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February 12, 2020

Mr. Grant Neitzel
Wisconsin Department of Natural Resources
1701 N 4th St
Superior, WI 54880

Subject: Site Investigation Report
Superior City ROW, Belknap and Clough (902-904 Belknap St), Superior, Wisconsin
BRRTS #03-16-560358

Dear Mr. Neitzel:

Enclosed is the Site Investigation Report for the City of Superior ROW (902-904 Belknap St) site in Superior, Wisconsin. Site investigation results indicate that residual soil and groundwater petroleum contamination is limited in extent and poses no risk to human health and the environment. As a result, we propose the site proceed to closure.

Please feel free to contact me, at 608-826-3608, if you have any questions or would like to discuss in further detail.

Sincerely,

TRC

Steve Sellwood, P.G.
Senior Hydrogeologist

cc: Todd Janigo, City of Superior (pdf via email)

Site Investigation Report

Superior City ROW – Belknap & Clough
(902-904 Belknap St ROW)
BRRTS #03-16-560358
Superior, Wisconsin

February 2020

Prepared For:

City of Superior

Prepared By:

TRC
708 Heartland Trail, Suite 3000
Madison, Wisconsin 53717

Stephen Sellwood, P.G.
Project Manager

Daniel Haak, P.E.
Client Service Manager

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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 subject site is City of Superior right-of-way (ROW) located at the intersection of Belknap St. and Clough Ave. in Superior, Wisconsin. The adjacent property has a commercial building (Letsos Building) with addresses 902-904 Belknap St. Three soil borings were installed and sampled in the ROW during a Phase 2.5 Site Investigation for the WisDOT in 2012. Soil samples from two borings installed in front of the commercial building contained petroleum compounds at concentrations exceeding NR 720 residual contaminant levels.

On May 3, 2018, a 500-gallon underground storage tank (UST) was removed from the ROW in front of the 902-904 Belknap St. commercial building. At the time of the removal 92.81 tons of petroleum-contaminated soil were excavated and hauled to the Vonco V landfill in Duluth, Minnesota, for treatment and disposal. Following the tank removal activities, additional soil excavation and sampling took place during utility work associated with the road reconstruction project in May 2018. An additional 136.81 tons of contaminated soil were excavated and hauled to the landfill for treatment and disposal.

On December 3 and 4, 2018, TRC and TRC's soil boring subcontractor sampled three soil borings and installed three monitoring wells at the site. Groundwater samples were collected from the three site monitoring wells on May 9, 2019 and August 10, 2019.

Laboratory results for soil and groundwater samples indicate that the petroleum contamination in soil and groundwater at the site is very limited in extent. Based on the results of site investigation activities completed at the subject site we conclude that:

- The UST and 230 tons of contaminated soil from the source area have been removed the site.
- Remaining soil contamination does not pose a direct contact risk.
- Groundwater contamination is limited in extent and there are no groundwater receptors in the area.
- Petroleum vapors are not present in the Letsos Building at concentrations exceeding Wisconsin screening levels.

Based on the findings of this investigation, petroleum contamination at this site does not pose a risk to human health or the environment; therefore, we recommend case closure.

1.0 Certifications

1.1 Professional Engineer Certification

I, Dan Haak, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Daniel Haak E-37374
Signature, Title and P.E. Number

1.2 Hydrogeologist Certification

I, Stephen Sellwood, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Stephen Sellwood Hydrogeologist
Signature and Title

2-12-2020
Date

2.0 Background Information

2.1 Introduction

The subject site is City of Superior right-of-way (ROW) located at the intersection of Belknap St. and Clough Ave. in Superior, Wisconsin (Figure 1). The adjacent property has a commercial building (Letsos Building) with addresses 902-904 Belknap St. Three soil borings (B22A, B22B, and B22C) were installed and sampled in the ROW during a Phase 2.5 Site Investigation for the WisDOT in 2012. Soil samples from the two borings (B22A and B22C) installed in front of the commercial building contained petroleum compounds at concentrations exceeding NR 720 residual contaminant levels (RCLs). Boring locations are shown on Figure 2 and soil laboratory results are summarized in Table 1. The results of the investigation were reported to the WDNR in a draft Phase 2.5 Site Investigation report in January 2013. The WDNR issued a Responsible Party letter to the City of Superior in April 2013.

Additional soil borings (B22D through B22K) were installed and sampled at the site during subsequent investigations conducted on behalf of the WisDOT in August 2015 and July 2016. None of the soil samples from these additional borings had petroleum contaminants (Table 1).

On May 3, 2018, a 500-gallon underground storage tank (UST) was removed from the ROW in front of the 902-904 Belknