solid
Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		17	10	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Bromobenzene	<24		69	24	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Bromochloromethane	<29	*	69	29	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Bromodichloromethane	<25	*	69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Bromoform	<33	*	69	33	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Bromomethane	<55		210	55	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Carbon tetrachloride	<26		69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Chlorobenzene	<26		69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Chloroethane	<35		69	35	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Chloroform	<25	*	140	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Chloromethane	<22		69	22	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
2-Chlorotoluene	<22		69	22	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
4-Chlorotoluene	<24		69	24	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
cis-1,2-Dichloroethene	<28	*	69	28	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
cis-1,3-Dichloropropene	<29		69	29	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Dibromochloromethane	<33		69	33	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2-Dibromo-3-Chloropropane	<140		340	140	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2-Dibromoethane	<26		69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Dibromomethane	<18		69	18	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2-Dichlorobenzene	<23		69	23	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,3-Dichlorobenzene	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,4-Dichlorobenzene	<25		69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Dichlorodifluoromethane	<46		210	46	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1-Dichloroethane	<28		69	28	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2-Dichloroethane	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1-Dichloroethene	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2-Dichloropropane	<29		69	29	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,3-Dichloropropane	<25		69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
2,2-Dichloropropane	<30		69	30	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1-Dichloropropene	<20	*	69	20	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Ethylbenzene	<13		17	13	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Hexachlorobutadiene	<31	*	69	31	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Isopropylbenzene	<26		69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Isopropyl ether	<19		69	19	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Methylene Chloride	<110		340	110	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Methyl tert-butyl ether	<27	*	69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Naphthalene	<23		69	23	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
n-Butylbenzene	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
N-Propylbenzene	<28		69	28	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
p-Isopropyltoluene	<25		69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
sec-Butylbenzene	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Styrene	<26		69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
tert-Butylbenzene	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1,1,2-Tetrachloroethane	<32		69	32	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1,2,2-Tetrachloroethane	<27		69	27	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Tetrachloroethene	<25		69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Toluene	<10		17	10	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
trans-1,2-Dichloroethene	<24	*	69	24	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
trans-1,3-Dichloropropene	<25		69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50

Client Sample ID: GP-20 (2'-4')

Lab Sample ID: 500-179841-19
Date Collected: 03/24/20 12:50 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<31		69	31	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2,4-Trichlorobenzene	<23		69	23	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1,1-Trichloroethane	<26	*	69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,1,2-Trichloroethane	<24		69	24	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Trichloroethene	<11		34	11	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Trichlorofluoromethane	<29		69	29	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2,3-Trichloropropane	<28		140	28	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,2,4-Trimethylbenzene	<25		69	25	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
1,3,5-Trimethylbenzene	<26		69	26	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Vinyl chloride	<18		69	18	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50
Xylenes, Total	<15		34	15	ug/Kg	☼	03/24/20 12:50	04/02/20 20:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*72 - 124*	*03/24/20 12:50*	*04/02/20 20:41*	*50*
Dibromofluoromethane (Surr)	*97*		*75 - 120*	*03/24/20 12:50*	*04/02/20 20:41*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/24/20 12:50*	*04/02/20 20:41*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*03/24/20 12:50*	*04/02/20 20:41*	*50*

Client Sample ID: GP-21 (2'-4')

Lab Sample ID: 500-179841-20
Date Collected: 03/24/20 13:00 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 82.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		18	10	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Bromobenzene	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Bromochloromethane	<30	*	70	30	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Bromodichloromethane	<26	*	70	26	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Bromoform	<34	*	70	34	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Bromomethane	<56		210	56	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Chlorobenzene	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Chloroethane	<35		70	35	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Chloroform	<26	*	140	26	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Chloromethane	<22		70	22	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
4-Chlorotoluene	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
cis-1,2-Dichloroethene	<29	*	70	29	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Dibromochloromethane	<34		70	34	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2-Dibromoethane	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Dibromomethane	<19		70	19	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2-Dichlorobenzene	<23		70	23	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,4-Dichlorobenzene	<26		70	26	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2-Dichloroethane	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50

Client: TRC Environmental Corporation.
Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-21 (2'-4')
Lab Sample ID: 500-179841-20
Date Collected: 03/24/20 13:00
Matrix: Solid
Date Received: 03/25/20 09:00
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
2,2-Dichloropropane	<31		70	31	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1-Dichloropropene	<21	*	70	21	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Hexachlorobutadiene	<31	*	70	31	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Isopropyl ether	<19		70	19	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Methylene Chloride	<110		350	110	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Methyl tert-butyl ether	<28	*	70	28	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Naphthalene	<23		70	23	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
p-Isopropyltoluene	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
sec-Butylbenzene	<28		70	28	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Styrene	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1,1,2-Tetrachloroethane	<32		70	32	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Toluene	<10		18	10	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
trans-1,2-Dichloroethene	<25	*	70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1,1-Trichloroethane	<27	*	70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Trichloroethene	<11		35	11	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,2,4-Trimethylbenzene	<25		70	25	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
1,3,5-Trimethylbenzene	<27		70	27	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Vinyl chloride	<18		70	18	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50
Xylenes, Total	<15		35	15	ug/Kg	☼	03/24/20 13:00	04/03/20 06:48	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*	*03/24/20 13:00*	*04/03/20 06:48*	*50*
Dibromofluoromethane (Surr)	*96*		*75 - 120*	*03/24/20 13:00*	*04/03/20 06:48*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/24/20 13:00*	*04/03/20 06:48*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*03/24/20 13:00*	*04/03/20 06:48*	*50*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	**4.5**		4.0	1.6	mg/Kg	☼	03/26/20 11:52	03/26/20 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*72*		*44 - 148*	*03/26/20 11:52*	*03/26/20 19:48*	*1*

Client: TRC Environmental Corporation.
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Job ID: 500-179841-1

Client Sample ID: GP-22 (2'-4')
Date Collected: 03/24/20 13:20
Date Received: 03/25/20 09:00

Lab Sample ID: 500-179841-21
Matrix: Solid
Percent Solids: 81.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<11		18	11	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Bromobenzene	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Bromochloromethane	<31	*	73	31	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Bromodichloromethane	<27	*	73	27	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Bromoform	<35	*	73	35	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Bromomethane	<58		220	58	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Carbon tetrachloride	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Chlorobenzene	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Chloroethane	<37		73	37	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Chloroform	<27	*	150	27	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Chloromethane	<23		73	23	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
2-Chlorotoluene	<23		73	23	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
4-Chlorotoluene	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
cis-1,2-Dichloroethene	<30	*	73	30	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
cis-1,3-Dichloropropene	<30		73	30	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Dibromochloromethane	<36		73	36	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2-Dibromo-3-Chloropropane	<150		360	150	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2-Dibromoethane	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Dibromomethane	<20		73	20	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2-Dichlorobenzene	<24		73	24	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,3-Dichlorobenzene	<29		73	29	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,4-Dichlorobenzene	<27		73	27	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Dichlorodifluoromethane	<49		220	49	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1-Dichloroethane	<30		73	30	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2-Dichloroethane	<29		73	29	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1-Dichloroethene	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2-Dichloropropane	<31		73	31	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,3-Dichloropropane	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
2,2-Dichloropropane	<32		73	32	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1-Dichloropropene	<22	*	73	22	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Hexachlorobutadiene	<33	*	73	33	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Isopropylbenzene	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Isopropyl ether	<20		73	20	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Methylene Chloride	<120		360	120	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Methyl tert-butyl ether	<29	*	73	29	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Naphthalene	<24		73	24	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
n-Butylbenzene	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
N-Propylbenzene	<30		73	30	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
p-Isopropyltoluene	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
sec-Butylbenzene	<29		73	29	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Styrene	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
tert-Butylbenzene	<29		73	29	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1,1,2-Tetrachloroethane	<34		73	34	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1,2,2-Tetrachloroethane	<29		73	29	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Tetrachloroethene	**890**		73	27	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Toluene	<11		18	11	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
trans-1,2-Dichloroethene	<26	*	73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
trans-1,3-Dichloropropene	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50

Client Sample ID: GP-22 (2'-4')

Lab Sample ID: 500-179841-21
Date Collected: 03/24/20 13:20 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 81.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<33		73	33	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2,4-Trichlorobenzene	<25		73	25	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1,1-Trichloroethane	<28	*	73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,1,2-Trichloroethane	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Trichloroethene	<12		36	12	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Trichlorofluoromethane	<31		73	31	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2,3-Trichloropropane	<30		150	30	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,2,4-Trimethylbenzene	<26		73	26	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
1,3,5-Trimethylbenzene	<28		73	28	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Vinyl chloride	<19		73	19	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50
Xylenes, Total	<16		36	16	ug/Kg	☼	03/24/20 13:20	04/03/20 07:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*	*03/24/20 13:20*	*04/03/20 07:16*	*50*
Dibromofluoromethane (Surr)	*95*		*75 - 120*	*03/24/20 13:20*	*04/03/20 07:16*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/24/20 13:20*	*04/03/20 07:16*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*03/24/20 13:20*	*04/03/20 07:16*	*50*

Client Sample ID: GP-22 (6'-8')

Lab Sample ID: 500-179841-22
Date Collected: 03/24/20 13:30 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<10		18	10	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Bromobenzene	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Bromochloromethane	<30	*	70	30	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Bromodichloromethane	<26	*	70	26	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Bromoform	<34	*	70	34	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Bromomethane	<56		210	56	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Carbon tetrachloride	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Chlorobenzene	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Chloroethane	<35		70	35	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Chloroform	<26	*	140	26	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Chloromethane	<23		70	23	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
2-Chlorotoluene	<22		70	22	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
4-Chlorotoluene	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
cis-1,2-Dichloroethene	<29	*	70	29	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
cis-1,3-Dichloropropene	<29		70	29	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Dibromochloromethane	<34		70	34	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2-Dibromoethane	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Dibromomethane	<19		70	19	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2-Dichlorobenzene	<24		70	24	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,3-Dichlorobenzene	<28		70	28	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,4-Dichlorobenzene	<26		70	26	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Dichlorodifluoromethane	<47		210	47	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1-Dichloroethane	<29		70	29	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2-Dichloroethane	<28		70	28	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1-Dichloroethene	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50

Client: TRC Environmental Corporation.
Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-22 (6'-8')
Lab Sample ID: 500-179841-22
Date Collected: 03/24/20 13:30
Matrix: Solid
Date Received: 03/25/20 09:00
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<30		70	30	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,3-Dichloropropane	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
2,2-Dichloropropane	<31		70	31	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1-Dichloropropene	<21	*	70	21	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Ethylbenzene	<13		18	13	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Hexachlorobutadiene	<31	*	70	31	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Isopropylbenzene	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Isopropyl ether	<19		70	19	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Methylene Chloride	<110		350	110	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Methyl tert-butyl ether	<28	*	70	28	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Naphthalene	<24		70	24	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
n-Butylbenzene	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
N-Propylbenzene	<29		70	29	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
p-Isopropyltoluene	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
sec-Butylbenzene	<28		70	28	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Styrene	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
tert-Butylbenzene	<28		70	28	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1,1,2-Tetrachloroethane	<33		70	33	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1,2,2-Tetrachloroethane	<28		70	28	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Tetrachloroethene	<26		70	26	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Toluene	<10		18	10	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
trans-1,2-Dichloroethene	<25	*	70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
trans-1,3-Dichloropropene	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2,3-Trichlorobenzene	<32		70	32	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2,4-Trichlorobenzene	<24		70	24	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1,1-Trichloroethane	<27	*	70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,1,2-Trichloroethane	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Trichloroethene	<12		35	12	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Trichlorofluoromethane	<30		70	30	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2,3-Trichloropropane	<29		140	29	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,2,4-Trimethylbenzene	<25		70	25	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
1,3,5-Trimethylbenzene	<27		70	27	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Vinyl chloride	<18		70	18	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50
Xylenes, Total	<15		35	15	ug/Kg	☼	03/24/20 13:30	04/03/20 07:43	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*	*03/24/20 13:30*	*04/03/20 07:43*	*50*
Dibromofluoromethane (Surr)	*96*		*75 - 120*	*03/24/20 13:30*	*04/03/20 07:43*	*50*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*	*03/24/20 13:30*	*04/03/20 07:43*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*03/24/20 13:30*	*04/03/20 07:43*	*50*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg	☼	03/26/20 11:52	03/26/20 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*74*		*44 - 148*	*03/26/20 11:52*	*03/26/20 20:14*	*1*

Client: TRC Environmental Corporation.
Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: Trip-02
Lab Sample ID: 500-179841-23
Date Collected: 03/24/20 00:00
Matrix: Solid
Date Received: 03/25/20 09:00
Percent Solids: 100.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<7.3		13	7.3	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Bromobenzene	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Bromochloromethane	<21	*	50	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Bromodichloromethane	<19	*	50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Bromoform	<24	*	50	24	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Bromomethane	<40		150	40	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Carbon tetrachloride	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Chlorobenzene	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Chloroethane	<25		50	25	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Chloroform	<19	*	100	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Chloromethane	<16		50	16	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
2-Chlorotoluene	<16		50	16	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
4-Chlorotoluene	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
cis-1,2-Dichloroethene	<20	*	50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Dibromochloromethane	<24		50	24	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2-Dibromoethane	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Dibromomethane	<14		50	14	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Dichlorodifluoromethane	<34		150	34	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1-Dichloroethane	<21		50	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2-Dichloroethane	<20		50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1-Dichloroethene	<20		50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2-Dichloropropane	<21		50	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,3-Dichloropropane	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
2,2-Dichloropropane	<22		50	22	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1-Dichloropropene	<15	*	50	15	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Hexachlorobutadiene	<22	*	50	22	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Isopropylbenzene	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Isopropyl ether	<14		50	14	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Methylene Chloride	<82		250	82	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Methyl tert-butyl ether	<20	*	50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Naphthalene	<17		50	17	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
n-Butylbenzene	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
N-Propylbenzene	<21		50	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
p-Isopropyltoluene	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
sec-Butylbenzene	<20		50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Styrene	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
tert-Butylbenzene	<20		50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Tetrachloroethene	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Toluene	<7.4		13	7.4	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
trans-1,2-Dichloroethene	<18	*	50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: Trip-02 **Lab Sample ID: 500-179841-23**
Date Collected: 03/24/20 00:00 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 100.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1,1-Trichloroethane	<19	*	50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Trichloroethene	<8.2		25	8.2	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Trichlorofluoromethane	<21		50	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Vinyl chloride	<13		50	13	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50
Xylenes, Total	<11		25	11	ug/Kg	☼	03/24/20 00:00	04/03/20 02:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/24/20 00:00*	*04/03/20 02:16*	*50*
Dibromofluoromethane (Surr)	*94*		*75 - 120*	*03/24/20 00:00*	*04/03/20 02:16*	*50*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*	*03/24/20 00:00*	*04/03/20 02:16*	*50*
Toluene-d8 (Surr)	*92*		*75 - 120*	*03/24/20 00:00*	*04/03/20 02:16*	*50*

Definitions/Glossary

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

GC/MS VOA

Prep Batch: 535627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-2	GP-09 (6'-8')	Total/NA	Solid	5035	
500-179841-3	GP-10 (2'-4')	Total/NA	Solid	5035	
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	WI GRO	
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-535627/22-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 535628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-1	GP-09 (2'-4')	Total/NA	Solid	5035	
500-179841-5	GP-11 (2'-4')	Total/NA	Solid	5035	
500-179841-6	GP-11 (6'-8')	Total/NA	Solid	5035	
500-179841-7	GP-12 (2'-4')	Total/NA	Solid	5035	
500-179841-8	GP-13 (2'-4')	Total/NA	Solid	5035	
500-179841-17	GP-19 (2'-4')	Total/NA	Solid	5035	
500-179841-18	GP-19 (6'-8')	Total/NA	Solid	5035	
500-179841-19	GP-20 (2'-4')	Total/NA	Solid	5035	
500-179841-20	GP-21 (2'-4')	Total/NA	Solid	5035	
500-179841-21	GP-22 (2'-4')	Total/NA	Solid	5035	
500-179841-22	GP-22 (6'-8')	Total/NA	Solid	5035	
500-179841-23	Trip-02	Total/NA	Solid	5035	
LB3 500-535628/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-535628/22-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 536092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	8260B	535627
MB 500-536092/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-535627/22-A	Lab Control Sample	Total/NA	Solid	8260B	535627
LCS 500-536092/5	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 536376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-1	GP-09 (2'-4')	Total/NA	Solid	8260B	535628
500-179841-2	GP-09 (6'-8')	Total/NA	Solid	8260B	535627
500-179841-3	GP-10 (2'-4')	Total/NA	Solid	8260B	535627
500-179841-5	GP-11 (2'-4')	Total/NA	Solid	8260B	535628
500-179841-6	GP-11 (6'-8')	Total/NA	Solid	8260B	535628
500-179841-7	GP-12 (2'-4')	Total/NA	Solid	8260B	535628
500-179841-8	GP-13 (2'-4')	Total/NA	Solid	8260B	535628
MB 500-536376/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-536376/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 536458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	8260B	535627
500-179841-17	GP-19 (2'-4')	Total/NA	Solid	8260B	535628
500-179841-18	GP-19 (6'-8')	Total/NA	Solid	8260B	535628
500-179841-19	GP-20 (2'-4')	Total/NA	Solid	8260B	535628
LB3 500-535628/21-A	Method Blank	Total/NA	Solid	8260B	535628
MB 500-536458/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-535628/22-A	Lab Control Sample	Total/NA	Solid	8260B	535628

GC/MS VOA (Continued)

Analysis Batch: 536458 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-536458/5	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 536572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-20	GP-21 (2'-4')	Total/NA	Solid	8260B	535628
500-179841-21	GP-22 (2'-4')	Total/NA	Solid	8260B	535628
500-179841-22	GP-22 (6'-8')	Total/NA	Solid	8260B	535628
500-179841-23	Trip-02	Total/NA	Solid	8260B	535628
MB 500-536572/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-536572/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 536022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	3541	
MB 500-536022/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-536022/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 536113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-536022/1-A	Method Blank	Total/NA	Solid	8270D	536022
LCS 500-536022/2-A	Lab Control Sample	Total/NA	Solid	8270D	536022

Analysis Batch: 536182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	8270D	536022

GC VOA

Prep Batch: 535627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	WI GRO	
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-535627/23-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 500-535627/24-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 536061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	WI-GRO	535627
LB3 500-535627/21-A	Method Blank	Total/NA	Solid	WI-GRO	535627
LCS 500-535627/23-A	Lab Control Sample	Total/NA	Solid	WI-GRO	535627
LCSD 500-535627/24-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	535627

GC Semi VOA

Prep Batch: 535546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-7	GP-12 (2'-4')	Total/NA	Solid	WI DRO PREP	
500-179841-8	GP-13 (2'-4')	Total/NA	Solid	WI DRO PREP	
500-179841-20	GP-21 (2'-4')	Total/NA	Solid	WI DRO PREP	
500-179841-22	GP-22 (6'-8')	Total/NA	Solid	WI DRO PREP	

GC Semi VOA (Continued)

Prep Batch: 535546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-535546/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-535546/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-535546/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

Analysis Batch: 535582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-7	GP-12 (2'-4')	Total/NA	Solid	WI-DRO	535546
500-179841-8	GP-13 (2'-4')	Total/NA	Solid	WI-DRO	535546
500-179841-20	GP-21 (2'-4')	Total/NA	Solid	WI-DRO	535546
500-179841-22	GP-22 (6'-8')	Total/NA	Solid	WI-DRO	535546
MB 500-535546/1-A	Method Blank	Total/NA	Solid	WI-DRO	535546
LCS 500-535546/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	535546
LCSD 500-535546/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	535546

Prep Batch: 536176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	3541	
MB 500-536176/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-536176/3-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 536278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	8082A	536176
MB 500-536176/1-A	Method Blank	Total/NA	Solid	8082A	536176
LCS 500-536176/3-A	Lab Control Sample	Total/NA	Solid	8082A	536176

Metals

Prep Batch: 536015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-1	GP-09 (2'-4')	Total/NA	Solid	3050B	
500-179841-2	GP-09 (6'-8')	Total/NA	Solid	3050B	
500-179841-3	GP-10 (2'-4')	Total/NA	Solid	3050B	
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	3050B	
500-179841-5	GP-11 (2'-4')	Total/NA	Solid	3050B	
500-179841-6	GP-11 (6'-8')	Total/NA	Solid	3050B	
MB 500-536015/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-536015/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 536149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	7471B	
MB 500-536149/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-536149/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 536159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-1	GP-09 (2'-4')	Total/NA	Solid	6010C	536015
500-179841-2	GP-09 (6'-8')	Total/NA	Solid	6010C	536015
500-179841-3	GP-10 (2'-4')	Total/NA	Solid	6010C	536015
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	6010C	536015

Metals (Continued)

Analysis Batch: 536159 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-5	GP-11 (2'-4')	Total/NA	Solid	6010C	536015
500-179841-6	GP-11 (6'-8')	Total/NA	Solid	6010C	536015
MB 500-536015/1-A	Method Blank	Total/NA	Solid	6010C	536015
LCS 500-536015/2-A	Lab Control Sample	Total/NA	Solid	6010C	536015

Analysis Batch: 536337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	7471B	536149
MB 500-536149/12-A	Method Blank	Total/NA	Solid	7471B	536149
LCS 500-536149/13-A	Lab Control Sample	Total/NA	Solid	7471B	536149

General Chemistry

Analysis Batch: 535705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-1	GP-09 (2'-4')	Total/NA	Solid	Moisture	
500-179841-2	GP-09 (6'-8')	Total/NA	Solid	Moisture	
500-179841-3	GP-10 (2'-4')	Total/NA	Solid	Moisture	

Analysis Batch: 535723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-179841-4	GP-10 (6'-8')	Total/NA	Solid	Moisture	
500-179841-5	GP-11 (2'-4')	Total/NA	Solid	Moisture	
500-179841-6	GP-11 (6'-8')	Total/NA	Solid	Moisture	
500-179841-7	GP-12 (2'-4')	Total/NA	Solid	Moisture	
500-179841-8	GP-13 (2'-4')	Total/NA	Solid	Moisture	
500-179841-17	GP-19 (2'-4')	Total/NA	Solid	Moisture	
500-179841-18	GP-19 (6'-8')	Total/NA	Solid	Moisture	
500-179841-19	GP-20 (2'-4')	Total/NA	Solid	Moisture	
500-179841-20	GP-21 (2'-4')	Total/NA	Solid	Moisture	
500-179841-21	GP-22 (2'-4')	Total/NA	Solid	Moisture	
500-179841-22	GP-22 (6'-8')	Total/NA	Solid	Moisture	
500-179841-23	Trip-02	Total/NA	Solid	Moisture	
500-179841-5 DU	GP-11 (2'-4')	Total/NA	Solid	Moisture	

Surrogate Summary

Client: TRC Environmental Corporation.
Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-179841-1	GP-09 (2'-4')	89	99	104	93
500-179841-2	GP-09 (6'-8')	91	98	104	93
500-179841-3	GP-10 (2'-4')	89	100	103	94
500-179841-4	GP-10 (6'-8')	107	106	113	97
500-179841-5	GP-11 (2'-4')	92	99	106	93
500-179841-6	GP-11 (6'-8')	90	97	104	94
500-179841-7	GP-12 (2'-4')	89	100	105	95
500-179841-8	GP-13 (2'-4')	90	101	105	94
500-179841-17	GP-19 (2'-4')	111	100	107	103
500-179841-18	GP-19 (6'-8')	109	105	114	98
500-179841-19	GP-20 (2'-4')	108	97	105	102
500-179841-20	GP-21 (2'-4')	90	96	105	91
500-179841-21	GP-22 (2'-4')	90	95	105	91
500-179841-22	GP-22 (6'-8')	90	96	106	91
500-179841-23	Trip-02	89	94	102	92
LB3 500-535627/21-A	Method Blank	89	111	105	99
LB3 500-535628/21-A	Method Blank	105	99	104	101
LCS 500-535627/22-A	Lab Control Sample	90	112	104	98
LCS 500-535628/22-A	Lab Control Sample	105	113	109	91
LCS 500-536092/5	Lab Control Sample	91	106	98	101
LCS 500-536376/4	Lab Control Sample	88	97	99	95
LCS 500-536458/5	Lab Control Sample	105	107	106	95
LCS 500-536572/4	Lab Control Sample	87	98	104	92
MB 500-536092/7	Method Blank	87	109	100	100
MB 500-536376/7	Method Blank	89	99	102	91
MB 500-536458/7	Method Blank	117	105	109	104
MB 500-536572/6	Method Blank	91	95	103	91

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(31-143)	(43-145)	(31-166)	(37-147)	(30-153)	(42-157)
500-179841-4	GP-10 (6'-8')	69	86	91	80	87	103
LCS 500-536022/2-A	Lab Control Sample	120	98	87	89	88	118
MB 500-536022/1-A	Method Blank	110	104	85	89	80	127

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (49-129)	DCBP2 (37-121)
500-179841-4	GP-10 (6'-8')	115	113
LCS 500-536176/3-A	Lab Control Sample	102	116
MB 500-536176/1-A	Method Blank	99	109

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	C9 (44-148)
500-179841-7	GP-12 (2'-4')	71
500-179841-8	GP-13 (2'-4')	74
500-179841-20	GP-21 (2'-4')	72
500-179841-22	GP-22 (6'-8')	74
LCS 500-535546/2-A	Lab Control Sample	74
LCSD 500-535546/3-A	Lab Control Sample Dup	72
MB 500-535546/1-A	Method Blank	76

Surrogate Legend

C9 = n-Nonane

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LB3 500-535627/21-A
Matrix: Solid
Analysis Batch: 536092

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535627

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromochloromethane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromodichloromethane	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Benzene	<7.3		13	7.3	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromoform	<24		50	24	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Bromomethane	<40		150	40	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Carbon tetrachloride	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chlorobenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chloroethane	<25		50	25	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chloroform	<19		100	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Chloromethane	<16		50	16	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
2-Chlorotoluene	<16		50	16	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
4-Chlorotoluene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Dibromochloromethane	<24		50	24	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dibromoethane	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Dibromomethane	<14		50	14	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1-Dichloroethane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dichloroethane	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1-Dichloroethene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2-Dichloropropane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,3-Dichloropropane	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
2,2-Dichloropropane	<22		50	22	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1-Dichloropropene	<15		50	15	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Hexachlorobutadiene	<22		50	22	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Isopropylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Isopropyl ether	<14		50	14	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Methylene Chloride	<82		250	82	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Naphthalene	<17		50	17	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
n-Butylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
N-Propylbenzene	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
p-Isopropyltoluene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
sec-Butylbenzene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Styrene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
tert-Butylbenzene	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Tetrachloroethene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Toluene	<7.4		13	7.4	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50

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

Lab Sample ID: LB3 500-535627/21-A
Matrix: Solid
Analysis Batch: 536092

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535627

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Trichloroethene	<8.2		25	8.2	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Trichlorofluoromethane	<21		50	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Vinyl chloride	<13		50	13	ug/Kg		03/26/20 21:15	03/31/20 18:30	50
Xylenes, Total	<11		25	11	ug/Kg		03/26/20 21:15	03/31/20 18:30	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*	*03/26/20 21:15*	*03/31/20 18:30*	*50*
Dibromofluoromethane (Surr)	*111*		*75 - 120*	*03/26/20 21:15*	*03/31/20 18:30*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*03/26/20 21:15*	*03/31/20 18:30*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*03/26/20 21:15*	*03/31/20 18:30*	*50*

Lab Sample ID: LCS 500-535627/22-A
Matrix: Solid
Analysis Batch: 536092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	2840		ug/Kg		114	70 - 122
Bromochloromethane	2500	3240	*	ug/Kg		130	65 - 122
Bromodichloromethane	2500	3000		ug/Kg		120	69 - 120
Benzene	2500	2890		ug/Kg		116	70 - 120
Bromoform	2500	3040		ug/Kg		122	56 - 132
Bromomethane	2500	3060		ug/Kg		122	40 - 152
Carbon tetrachloride	2500	2770		ug/Kg		111	59 - 133
Chlorobenzene	2500	2940		ug/Kg		118	70 - 120
Chloroethane	2500	2310		ug/Kg		92	48 - 136
Chloroform	2500	2930		ug/Kg		117	70 - 120
Chloromethane	2500	1610		ug/Kg		64	56 - 152
2-Chlorotoluene	2500	2590		ug/Kg		104	70 - 125
4-Chlorotoluene	2500	2580		ug/Kg		103	68 - 124
cis-1,2-Dichloroethene	2500	3120		ug/Kg		125	70 - 125
cis-1,3-Dichloropropene	2500	2800		ug/Kg		112	64 - 127
Dibromochloromethane	2500	3080		ug/Kg		123	68 - 125
1,2-Dibromo-3-Chloropropane	2500	2570		ug/Kg		103	56 - 123
1,2-Dibromoethane	2500	2960		ug/Kg		118	70 - 125
Dibromomethane	2500	3130	*	ug/Kg		125	70 - 120
1,2-Dichlorobenzene	2500	2910		ug/Kg		116	70 - 125
1,3-Dichlorobenzene	2500	2850		ug/Kg		114	70 - 125
1,4-Dichlorobenzene	2500	2790		ug/Kg		112	70 - 120
Dichlorodifluoromethane	2500	1100		ug/Kg		44	40 - 159
1,1-Dichloroethane	2500	2740		ug/Kg		110	70 - 125

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

Lab Sample ID: LCS 500-535627/22-A
Matrix: Solid
Analysis Batch: 536092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	2500	3020		ug/Kg		121	68 - 127
1,1-Dichloroethene	2500	2540		ug/Kg		102	67 - 122
1,2-Dichloropropane	2500	2830		ug/Kg		113	67 - 130
1,3-Dichloropropane	2500	2790		ug/Kg		112	62 - 136
2,2-Dichloropropane	2500	2590		ug/Kg		104	58 - 139
1,1-Dichloropropene	2500	2600		ug/Kg		104	70 - 121
Ethylbenzene	2500	2850		ug/Kg		114	70 - 123
Hexachlorobutadiene	2500	2390		ug/Kg		96	51 - 150
Isopropylbenzene	2500	2550		ug/Kg		102	70 - 126
Methylene Chloride	2500	2990		ug/Kg		120	69 - 125
Methyl tert-butyl ether	2500	3000		ug/Kg		120	55 - 123
Naphthalene	2500	2810		ug/Kg		112	53 - 144
n-Butylbenzene	2500	2440		ug/Kg		97	68 - 125
N-Propylbenzene	2500	2530		ug/Kg		101	69 - 127
p-Isopropyltoluene	2500	2620		ug/Kg		105	70 - 125
sec-Butylbenzene	2500	2540		ug/Kg		102	70 - 123
Styrene	2500	2810		ug/Kg		112	70 - 120
tert-Butylbenzene	2500	2700		ug/Kg		108	70 - 121
1,1,1,2-Tetrachloroethane	2500	3130		ug/Kg		125	70 - 125
1,1,2,2-Tetrachloroethane	2500	2700		ug/Kg		108	62 - 140
Tetrachloroethene	2500	2690		ug/Kg		108	70 - 128
Toluene	2500	2730		ug/Kg		109	70 - 125
trans-1,2-Dichloroethene	2500	2880		ug/Kg		115	70 - 125
trans-1,3-Dichloropropene	2500	2720		ug/Kg		109	62 - 128
1,2,3-Trichlorobenzene	2500	2840		ug/Kg		114	51 - 145
1,2,4-Trichlorobenzene	2500	2790		ug/Kg		111	57 - 137
1,1,1-Trichloroethane	2500	2730		ug/Kg		109	70 - 125
1,1,2-Trichloroethane	2500	2830		ug/Kg		113	71 - 130
Trichloroethene	2500	3040		ug/Kg		122	70 - 125
Trichlorofluoromethane	2500	2290		ug/Kg		91	55 - 128
1,2,3-Trichloropropane	2500	2680		ug/Kg		107	50 - 133
1,2,4-Trimethylbenzene	2500	2620		ug/Kg		105	70 - 123
1,3,5-Trimethylbenzene	2500	2620		ug/Kg		105	70 - 123
Vinyl chloride	2500	1840		ug/Kg		74	64 - 126
Xylenes, Total	5000	5420		ug/Kg		108	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*72 - 124*
Dibromofluoromethane (Surr)	*112*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Sample ID: LB3 500-535628/21-A
Matrix: Solid
Analysis Batch: 536458

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535628

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50

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

Lab Sample ID: LB3 500-535628/21-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536458 **Prep Batch: 535628**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	<21		50	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Bromodichloromethane	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Benzene	<7.3		13	7.3	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Bromoform	<24		50	24	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Bromomethane	<40		150	40	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Carbon tetrachloride	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Chlorobenzene	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Chloroethane	<25		50	25	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Chloroform	<19		100	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Chloromethane	<16		50	16	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
2-Chlorotoluene	<16		50	16	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
4-Chlorotoluene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Dibromochloromethane	<24		50	24	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2-Dibromoethane	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Dibromomethane	<14		50	14	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1-Dichloroethane	<21		50	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2-Dichloroethane	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1-Dichloroethene	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2-Dichloropropane	<21		50	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,3-Dichloropropane	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
2,2-Dichloropropane	<22		50	22	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1-Dichloropropene	<15		50	15	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Hexachlorobutadiene	<22		50	22	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Isopropylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Isopropyl ether	<14		50	14	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Methylene Chloride	<82		250	82	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Naphthalene	<17		50	17	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
n-Butylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
N-Propylbenzene	<21		50	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
p-Isopropyltoluene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
sec-Butylbenzene	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Styrene	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
tert-Butylbenzene	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Tetrachloroethene	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Toluene	<7.4		13	7.4	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		03/26/20 21:15	04/02/20 13:07	50

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

Lab Sample ID: LB3 500-535628/21-A
Matrix: Solid
Analysis Batch: 536458

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535628

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Trichloroethene	<8.2		25	8.2	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Trichlorofluoromethane	<21		50	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Vinyl chloride	<13		50	13	ug/Kg		03/26/20 21:15	04/02/20 13:07	50
Xylenes, Total	<11		25	11	ug/Kg		03/26/20 21:15	04/02/20 13:07	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*	*03/26/20 21:15*	*04/02/20 13:07*	*50*
Dibromofluoromethane (Surr)	*99*		*75 - 120*	*03/26/20 21:15*	*04/02/20 13:07*	*50*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*03/26/20 21:15*	*04/02/20 13:07*	*50*
Toluene-d8 (Surr)	*101*		*75 - 120*	*03/26/20 21:15*	*04/02/20 13:07*	*50*

Lab Sample ID: LCS 500-535628/22-A
Matrix: Solid
Analysis Batch: 536458

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535628

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	3050		ug/Kg		122	70 - 122
Bromochloromethane	2500	3160	*	ug/Kg		126	65 - 122
Bromodichloromethane	2500	3040	*	ug/Kg		122	69 - 120
Benzene	2500	2900		ug/Kg		116	70 - 120
Bromoform	2500	3340	*	ug/Kg		134	56 - 132
Bromomethane	2500	3140		ug/Kg		126	40 - 152
Carbon tetrachloride	2500	3150		ug/Kg		126	59 - 133
Chlorobenzene	2500	2860		ug/Kg		115	70 - 120
Chloroethane	2500	2670		ug/Kg		107	48 - 136
Chloroform	2500	3390	*	ug/Kg		136	70 - 120
Chloromethane	2500	2080		ug/Kg		83	56 - 152
2-Chlorotoluene	2500	2920		ug/Kg		117	70 - 125
4-Chlorotoluene	2500	2880		ug/Kg		115	68 - 124
cis-1,2-Dichloroethene	2500	3270	*	ug/Kg		131	70 - 125
cis-1,3-Dichloropropene	2500	2520		ug/Kg		101	64 - 127
Dibromochloromethane	2500	2830		ug/Kg		113	68 - 125
1,2-Dibromo-3-Chloropropane	2500	2460		ug/Kg		98	56 - 123
1,2-Dibromoethane	2500	2950		ug/Kg		118	70 - 125
Dibromomethane	2500	2840		ug/Kg		114	70 - 120
1,2-Dichlorobenzene	2500	2720		ug/Kg		109	70 - 125
1,3-Dichlorobenzene	2500	2710		ug/Kg		109	70 - 125
1,4-Dichlorobenzene	2500	2610		ug/Kg		104	70 - 120
Dichlorodifluoromethane	2500	1730		ug/Kg		69	40 - 159
1,1-Dichloroethane	2500	3000		ug/Kg		120	70 - 125
1,2-Dichloroethane	2500	2990		ug/Kg		120	68 - 127
1,1-Dichloroethene	2500	2930		ug/Kg		117	67 - 122

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

Lab Sample ID: LCS 500-535628/22-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536458 **Prep Batch: 535628**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	2500	2540		ug/Kg		101	67 - 130
1,3-Dichloropropane	2500	2900		ug/Kg		116	62 - 136
2,2-Dichloropropane	2500	3480		ug/Kg		139	58 - 139
1,1-Dichloropropene	2500	3160	*	ug/Kg		126	70 - 121
Ethylbenzene	2500	2940		ug/Kg		118	70 - 123
Hexachlorobutadiene	2500	4370	*	ug/Kg		175	51 - 150
Isopropylbenzene	2500	2790		ug/Kg		112	70 - 126
Methylene Chloride	2500	3140		ug/Kg		125	69 - 125
Methyl tert-butyl ether	2500	3270	*	ug/Kg		131	55 - 123
Naphthalene	2500	2710		ug/Kg		108	53 - 144
n-Butylbenzene	2500	2740		ug/Kg		110	68 - 125
N-Propylbenzene	2500	2830		ug/Kg		113	69 - 127
p-Isopropyltoluene	2500	2720		ug/Kg		109	70 - 125
sec-Butylbenzene	2500	2720		ug/Kg		109	70 - 123
Styrene	2500	2900		ug/Kg		116	70 - 120
tert-Butylbenzene	2500	2620		ug/Kg		105	70 - 121
1,1,1,2-Tetrachloroethane	2500	2710		ug/Kg		109	70 - 125
1,1,2,2-Tetrachloroethane	2500	2820		ug/Kg		113	62 - 140
Tetrachloroethene	2500	3140		ug/Kg		125	70 - 128
Toluene	2500	2520		ug/Kg		101	70 - 125
trans-1,2-Dichloroethene	2500	3230	*	ug/Kg		129	70 - 125
trans-1,3-Dichloropropene	2500	2770		ug/Kg		111	62 - 128
1,2,3-Trichlorobenzene	2500	3560		ug/Kg		143	51 - 145
1,2,4-Trichlorobenzene	2500	3400		ug/Kg		136	57 - 137
1,1,1-Trichloroethane	2500	3780	*	ug/Kg		151	70 - 125
1,1,2-Trichloroethane	2500	2750		ug/Kg		110	71 - 130
Trichloroethene	2500	2720		ug/Kg		109	70 - 125
Trichlorofluoromethane	2500	3030		ug/Kg		121	55 - 128
1,2,3-Trichloropropane	2500	2870		ug/Kg		115	50 - 133
1,2,4-Trimethylbenzene	2500	2830		ug/Kg		113	70 - 123
1,3,5-Trimethylbenzene	2500	2860		ug/Kg		114	70 - 123
Vinyl chloride	2500	2620		ug/Kg		105	64 - 126
Xylenes, Total	5000	5920		ug/Kg		118	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*
Dibromofluoromethane (Surr)	*113*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 126*
Toluene-d8 (Surr)	*91*		*75 - 120*

Lab Sample ID: MB 500-536092/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			03/31/20 10:29	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			03/31/20 10:29	1

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

Lab Sample ID: MB 500-536092/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.25	0.15	ug/Kg			03/31/20 10:29	1
Bromoform	<0.48		1.0	0.48	ug/Kg			03/31/20 10:29	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			03/31/20 10:29	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			03/31/20 10:29	1
Chloroform	<0.37		2.0	0.37	ug/Kg			03/31/20 10:29	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			03/31/20 10:29	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			03/31/20 10:29	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			03/31/20 10:29	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			03/31/20 10:29	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			03/31/20 10:29	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			03/31/20 10:29	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			03/31/20 10:29	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			03/31/20 10:29	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			03/31/20 10:29	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			03/31/20 10:29	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			03/31/20 10:29	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			03/31/20 10:29	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			03/31/20 10:29	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			03/31/20 10:29	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			03/31/20 10:29	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			03/31/20 10:29	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			03/31/20 10:29	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			03/31/20 10:29	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
Naphthalene	0.519	J	1.0	0.33	ug/Kg			03/31/20 10:29	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			03/31/20 10:29	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
Styrene	<0.39		1.0	0.39	ug/Kg			03/31/20 10:29	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			03/31/20 10:29	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			03/31/20 10:29	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			03/31/20 10:29	1
Toluene	<0.15		0.25	0.15	ug/Kg			03/31/20 10:29	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			03/31/20 10:29	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			03/31/20 10:29	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			03/31/20 10:29	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1

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

Lab Sample ID: MB 500-536092/7
Matrix: Solid
Analysis Batch: 536092

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			03/31/20 10:29	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			03/31/20 10:29	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			03/31/20 10:29	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			03/31/20 10:29	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			03/31/20 10:29	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			03/31/20 10:29	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			03/31/20 10:29	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			03/31/20 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*03/31/20 10:29*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*03/31/20 10:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*03/31/20 10:29*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*03/31/20 10:29*	*1*

Lab Sample ID: LCS 500-536092/5
Matrix: Solid
Analysis Batch: 536092

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	46.2		ug/Kg		92	70 - 122
Bromochloromethane	50.0	50.1		ug/Kg		100	65 - 122
Bromodichloromethane	50.0	46.2		ug/Kg		92	69 - 120
Benzene	50.0	47.3		ug/Kg		95	70 - 120
Bromoform	50.0	50.0		ug/Kg		100	56 - 132
Bromomethane	50.0	60.7		ug/Kg		121	40 - 152
Carbon tetrachloride	50.0	52.3		ug/Kg		105	59 - 133
Chlorobenzene	50.0	50.0		ug/Kg		100	70 - 120
Chloroethane	50.0	46.2		ug/Kg		92	48 - 136
Chloroform	50.0	46.4		ug/Kg		93	70 - 120
Chloromethane	50.0	38.4		ug/Kg		77	56 - 152
2-Chlorotoluene	50.0	44.3		ug/Kg		89	70 - 125
4-Chlorotoluene	50.0	43.6		ug/Kg		87	68 - 124
cis-1,2-Dichloroethene	50.0	49.0		ug/Kg		98	70 - 125
cis-1,3-Dichloropropene	50.0	47.0		ug/Kg		94	64 - 127
Dibromochloromethane	50.0	49.5		ug/Kg		99	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	41.1		ug/Kg		82	56 - 123
1,2-Dibromoethane	50.0	48.3		ug/Kg		97	70 - 125
Dibromomethane	50.0	46.9		ug/Kg		94	70 - 120
1,2-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 125
1,3-Dichlorobenzene	50.0	47.3		ug/Kg		95	70 - 125
1,4-Dichlorobenzene	50.0	47.0		ug/Kg		94	70 - 120
Dichlorodifluoromethane	50.0	47.3		ug/Kg		95	40 - 159
1,1-Dichloroethane	50.0	45.5		ug/Kg		91	70 - 125
1,2-Dichloroethane	50.0	46.4		ug/Kg		93	68 - 127
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 122
1,2-Dichloropropane	50.0	44.0		ug/Kg		88	67 - 130
1,3-Dichloropropane	50.0	44.3		ug/Kg		89	62 - 136

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

Lab Sample ID: LCS 500-536092/5 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	50.0	48.3		ug/Kg		97	58 - 139
1,1-Dichloropropene	50.0	46.4		ug/Kg		93	70 - 121
Ethylbenzene	50.0	50.1		ug/Kg		100	70 - 123
Hexachlorobutadiene	50.0	44.0		ug/Kg		88	51 - 150
Isopropylbenzene	50.0	45.8		ug/Kg		92	70 - 126
Methylene Chloride	50.0	47.6		ug/Kg		95	69 - 125
Methyl tert-butyl ether	50.0	46.1		ug/Kg		92	55 - 123
Naphthalene	50.0	45.8		ug/Kg		92	53 - 144
n-Butylbenzene	50.0	45.6		ug/Kg		91	68 - 125
N-Propylbenzene	50.0	44.9		ug/Kg		90	69 - 127
p-Isopropyltoluene	50.0	47.2		ug/Kg		94	70 - 125
sec-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 123
Styrene	50.0	46.4		ug/Kg		93	70 - 120
tert-Butylbenzene	50.0	47.6		ug/Kg		95	70 - 121
1,1,1,2-Tetrachloroethane	50.0	52.4		ug/Kg		105	70 - 125
1,1,2,2-Tetrachloroethane	50.0	42.8		ug/Kg		86	62 - 140
Tetrachloroethene	50.0	50.6		ug/Kg		101	70 - 128
Toluene	50.0	46.7		ug/Kg		93	70 - 125
trans-1,2-Dichloroethene	50.0	50.0		ug/Kg		100	70 - 125
trans-1,3-Dichloropropene	50.0	45.6		ug/Kg		91	62 - 128
1,2,3-Trichlorobenzene	50.0	48.0		ug/Kg		96	51 - 145
1,2,4-Trichlorobenzene	50.0	49.2		ug/Kg		98	57 - 137
1,1,1-Trichloroethane	50.0	50.1		ug/Kg		100	70 - 125
1,1,2-Trichloroethane	50.0	45.4		ug/Kg		91	71 - 130
Trichloroethene	50.0	52.1		ug/Kg		104	70 - 125
Trichlorofluoromethane	50.0	52.5		ug/Kg		105	55 - 128
1,2,3-Trichloropropane	50.0	42.5		ug/Kg		85	50 - 133
1,2,4-Trimethylbenzene	50.0	44.2		ug/Kg		88	70 - 123
1,3,5-Trimethylbenzene	50.0	44.9		ug/Kg		90	70 - 123
Vinyl chloride	50.0	44.9		ug/Kg		90	64 - 126
Xylenes, Total	100	93.2		ug/Kg		93	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*
Dibromofluoromethane (Surr)	*106*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: MB 500-536376/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.25	0.15	ug/Kg			04/01/20 23:57	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			04/01/20 23:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			04/01/20 23:57	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			04/01/20 23:57	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			04/01/20 23:57	1

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

Lab Sample ID: MB 500-536376/7 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.25	0.15	ug/Kg			04/01/20 23:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			04/01/20 23:57	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			04/01/20 23:57	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			04/01/20 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*04/01/20 23:57*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 120*		*04/01/20 23:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*04/01/20 23:57*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*04/01/20 23:57*	*1*

Lab Sample ID: LCS 500-536376/4 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.2		ug/Kg		102	70 - 120
Ethylbenzene	50.0	48.5		ug/Kg		97	70 - 123
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	55 - 123
Naphthalene	50.0	58.4		ug/Kg		117	53 - 144
Tetrachloroethene	50.0	50.6		ug/Kg		101	70 - 128
Toluene	50.0	50.0		ug/Kg		100	70 - 125
1,2,4-Trimethylbenzene	50.0	49.9		ug/Kg		100	70 - 123
1,3,5-Trimethylbenzene	50.0	50.8		ug/Kg		102	70 - 123
Xylenes, Total	100	94.2		ug/Kg		94	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*
Dibromofluoromethane (Surr)	*97*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
Toluene-d8 (Surr)	*95*		*75 - 120*

Lab Sample ID: MB 500-536458/7 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.36		1.0	0.36	ug/Kg			04/02/20 12:42	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			04/02/20 12:42	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			04/02/20 12:42	1
Benzene	<0.15		0.25	0.15	ug/Kg			04/02/20 12:42	1
Bromoform	<0.48		1.0	0.48	ug/Kg			04/02/20 12:42	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			04/02/20 12:42	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			04/02/20 12:42	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			04/02/20 12:42	1
Chloroform	<0.37		2.0	0.37	ug/Kg			04/02/20 12:42	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			04/02/20 12:42	1

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

Lab Sample ID: MB 500-536458/7
Matrix: Solid
Analysis Batch: 536458

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			04/02/20 12:42	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			04/02/20 12:42	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			04/02/20 12:42	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			04/02/20 12:42	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			04/02/20 12:42	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			04/02/20 12:42	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			04/02/20 12:42	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			04/02/20 12:42	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			04/02/20 12:42	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			04/02/20 12:42	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			04/02/20 12:42	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			04/02/20 12:42	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			04/02/20 12:42	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			04/02/20 12:42	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			04/02/20 12:42	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			04/02/20 12:42	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			04/02/20 12:42	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			04/02/20 12:42	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			04/02/20 12:42	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			04/02/20 12:42	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			04/02/20 12:42	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			04/02/20 12:42	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			04/02/20 12:42	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			04/02/20 12:42	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			04/02/20 12:42	1
Styrene	<0.39		1.0	0.39	ug/Kg			04/02/20 12:42	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			04/02/20 12:42	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			04/02/20 12:42	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			04/02/20 12:42	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			04/02/20 12:42	1
Toluene	<0.15		0.25	0.15	ug/Kg			04/02/20 12:42	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			04/02/20 12:42	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			04/02/20 12:42	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			04/02/20 12:42	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			04/02/20 12:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			04/02/20 12:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			04/02/20 12:42	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			04/02/20 12:42	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			04/02/20 12:42	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			04/02/20 12:42	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			04/02/20 12:42	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			04/02/20 12:42	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			04/02/20 12:42	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			04/02/20 12:42	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		72 - 124		04/02/20 12:42	1
Dibromofluoromethane (Surr)	105		75 - 120		04/02/20 12:42	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 126		04/02/20 12:42	1
Toluene-d8 (Surr)	104		75 - 120		04/02/20 12:42	1

Lab Sample ID: LCS 500-536458/5
Matrix: Solid
Analysis Batch: 536458

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	50.1		ug/Kg		100	70 - 122
Bromochloromethane	50.0	54.0		ug/Kg		108	65 - 122
Bromodichloromethane	50.0	52.0		ug/Kg		104	69 - 120
Benzene	50.0	48.5		ug/Kg		97	70 - 120
Bromoform	50.0	63.0		ug/Kg		126	56 - 132
Bromomethane	50.0	61.2		ug/Kg		122	40 - 152
Carbon tetrachloride	50.0	56.3		ug/Kg		113	59 - 133
Chlorobenzene	50.0	48.1		ug/Kg		96	70 - 120
Chloroethane	50.0	50.1		ug/Kg		100	48 - 136
Chloroform	50.0	56.2		ug/Kg		112	70 - 120
Chloromethane	50.0	45.0		ug/Kg		90	56 - 152
2-Chlorotoluene	50.0	49.4		ug/Kg		99	70 - 125
4-Chlorotoluene	50.0	49.7		ug/Kg		99	68 - 124
cis-1,2-Dichloroethene	50.0	53.3		ug/Kg		107	70 - 125
cis-1,3-Dichloropropene	50.0	44.1		ug/Kg		88	64 - 127
Dibromochloromethane	50.0	49.2		ug/Kg		98	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	40.4		ug/Kg		81	56 - 123
1,2-Dibromoethane	50.0	49.6		ug/Kg		99	70 - 125
Dibromomethane	50.0	48.3		ug/Kg		97	70 - 120
1,2-Dichlorobenzene	50.0	46.5		ug/Kg		93	70 - 125
1,3-Dichlorobenzene	50.0	46.0		ug/Kg		92	70 - 125
1,4-Dichlorobenzene	50.0	44.6		ug/Kg		89	70 - 120
Dichlorodifluoromethane	50.0	54.5		ug/Kg		109	40 - 159
1,1-Dichloroethane	50.0	50.2		ug/Kg		100	70 - 125
1,2-Dichloroethane	50.0	50.5		ug/Kg		101	68 - 127
1,1-Dichloroethene	50.0	51.0		ug/Kg		102	67 - 122
1,2-Dichloropropane	50.0	42.5		ug/Kg		85	67 - 130
1,3-Dichloropropane	50.0	48.5		ug/Kg		97	62 - 136
2,2-Dichloropropane	50.0	61.8		ug/Kg		124	58 - 139
1,1-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 121
Ethylbenzene	50.0	50.7		ug/Kg		101	70 - 123
Hexachlorobutadiene	50.0	73.6		ug/Kg		147	51 - 150
Isopropylbenzene	50.0	47.7		ug/Kg		95	70 - 126
Methylene Chloride	50.0	53.4		ug/Kg		107	69 - 125
Methyl tert-butyl ether	50.0	53.4		ug/Kg		107	55 - 123
Naphthalene	50.0	39.8		ug/Kg		80	53 - 144
n-Butylbenzene	50.0	47.2		ug/Kg		94	68 - 125
N-Propylbenzene	50.0	48.8		ug/Kg		98	69 - 127
p-Isopropyltoluene	50.0	46.3		ug/Kg		93	70 - 125
sec-Butylbenzene	50.0	46.8		ug/Kg		94	70 - 123
Styrene	50.0	50.4		ug/Kg		101	70 - 120

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

Lab Sample ID: LCS 500-536458/5
Matrix: Solid
Analysis Batch: 536458

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	50.0	45.7		ug/Kg		91	70 - 121
1,1,1,2-Tetrachloroethane	50.0	48.3		ug/Kg		97	70 - 125
1,1,2,2-Tetrachloroethane	50.0	47.2		ug/Kg		94	62 - 140
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 128
Toluene	50.0	44.9		ug/Kg		90	70 - 125
trans-1,2-Dichloroethene	50.0	54.6		ug/Kg		109	70 - 125
trans-1,3-Dichloropropene	50.0	47.0		ug/Kg		94	62 - 128
1,2,3-Trichlorobenzene	50.0	54.7		ug/Kg		109	51 - 145
1,2,4-Trichlorobenzene	50.0	53.8		ug/Kg		108	57 - 137
1,1,1-Trichloroethane	50.0	65.3	*	ug/Kg		131	70 - 125
1,1,2-Trichloroethane	50.0	45.4		ug/Kg		91	71 - 130
Trichloroethene	50.0	46.1		ug/Kg		92	70 - 125
Trichlorofluoromethane	50.0	57.7		ug/Kg		115	55 - 128
1,2,3-Trichloropropane	50.0	48.5		ug/Kg		97	50 - 133
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 123
1,3,5-Trimethylbenzene	50.0	49.0		ug/Kg		98	70 - 123
Vinyl chloride	50.0	54.3		ug/Kg		109	64 - 126
Xylenes, Total	100	104		ug/Kg		104	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*
Dibromofluoromethane (Surr)	*107*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*
Toluene-d8 (Surr)	*95*		*75 - 120*

Lab Sample ID: MB 500-536572/6
Matrix: Solid
Analysis Batch: 536572

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.36		1.0	0.36	ug/Kg			04/03/20 00:27	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			04/03/20 00:27	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			04/03/20 00:27	1
Benzene	<0.15		0.25	0.15	ug/Kg			04/03/20 00:27	1
Bromoform	<0.48		1.0	0.48	ug/Kg			04/03/20 00:27	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			04/03/20 00:27	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			04/03/20 00:27	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			04/03/20 00:27	1
Chloroform	<0.37		2.0	0.37	ug/Kg			04/03/20 00:27	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			04/03/20 00:27	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			04/03/20 00:27	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			04/03/20 00:27	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			04/03/20 00:27	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			04/03/20 00:27	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			04/03/20 00:27	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			04/03/20 00:27	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

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

Lab Sample ID: MB 500-536572/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.27		1.0	0.27	ug/Kg			04/03/20 00:27	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			04/03/20 00:27	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			04/03/20 00:27	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			04/03/20 00:27	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			04/03/20 00:27	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			04/03/20 00:27	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			04/03/20 00:27	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			04/03/20 00:27	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			04/03/20 00:27	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			04/03/20 00:27	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			04/03/20 00:27	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			04/03/20 00:27	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			04/03/20 00:27	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			04/03/20 00:27	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			04/03/20 00:27	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			04/03/20 00:27	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			04/03/20 00:27	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			04/03/20 00:27	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			04/03/20 00:27	1
Styrene	<0.39		1.0	0.39	ug/Kg			04/03/20 00:27	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			04/03/20 00:27	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			04/03/20 00:27	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			04/03/20 00:27	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			04/03/20 00:27	1
Toluene	<0.15		0.25	0.15	ug/Kg			04/03/20 00:27	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			04/03/20 00:27	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			04/03/20 00:27	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			04/03/20 00:27	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			04/03/20 00:27	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			04/03/20 00:27	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			04/03/20 00:27	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			04/03/20 00:27	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			04/03/20 00:27	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			04/03/20 00:27	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			04/03/20 00:27	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			04/03/20 00:27	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			04/03/20 00:27	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			04/03/20 00:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*72 - 124*		*04/03/20 00:27*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 120*		*04/03/20 00:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*04/03/20 00:27*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*04/03/20 00:27*	*1*

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

Lab Sample ID: LCS 500-536572/4
Matrix: Solid
Analysis Batch: 536572

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	43.7		ug/Kg		87	70 - 122
Bromochloromethane	50.0	50.7		ug/Kg		101	65 - 122
Bromodichloromethane	50.0	48.5		ug/Kg		97	69 - 120
Benzene	50.0	51.5		ug/Kg		103	70 - 120
Bromoform	50.0	40.5		ug/Kg		81	56 - 132
Bromomethane	50.0	55.4		ug/Kg		111	40 - 152
Carbon tetrachloride	50.0	54.6		ug/Kg		109	59 - 133
Chlorobenzene	50.0	49.5		ug/Kg		99	70 - 120
Chloroethane	50.0	52.2		ug/Kg		104	48 - 136
Chloroform	50.0	51.1		ug/Kg		102	70 - 120
Chloromethane	50.0	45.6		ug/Kg		91	56 - 152
2-Chlorotoluene	50.0	45.7		ug/Kg		91	70 - 125
4-Chlorotoluene	50.0	47.0		ug/Kg		94	68 - 124
cis-1,2-Dichloroethene	50.0	49.8		ug/Kg		100	70 - 125
cis-1,3-Dichloropropene	50.0	43.2		ug/Kg		86	64 - 127
Dibromochloromethane	50.0	43.7		ug/Kg		87	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	31.2		ug/Kg		62	56 - 123
1,2-Dibromoethane	50.0	43.7		ug/Kg		87	70 - 125
Dibromomethane	50.0	50.7		ug/Kg		101	70 - 120
1,2-Dichlorobenzene	50.0	45.9		ug/Kg		92	70 - 125
1,3-Dichlorobenzene	50.0	47.5		ug/Kg		95	70 - 125
1,4-Dichlorobenzene	50.0	47.4		ug/Kg		95	70 - 120
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	40 - 159
1,1-Dichloroethane	50.0	49.4		ug/Kg		99	70 - 125
1,2-Dichloroethane	50.0	54.8		ug/Kg		110	68 - 127
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 122
1,2-Dichloropropane	50.0	49.4		ug/Kg		99	67 - 130
1,3-Dichloropropane	50.0	45.1		ug/Kg		90	62 - 136
2,2-Dichloropropane	50.0	51.2		ug/Kg		102	58 - 139
1,1-Dichloropropene	50.0	52.0		ug/Kg		104	70 - 121
Ethylbenzene	50.0	52.9		ug/Kg		106	70 - 123
Hexachlorobutadiene	50.0	59.8		ug/Kg		120	51 - 150
Isopropylbenzene	50.0	46.8		ug/Kg		94	70 - 126
Methylene Chloride	50.0	46.6		ug/Kg		93	69 - 125
Methyl tert-butyl ether	50.0	52.5		ug/Kg		105	55 - 123
Naphthalene	50.0	41.2		ug/Kg		82	53 - 144
n-Butylbenzene	50.0	52.5		ug/Kg		105	68 - 125
N-Propylbenzene	50.0	48.0		ug/Kg		96	69 - 127
p-Isopropyltoluene	50.0	52.6		ug/Kg		105	70 - 125
sec-Butylbenzene	50.0	50.5		ug/Kg		101	70 - 123
Styrene	50.0	50.0		ug/Kg		100	70 - 120
tert-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.1		ug/Kg		92	70 - 125
1,1,2,2-Tetrachloroethane	50.0	35.3		ug/Kg		71	62 - 140
Tetrachloroethene	50.0	53.8		ug/Kg		108	70 - 128
Toluene	50.0	48.4		ug/Kg		97	70 - 125
trans-1,2-Dichloroethene	50.0	50.8		ug/Kg		102	70 - 125
trans-1,3-Dichloropropene	50.0	43.8		ug/Kg		88	62 - 128

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

Lab Sample ID: LCS 500-536572/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	50.0	48.1		ug/Kg		96	51 - 145
1,2,4-Trichlorobenzene	50.0	48.8		ug/Kg		98	57 - 137
1,1,1-Trichloroethane	50.0	53.8		ug/Kg		108	70 - 125
1,1,2-Trichloroethane	50.0	44.0		ug/Kg		88	71 - 130
Trichloroethene	50.0	52.0		ug/Kg		104	70 - 125
Trichlorofluoromethane	50.0	52.7		ug/Kg		105	55 - 128
1,2,3-Trichloropropane	50.0	39.1		ug/Kg		78	50 - 133
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 123
1,3,5-Trimethylbenzene	50.0	48.6		ug/Kg		97	70 - 123
Vinyl chloride	50.0	49.4		ug/Kg		99	64 - 126
Xylenes, Total	100	106		ug/Kg		106	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*
Dibromofluoromethane (Surr)	*98*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*
Toluene-d8 (Surr)	*92*		*75 - 120*

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

Lab Sample ID: MB 500-536022/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536113 **Prep Batch: 536022**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<36		170	36	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1,2-Dichlorobenzene	<40		170	40	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1,3-Dichlorobenzene	<37		170	37	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1,4-Dichlorobenzene	<43		170	43	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
1-Methylnaphthalene	<8.1		67	8.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,2'-oxybis[1-chloropropane]	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4,5-Trichlorophenol	<76		330	76	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4,6-Trichlorophenol	<110		330	110	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dichlorophenol	<79		330	79	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dimethylphenol	<130		330	130	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dinitrophenol	<590		670	590	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,4-Dinitrotoluene	<53		170	53	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2,6-Dinitrotoluene	<65		170	65	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Chloronaphthalene	<37		170	37	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Chlorophenol	<57		170	57	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Methylnaphthalene	<6.1		67	6.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Methylphenol	<53		170	53	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Nitroaniline	<45		170	45	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
2-Nitrophenol	<79		330	79	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
3 & 4 Methylphenol	<55		170	55	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
3,3'-Dichlorobenzidine	<47		170	47	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
3-Nitroaniline	<100		330	100	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4,6-Dinitro-2-methylphenol	<270		670	270	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Bromophenyl phenyl ether	<44		170	44	ug/Kg		03/30/20 18:18	03/31/20 11:54	1

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

Lab Sample ID: MB 500-536022/1-A
Matrix: Solid
Analysis Batch: 536113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	<110		330	110	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Chloroaniline	<160		670	160	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Chlorophenyl phenyl ether	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Nitroaniline	<140		330	140	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
4-Nitrophenol	<320		670	320	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Acenaphthene	<6.0		33	6.0	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Anthracene	<5.6		33	5.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzoic acid	<330		1700	330	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Benzyl alcohol	<330		670	330	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Bis(2-chloroethoxy)methane	<34		170	34	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Bis(2-chloroethyl)ether	<50		170	50	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Bis(2-ethylhexyl) phthalate	<61		170	61	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Butyl benzyl phthalate	<63		170	63	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Carbazole	<83		170	83	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Chrysene	<9.1		33	9.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Dibenzofuran	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Diethyl phthalate	<56		170	56	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Dimethyl phthalate	<43		170	43	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Di-n-butyl phthalate	<51		170	51	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Di-n-octyl phthalate	<54		170	54	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Fluoranthene	<6.2		33	6.2	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Fluorene	<4.7		33	4.7	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachlorobenzene	<7.7		67	7.7	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachlorobutadiene	<52		170	52	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachlorocyclopentadiene	<190		670	190	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Hexachloroethane	<51		170	51	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Isophorone	<37		170	37	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Naphthalene	<5.1		33	5.1	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Nitrobenzene	<8.3		33	8.3	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
N-Nitrosodi-n-propylamine	<41		67	41	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
N-Nitrosodiphenylamine	<39		170	39	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Pentachlorophenol	<530		670	530	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Phenanthrene	<4.6		33	4.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Phenol	<74		170	74	ug/Kg		03/30/20 18:18	03/31/20 11:54	1
Pyrene	<6.6		33	6.6	ug/Kg		03/30/20 18:18	03/31/20 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*31 - 143*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
2-Fluorobiphenyl (Surr)	*104*		*43 - 145*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
2-Fluorophenol (Surr)	*85*		*31 - 166*	*03/30/20 18:18*	*03/31/20 11:54*	*1*

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

Lab Sample ID: MB 500-536022/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536113 **Prep Batch: 536022**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*89*		*37 - 147*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
Phenol-d5 (Surr)	*80*		*30 - 153*	*03/30/20 18:18*	*03/31/20 11:54*	*1*
Terphenyl-d14 (Surr)	*127*		*42 - 157*	*03/30/20 18:18*	*03/31/20 11:54*	*1*

Lab Sample ID: LCS 500-536022/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536113 **Prep Batch: 536022**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	1330	1310		ug/Kg		98	66 - 117
1,2-Dichlorobenzene	1330	1200		ug/Kg		90	62 - 110
1,3-Dichlorobenzene	1330	1240		ug/Kg		93	65 - 124
1,4-Dichlorobenzene	1330	1210		ug/Kg		91	61 - 110
1-Methylnaphthalene	1330	1380		ug/Kg		103	68 - 111
2,2'-oxybis[1-chloropropane]	1330	804		ug/Kg		60	40 - 124
2,4,5-Trichlorophenol	1330	1220		ug/Kg		91	50 - 120
2,4,6-Trichlorophenol	1330	1320		ug/Kg		99	57 - 120
2,4-Dichlorophenol	1330	1180		ug/Kg		88	58 - 120
2,4-Dimethylphenol	1330	1310		ug/Kg		98	60 - 110
2,4-Dinitrophenol	2670	789		ug/Kg		30	10 - 100
2,4-Dinitrotoluene	1330	1190		ug/Kg		89	69 - 124
2,6-Dinitrotoluene	1330	1370		ug/Kg		103	70 - 123
2-Chloronaphthalene	1330	1310		ug/Kg		98	69 - 114
2-Chlorophenol	1330	1330		ug/Kg		100	64 - 110
2-Methylnaphthalene	1330	1420		ug/Kg		107	69 - 112
2-Methylphenol	1330	1080		ug/Kg		81	60 - 120
2-Nitroaniline	1330	1150		ug/Kg		86	57 - 124
2-Nitrophenol	1330	1310		ug/Kg		98	60 - 120
3 & 4 Methylphenol	1330	1210		ug/Kg		91	57 - 120
3,3'-Dichlorobenzidine	1330	1120		ug/Kg		84	35 - 128
3-Nitroaniline	1330	1180		ug/Kg		89	40 - 122
4,6-Dinitro-2-methylphenol	2670	1240		ug/Kg		47	10 - 110
4-Bromophenyl phenyl ether	1330	1270		ug/Kg		95	68 - 118
4-Chloro-3-methylphenol	1330	1190		ug/Kg		89	65 - 122
4-Chloroaniline	1330	1210		ug/Kg		91	30 - 150
4-Chlorophenyl phenyl ether	1330	1240		ug/Kg		93	62 - 119
4-Nitroaniline	1330	1230		ug/Kg		93	60 - 160
4-Nitrophenol	2670	1690		ug/Kg		64	30 - 122
Acenaphthene	1330	1340		ug/Kg		101	65 - 124
Acenaphthylene	1330	1340		ug/Kg		100	68 - 120
Anthracene	1330	1380		ug/Kg		103	70 - 114
Benzo[a]anthracene	1330	1380		ug/Kg		104	67 - 122
Benzo[a]pyrene	1330	1320		ug/Kg		99	65 - 133
Benzo[b]fluoranthene	1330	1230		ug/Kg		92	69 - 129
Benzo[g,h,i]perylene	1330	1460		ug/Kg		109	72 - 131
Benzo[k]fluoranthene	1330	1400		ug/Kg		105	68 - 127
Benzoic acid	2670	1360	J	ug/Kg		51	10 - 100
Benzyl alcohol	1330	1660		ug/Kg		125	21 - 139

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

Lab Sample ID: LCS 500-536022/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536113 **Prep Batch: 536022**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	1330	1110		ug/Kg		83	60 - 112
Bis(2-chloroethyl)ether	1330	1200		ug/Kg		90	55 - 111
Bis(2-ethylhexyl) phthalate	1330	1650		ug/Kg		124	72 - 131
Butyl benzyl phthalate	1330	1490		ug/Kg		112	71 - 129
Carbazole	1330	1490		ug/Kg		112	65 - 142
Chrysene	1330	1410		ug/Kg		105	63 - 120
Dibenz(a,h)anthracene	1330	1440		ug/Kg		108	64 - 131
Dibenzofuran	1330	1230		ug/Kg		92	66 - 115
Diethyl phthalate	1330	1410		ug/Kg		106	58 - 120
Dimethyl phthalate	1330	1360		ug/Kg		102	69 - 116
Di-n-butyl phthalate	1330	1460		ug/Kg		109	65 - 120
Di-n-octyl phthalate	1330	1470		ug/Kg		110	68 - 134
Fluoranthene	1330	1290		ug/Kg		97	62 - 120
Fluorene	1330	1370		ug/Kg		103	62 - 120
Hexachlorobenzene	1330	1400		ug/Kg		105	63 - 124
Hexachlorobutadiene	1330	1230		ug/Kg		92	56 - 120
Hexachlorocyclopentadiene	1330	537	J	ug/Kg		40	10 - 133
Hexachloroethane	1330	1140		ug/Kg		86	60 - 114
Indeno[1,2,3-cd]pyrene	1330	1450		ug/Kg		109	68 - 130
Isophorone	1330	1080		ug/Kg		81	55 - 110
Naphthalene	1330	1310		ug/Kg		98	63 - 110
Nitrobenzene	1330	1120		ug/Kg		84	60 - 116
N-Nitrosodi-n-propylamine	1330	923		ug/Kg		69	56 - 118
N-Nitrosodiphenylamine	1330	1460		ug/Kg		109	65 - 112
Pentachlorophenol	2670	2030		ug/Kg		76	13 - 112
Phenanthrene	1330	1380		ug/Kg		104	62 - 120
Phenol	1330	1130		ug/Kg		85	56 - 122
Pyrene	1330	1400		ug/Kg		105	61 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*120*		*31 - 143*
2-Fluorobiphenyl (Surr)	*98*		*43 - 145*
2-Fluorophenol (Surr)	*87*		*31 - 166*
Nitrobenzene-d5 (Surr)	*89*		*37 - 147*
Phenol-d5 (Surr)	*88*		*30 - 153*
Terphenyl-d14 (Surr)	*118*		*42 - 157*

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: LB3 500-535627/21-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 536061 **Prep Batch: 535627**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<0.50		1.5	0.50	mg/Kg		03/26/20 21:15	04/01/20 01:11	50

Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC) (Continued)

Lab Sample ID: LCS 500-535627/23-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536061 — **Prep Batch: 535627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
WI Gasoline Range Organics (C5-C10)	20.0	21.8		mg/Kg		109	80 - 120

Lab Sample ID: LCSD 500-535627/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536061 — **Prep Batch: 535627**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
WI Gasoline Range Organics (C5-C10)	20.0	22.1		mg/Kg		110	80 - 120	1	20

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-536176/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536278 — **Prep Batch: 536176**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		03/31/20 16:25	04/01/20 10:14	1
PCB-1221	<7.3		17	7.3	ug/Kg		03/31/20 16:25	04/01/20 10:14	1
PCB-1232	<7.3		17	7.3	ug/Kg		03/31/20 16:25	04/01/20 10:14	1
PCB-1242	<5.5		17	5.5	ug/Kg		03/31/20 16:25	04/01/20 10:14	1
PCB-1248	<6.6		17	6.6	ug/Kg		03/31/20 16:25	04/01/20 10:14	1
PCB-1254	<3.6		17	3.6	ug/Kg		03/31/20 16:25	04/01/20 10:14	1
PCB-1260	<8.2		17	8.2	ug/Kg		03/31/20 16:25	04/01/20 10:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*49 - 129*	*03/31/20 16:25*	*04/01/20 10:14*	*1*
DCB Decachlorobiphenyl	*109*		*37 - 121*	*03/31/20 16:25*	*04/01/20 10:14*	*1*

Lab Sample ID: LCS 500-536176/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536278 — **Prep Batch: 536176**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	167	180		ug/Kg		108	57 - 120
PCB-1260	167	177		ug/Kg		106	61 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*102*		*49 - 129*
DCB Decachlorobiphenyl	*116*		*37 - 121*

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Lab Sample ID: MB 500-535546/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 535582 — **Prep Batch: 535546**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg		03/26/20 11:52	03/26/20 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Nonane	*76*		*44 - 148*	*03/26/20 11:52*	*03/26/20 16:43*	*1*

Lab Sample ID: LCS 500-535546/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 535582 — **Prep Batch: 535546**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
WI Diesel Range Organics (C10-C28)	20.0	18.3		mg/Kg		91	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Nonane	*74*		*44 - 148*

Lab Sample ID: LCSD 500-535546/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 535582 — **Prep Batch: 535546**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
WI Diesel Range Organics (C10-C28)	20.0	20.4		mg/Kg		102	70 - 120	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Nonane	*72*		*44 - 148*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-536015/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536159 — **Prep Batch: 536015**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.34		1.0	0.34	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Barium	<0.11		1.0	0.11	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Cadmium	<0.036		0.20	0.036	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Chromium	<0.50		1.0	0.50	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Copper	<0.28		1.0	0.28	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Lead	<0.23		0.50	0.23	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Nickel	<0.29		1.0	0.29	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Selenium	<0.59		1.0	0.59	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Silver	<0.13		0.50	0.13	mg/Kg		03/30/20 17:03	03/31/20 10:19	1
Zinc	<0.88		2.0	0.88	mg/Kg		03/30/20 17:03	03/31/20 10:19	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-536015/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536159 — **Prep Batch: 536015**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.0	8.77		mg/Kg		88	80 - 120
Barium	200	184		mg/Kg		92	80 - 120
Cadmium	5.00	4.52		mg/Kg		90	80 - 120
Chromium	20.0	19.1		mg/Kg		96	80 - 120
Copper	25.0	23.6		mg/Kg		94	80 - 120
Lead	10.0	9.18		mg/Kg		92	80 - 120
Nickel	50.0	46.7		mg/Kg		93	80 - 120
Selenium	10.0	8.18		mg/Kg		82	80 - 120
Silver	5.00	4.39		mg/Kg		88	80 - 120
Zinc	50.0	46.9		mg/Kg		94	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-536149/12-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536337 — **Prep Batch: 536149**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0056		0.017	0.0056	mg/Kg		03/31/20 13:15	04/01/20 09:37	1

Lab Sample ID: LCS 500-536149/13-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 536337 — **Prep Batch: 536149**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.158		mg/Kg		95	80 - 120

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-09 (2'-4') Lab Sample ID: 500-179841-1
Date Collected: 03/24/20 08:30 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:41	LWN	TAL CHI

Client Sample ID: GP-09 (2'-4') Lab Sample ID: 500-179841-1
Date Collected: 03/24/20 08:30 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 77.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 08:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 01:46	JDD	TAL CHI
Total/NA	Prep	3050B			536015	03/30/20 17:03	BDE	TAL CHI
Total/NA	Analysis	6010C		1	536159	03/31/20 10:31	JEF	TAL CHI

Client Sample ID: GP-09 (6'-8') Lab Sample ID: 500-179841-2
Date Collected: 03/24/20 08:35 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:41	LWN	TAL CHI

Client Sample ID: GP-09 (6'-8') Lab Sample ID: 500-179841-2
Date Collected: 03/24/20 08:35 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/24/20 08:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 02:13	JDD	TAL CHI
Total/NA	Prep	3050B			536015	03/30/20 17:03	BDE	TAL CHI
Total/NA	Analysis	6010C		1	536159	03/31/20 10:35	JEF	TAL CHI

Client Sample ID: GP-10 (2'-4') Lab Sample ID: 500-179841-3
Date Collected: 03/24/20 08:45 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535705	03/27/20 08:41	LWN	TAL CHI

Client Sample ID: GP-10 (2'-4') Lab Sample ID: 500-179841-3
Date Collected: 03/24/20 08:45 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 88.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535627	03/24/20 08:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 02:41	JDD	TAL CHI
Total/NA	Prep	3050B			536015	03/30/20 17:03	BDE	TAL CHI
Total/NA	Analysis	6010C		1	536159	03/31/20 10:39	JEF	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-10 (6'-8') Lab Sample ID: 500-179841-4
Date Collected: 03/24/20 08:55 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-10 (6'-8') Lab Sample ID: 500-179841-4
Date Collected: 03/24/20 08:55 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			535627	03/24/20 08:55	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536458	04/02/20 18:09	JDD	TAL CHI
Total/NA	Prep	3541			536022	03/30/20 18:18	ACK	TAL CHI
Total/NA	Analysis	8270D		1	536182	04/01/20 02:00	NRJ	TAL CHI
Total/NA	Prep	WI GRO			535627	03/24/20 08:55	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		50	536061	04/01/20 03:30	WRE	TAL CHI
Total/NA	Prep	3541			536176	03/31/20 16:25	JP1	TAL CHI
Total/NA	Analysis	8082A		1	536278	04/01/20 12:02	BJH	TAL CHI
Total/NA	Prep	3050B			536015	03/30/20 17:03	BDE	TAL CHI
Total/NA	Analysis	6010C		1	536159	03/31/20 10:43	JEF	TAL CHI
Total/NA	Prep	7471B			536149	03/31/20 13:15	MJG	TAL CHI
Total/NA	Analysis	7471B		1	536337	04/01/20 09:43	MJG	TAL CHI

Client Sample ID: GP-11 (2'-4') Lab Sample ID: 500-179841-5
Date Collected: 03/24/20 09:05 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-11 (2'-4') Lab Sample ID: 500-179841-5
Date Collected: 03/24/20 09:05 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 82.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 09:05	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 03:08	JDD	TAL CHI
Total/NA	Prep	3050B			536015	03/30/20 17:03	BDE	TAL CHI
Total/NA	Analysis	6010C		1	536159	03/31/20 10:47	JEF	TAL CHI

Client Sample ID: GP-11 (6'-8') Lab Sample ID: 500-179841-6
Date Collected: 03/24/20 09:15 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-11 (6'-8')
Lab Sample ID: 500-179841-6
Date Collected: 03/24/20 09:15 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 87.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 09:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 03:35	JDD	TAL CHI
Total/NA	Prep	3050B			536015	03/30/20 17:03	BDE	TAL CHI
Total/NA	Analysis	6010C		1	536159	03/31/20 10:51	JEF	TAL CHI

Client Sample ID: GP-12 (2'-4')
Lab Sample ID: 500-179841-7
Date Collected: 03/24/20 09:45 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-12 (2'-4')
Lab Sample ID: 500-179841-7
Date Collected: 03/24/20 09:45 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 87.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 09:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 04:02	JDD	TAL CHI
Total/NA	Prep	WI DRO PREP			535546	03/26/20 11:52	DAK	TAL CHI
Total/NA	Analysis	WI-DRO		1	535582	03/26/20 18:55	AK	TAL CHI

Client Sample ID: GP-13 (2'-4')
Lab Sample ID: 500-179841-8
Date Collected: 03/24/20 09:50 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-13 (2'-4')
Lab Sample ID: 500-179841-8
Date Collected: 03/24/20 09:50 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 81.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 09:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536376	04/02/20 04:29	JDD	TAL CHI
Total/NA	Prep	WI DRO PREP			535546	03/26/20 11:52	DAK	TAL CHI
Total/NA	Analysis	WI-DRO		1	535582	03/26/20 19:21	AK	TAL CHI

Client Sample ID: GP-19 (2'-4')
Lab Sample ID: 500-179841-17
Date Collected: 03/24/20 12:25 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-19 (2'-4')
Lab Sample ID: 500-179841-17
Date Collected: 03/24/20 12:25 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 81.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 12:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536458	04/02/20 19:50	JDD	TAL CHI

Client Sample ID: GP-19 (6'-8')
Lab Sample ID: 500-179841-18
Date Collected: 03/24/20 12:35 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-19 (6'-8')
Lab Sample ID: 500-179841-18
Date Collected: 03/24/20 12:35 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 91.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 12:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536458	04/02/20 20:16	JDD	TAL CHI

Client Sample ID: GP-20 (2'-4')
Lab Sample ID: 500-179841-19
Date Collected: 03/24/20 12:50 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-20 (2'-4')
Lab Sample ID: 500-179841-19
Date Collected: 03/24/20 12:50 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 12:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536458	04/02/20 20:41	JDD	TAL CHI

Client Sample ID: GP-21 (2'-4')
Lab Sample ID: 500-179841-20
Date Collected: 03/24/20 13:00 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: GP-21 (2'-4')
Lab Sample ID: 500-179841-20
Date Collected: 03/24/20 13:00 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 82.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 13:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536572	04/03/20 06:48	JDD	TAL CHI
Total/NA	Prep	WI DRO PREP			535546	03/26/20 11:52	DAK	TAL CHI
Total/NA	Analysis	WI-DRO		1	535582	03/26/20 19:48	AK	TAL CHI

Client Sample ID: GP-22 (2'-4')
Lab Sample ID: 500-179841-21
Date Collected: 03/24/20 13:20 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-22 (2'-4')
Lab Sample ID: 500-179841-21
Date Collected: 03/24/20 13:20 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 81.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 13:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536572	04/03/20 07:16	JDD	TAL CHI

Client Sample ID: GP-22 (6'-8')
Lab Sample ID: 500-179841-22
Date Collected: 03/24/20 13:30 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Client Sample ID: GP-22 (6'-8')
Lab Sample ID: 500-179841-22
Date Collected: 03/24/20 13:30 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 83.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 13:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536572	04/03/20 07:43	JDD	TAL CHI
Total/NA	Prep	WI DRO PREP			535546	03/26/20 11:52	DAK	TAL CHI
Total/NA	Analysis	WI-DRO		1	535582	03/26/20 20:14	AK	TAL CHI

Client Sample ID: Trip-02
Lab Sample ID: 500-179841-23
Date Collected: 03/24/20 00:00 **Matrix: Solid**
Date Received: 03/25/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	535723	03/27/20 09:12	LWN	TAL CHI

Lab Chronicle

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Client Sample ID: Trip-02 **Lab Sample ID: 500-179841-23**
Date Collected: 03/24/20 00:00 **Matrix: Solid**
Date Received: 03/25/20 09:00 **Percent Solids: 100.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			535628	03/24/20 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	536572	04/03/20 02:16	JDD	TAL CHI

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation. Job ID: 500-179841-1
Project/Site: WisDOT 2667-03-01 Humbolt Ph2.5 382056

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

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

Chain of Custody Record

eurofins

Client Information	Sampler: A. Sobbe	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-79350-36559.3
Client Contact: Aaron Sobbe	Phone:	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 3 of 6
Company: TRC Environmental Corporation.				Job #: 500-179841
Address: 150 N. Patrick Blvd. Suite 180	Due Date Requested:			Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:
City: Brookfield	TAT Requested (days): 10			
State, Zip: WI, 53045	PO #: Purchase Order Requested			
Phone:	WO #:			
Email: asobbe@trccompanies.com	Project #: 50016869			
Project Name: WisDOT 2667-03-01 Humboldt Ph 2 5 382056	SSOW#:			
Site:				

500-179841 COC

Analysis Requested

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 + naphthalene	Lead	VOCs 8260	SVOCs	PCBs	11 RCRA metals	DRO	Total Number of containers	Special Instructions/Note:
				Preservation Code:												
1	GP-09 (2'-4')	3-24-2020	830	G	Solid			X	X							
2	GP-09 (6'-8')		835		Solid			X	X							
3	GP-10 (2'-4')		845		Solid			X	X							
4	GP-10 (6'-8')		855		Solid					X	X	X	X			
5	GP-11 (2'-4')		905		Solid			X	X							
6	GP-11 (6'-8')		915		Solid			X	X							
7	GP-12 (2'-4')		945		Solid			X						X		
8	GP-13 (2'-4')		950		Solid			X						X		
9	GP-14 (2'-4')		1000		Solid			X								Analyze, but hold result
10	GP-15 (2'-4')		1010		Solid			X	X							1
11	GP-15 (6'-8')		1040		Solid			X	X							

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	3-24-2020/1700	TRC	[signature]	3/25/20 0900	TAECHI
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.9 → 2.9

Ver: 01/16/2019

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

Chain of Custody Record

eurofins

Client Information	Sampler: A. Sobbe	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-79350-36559.4
Client Contact: Aaron Sobbe	Phone:	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 4 of 6
Company: TRC Environmental Corporation.		Analysis Requested		Job #: 500-179841
Address: 150 N. Patrick Blvd Suite 180	Due Date Requested:			Preservation Codes:
City: Brookfield	TAT Requested (days): 10			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: WI, 53045				
Phone:	PO #: Purchase Order Requested			Other:
Email: asobbe@trccompanies.com	WO #:			
Project Name: WisDOT 2667-03-01 Humboldt Ph 2.5 382050	Project #: 50016869			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PVOCs + naphthalene 8260	Lead	VOCs 8260	DRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
12 GP-16 (2'-4')	3-24-2020	1105	G	Solid			X	X				T
13 GP-16 (6'-8')		1116		Solid			X	X				
14 GP-17 (2'-4')		1125		Solid					X			
15 GP-18 (2'-4')		1135		Solid					X			Analyte, but had results
16 GP-18 (6'-8')		1140		Solid					X			" "
17 GP-19 (2'-4')		1225		Solid					X			
18 GP-19 (6'-8')		1235		Solid					X			
19 GP-20 (2'-4')		1250		Solid					X			
20 GP-21 (2'-4')		1300		Solid					X	X		
21 GP-22 (2'-4')		1320		Solid					X			
22 GP-22 (6'-8')		1330		Solid					X	X		

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	3-24-2020 1700	TRC	[signature]	3/25/20 0900	TA-CHI
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins

Client Information	Sampler: A. Sobbe	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-79350-36559.5
Client Contact: Aaron Sobbe	Phone:	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 5 of 6
Company: TRC Environmental Corporation.		Analysis Requested		Job #: 500-179841
Address: 150 N. Patrick Blvd Suite 180	Due Date Requested:			Preservation Codes:
City: Brookfield	TAT Requested (days): 10			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: WI 53045	PO #: Purchase Order Requested			
Phone:	WO #:			
Email: asobbe@trccompanies.com	Project #: 50016369			Other:
Project Name: WisDOT 2667-03-01 Humboldt Ph 2.5 382056	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
23 Trip-02	3-24-2020	—	—	Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					

AS 3-24-2020

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	3-24-2020/1700	TRC	[signature]	3/25/20 0900	TAL CHI
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

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

Ver: 04/16/2019

Fredrick, Sandie

From: Bergmann, Bryan <BBergmann@trccompanies.com>
Sent: Thursday, March 26, 2020 3:29 PM
To: Fredrick, Sandie
Subject: RE: [EXTERNAL] Eurofins TestAmerica Sample Login Confirmation files from 500-179841 WisDOT 2667-03-01 Humbolt Ph2.5 382056

EXTERNAL EMAIL*

Please add to just GP-10 (6'-8'). Thanks!

From: Fredrick, Sandie <Sandra.Fredrick@testamericainc.com>
Sent: Thursday, March 26, 2020 3:28 PM
To: Bergmann, Bryan <BBergmann@trccompanies.com>
Subject: RE: [EXTERNAL] Eurofins TestAmerica Sample Login Confirmation files from 500-179841 WisDOT 2667-03-01 Humbolt Ph2.5 382056

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

Hi Bryan,
I can add GRO to either below. What do you prefer? Or both?
Thanks,
Sandie

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

We are thankful for your business and hope that you have a wonderful day!

Sandie Fredrick
Project Manager

Eurofins TestAmerica
2417 Bond Street
University Park, IL 60484
USA

Phone: 920-261-1660

E-mail: sandie.fredrick@testamericainc.com
www.EurofinsUS.com | www.TestAmericainc.com

Please note: In order to continue to provide critical testing services, **Eurofins Environment Testing laboratories in the US are maintaining our courier services and continue to sample, analyze and report all test data as usual.** The situation around COVID-19 continues to be fluid and we are continuing to follow

local and government mandates as applicable. For up-to-date business information, visit our website and follow us on Facebook and LinkedIn.

Links to use:

Website: https://www.eurofinsus.com/environment-testing/
Facebook: https://www.facebook.com/EurofinsEnvTesting
LinkedIn: https://www.linkedin.com/company/eurofins-env-testing-america/

From: Bergmann, Bryan [mailto:BBergmann@trccompanies.com]
Sent: Thursday, March 26, 2020 2:53 PM
To: Fredrick, Sandie
Subject: RE: [EXTERNAL] Eurofins TestAmerica Sample Login Confirmation files from 500-179841 WisDOT 2667-03-01 Humbolt Ph2.5 382056

EXTERNAL EMAIL*

Hi Sandie,

Is there any way to run GRO on the samples that were submitted for GP-10 (6'-8')?

If not, if GP-09 (6'-8') has not been prepped yet, can I change that from PVOCs + Nap by 8260 to GRO/PVOCs + nap?

From: Sandie Fredrick <sandie.fredrick@testamericainc.com>
Sent: Wednesday, March 25, 2020 1:35 PM
To: Sobbe, Aaron <ASobbe@trccompanies.com>
Subject: [EXTERNAL] Eurofins TestAmerica Sample Login Confirmation files from 500-179841 WisDOT 2667-03-01 Humbolt Ph2.5 382056

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

Hello Aaron,

I have the analyze and hold on a separate login.

Attached, please find the Sample Confirmation files for job 500-179841; WisDOT 2667-03-01 Humbolt Ph2.5 382056

Please feel free to contact me if you have any questions.

Thank you.

Sandie Fredrick

Project Manager

Eurofins TestAmerica, Chicago
Phone: 920-261-1660

E-mail: sandie.fredrick@testamericainc.com
www.eurofinsus.com | www.testamericainc.com

Reference: [500-527200]
Attachments: 5

Please let us know if we met your expectations by rating the service you received from Eurofins TestAmerica on this project by visiting our website at: Project Feedback

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* WARNING - EXTERNAL: This email originated from outside of Eurofins TestAmerica. Do not click any links or open any attachments unless you trust the sender and know that the content is safe!

ORIGIN ID:RRLA (262) 901-2154
JESSICA PELICARIC
TRC COMPANIES
150 N PATRICK BLVD. SUITE 180

BROOKFIELD, WI 53045
UNITED STATES US

SHIP DATE: 24MAR20
ACTWGT: 40.00 LB
CAD: 110326482/INET4220

BILL RECIPIENT

TO ATTN: SAMPLE RECEIVING
TEST AMERICA - CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484

500-179841 Waybill

(708) 534-5200 REF 36:056 0000 0000
INV
PO DEPT

FedEx Express

WED - 25 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7700 9549 0266

79 JOTA

60484
IL-US ORD

Login Sample Receipt Checklist

Client: TRC Environmental Corporation. Job Number: 500-179841-1

Login Number: 179841 **List Source: Eurofins TestAmerica, Chicago**
List Number: 1
Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix E: Draft Special Provisions

Management of Solid Waste, Item SPV.0195.01.

A General

A.1 Description

This work will conform with the requirements of Section 205 of the Standard Specifications; to pertinent parts of the Wisconsin Administrative Code, Chapters NR 700-736 Environmental Investigation and Remediation of Environmental Contamination; Wisconsin Administration Code, Chapters NR 500-538, Solid Waste; and as shown on the plans and as supplemented herein.

Soil considered to be solid waste due to Chlorinated Volatile Organic Compounds (CVOCs) will be encountered within the construction limits. The solid waste may contain NR 500 non-exempt industrial wastes including soil mixed with foundry sand. Impacted waste material excavated during construction which cannot in the opinion of the environmental consultant be managed as common excavation or as petroleum-contaminated soil will be managed as solid waste.

This work consists of excavating, segregating, temporary stockpiling, loading, hauling, and disposing of solid waste material at a WDNR-approved disposal facility. The nearest WDNR-approved disposal facilities are:

Advanced Disposal Emerald Park Landfill
W124S10629 South 124th Street
Muskego, WI 53150
(414) 529-1360

Waste Management Orchard Ridge Landfill
W124 N9355 Boundary Road
Menomonee Falls, WI 53051
(866) 909-4458

Provide information to the environmental consultant and engineer that indicates the WDNR-approved disposal facility that the contractor will use.

A.2 Notice to the Contractor–Solid Waste Locations

The department and others completed hazardous materials assessment for locations within this project where excavation is required. Investigation for soil contamination was conducted at select locations. Results indicate that solid waste (soil contaminated with CVOCs) is present at the following location as shown on the plans:

- Station 47+35 to 47+75, from 30 feet left of reference line to project limits left, from approximately 1 to 6 feet bgs. The estimated volume of contaminated soil to be excavated at this location is 325 CY (approximately 552 tons using a conversion factor of 1.7 tons per cubic yard).

Directly load solid waste soil excavated by the project at the above location into trucks that will transport the material to a WDNR-licensed landfill facility for landfill disposal.

If obviously contaminated soils or signs of NR 500 non-exempt solid waste and hazardous materials are unexpectedly encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Examples of these unexpected conditions may include, but are not limited to, buried containers or tanks, noxious odors and fumes, stained soils, sheen on ground water, other industrial wastes, and significant volumes of municipal or domestic garbage.

If dewatering is required at the above location, conduct the dewatering in accordance with Section C below.

An active monitoring well was observed within the construction limits during the hazardous materials assessment at the following location:

- Station 46+07, 9 feet left of reference line.

If any additional active groundwater monitoring wells are encountered during construction, notify the engineer and protect the wells to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For wells that do not need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

A.3 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated waste. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities in these areas contact:

Name:	Andrew Malsom
Address:	141 NW Barstow Street, Waukesha, WI 53187-0798
Phone:	262-548-6705
Fax:	262-548-6891
e-mail:	andrew.malsom@dot.state.wi.us

A.4 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	TRC Environmental Corporation
Address:	150 N. Patrick Blvd. Ste. 180, Brookfield, WI 53045
Contact:	Bryan Bergmann
Phone:	262-901-2126 (office), 262-227-9210 (cell)

Fax: 262-879-1220
E-mail: bbergmann@trccompanies.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of solid waste to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying soils to be hauled to the landfill facility;
3. Documenting that activities associated with management of solid waste are in conformance with the solid waste management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of solid waste from the landfill facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the area of solid waste fill described in A.2 to the environmental consultant. Identify the WDNR licensed landfill facility that will be used for disposal of solid waste, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation in the impacted area or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals from the landfill facility for disposal of the solid waste.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation in the impacted area. Notify the environmental consultant at least three calendar days prior to commencement of excavation in the impacted area. Perform excavation in the impacted area on a continuous basis until excavation work is completed. Do not transport soil containing solid waste offsite without prior approval from the environmental consultant.

A.5 Health and Safety Requirements
Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter historic fill contaminated with industrial waste (foundry sand) and associated regulated metals and organic compounds. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each impacted area as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

B (Vacant)

C Construction

Subsection 205.3 of the Standard Specification is supplemented with the following:

Control operations in the impacted area to minimize the quantity of soil excavated.

The environmental consultant will periodically monitor soil excavated from the area identified in A.2 above. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul solid waste soil designated by the environmental consultant for offsite disposal to the WDNR approved landfill facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of the material. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids.

Verify that the vehicles used to transport material are licensed for such activity in accordance with applicable state and federal regulations. Obtain the necessary disposal facility approvals and WDNR approvals for disposal. Do not transport regulated solid waste off-site without obtaining the approval of the environmental consultant and engineer and notifying the disposal facility.

During excavations in the areas of known contamination, larger chunks of clean concrete (~2 cubic feet), asphalt and bricks shall be segregated from the fill, to the extent practical and managed as common excavation. Under NR 500.08 this material is exempt from licensing and requirements of Wisconsin Administrative Code NR 500-538 of the solid waste regulations, and will be reused as designated by the engineer as fill on the project, or it will be disposed of off-site at the contractor's disposal site(s).

If dewatering is required in areas of known contamination, water generated from dewatering activities may contain chlorinated solvents, petroleum compounds and/or metals. Such water may require analytical testing, and with approval from the Milwaukee Metropolitan Sewerage District (MMSD) be discharged to the sanitary sewer as follows:

1. Meet all applicable requirements of the MMSD including the control of suspended solids. Perform all necessary monitoring to document compliance with the MMSD requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with the MMSD requirements.
2. Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Groundwater with a petroleum sheen cannot be discharged to the sanitary sewer per MMSD guidelines. If dewatering is necessary where the groundwater has a sheen on the surface, the water shall be pumped into a holding tank or tanker truck for off-site testing and disposal.

Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

D Measurement

The department will measure solid waste by the ton of waste accepted by the disposal facility and as documented by weight tickets.

E Payment

The department will pay for measured quantities at the contract unit price under the following item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Management of Solid Waste	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and landfill disposal of solid waste; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of soil samples for field evaluation; dewatering of soils prior to transport, if necessary; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

1. Notice to Contractor – Possible Contamination Beyond Construction Limits.

The department completed a review of environmental documents and databases for soil and groundwater contamination at locations within this project where excavation is required. The review indicated that petroleum-contaminated soil and groundwater may be present beyond the project limits at the following locations:

1. Station 01+50 to 02+75, beyond project limits left (Coffaros Service Station, 1030 E. North Ave., WDNR BRRTS No. 03-41-001598, Closed LUST Site and active filling station).

2. Station 01+50 to 02+75, beyond project limits right (Clark Oil/Silverman, Pindyck, 2300 N. Humboldt Blvd., BRRTS No. 03-41-000514, Closed LUST Site).

3. Station 44+50 to 47+20, beyond project limits left (Alterra Coffee, 2941-2955 N. Humboldt Blvd., WDNR BRRTS No. 03-41-484156, Open LUST Site. Jacquez Service, 2963 N. Humboldt Blvd., WDNR BRRTS No. 03-41-004824, Closed LUST Site).

4. 47+55 to 48+80, beyond project limits left (Adelman Cleaners Laundry Mat – Former & Vacant Lot, 3009 N. Humboldt Blvd., WDNR BRRTS No. 03-41-111395 and 02-41-531327, Closed LUST and Closed ERP Site).

Contaminated soil and/or groundwater could be present at sites 1,2, and 3 and is known to be present at site 4; however, if present, the contamination is expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations near these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soil and/or groundwater is encountered near these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting:

Andrew Malsom
WisDOT SE Region
141 NW Barstow St.
Waukesha, WI 53187
262-548-6705

107-100 (20050901)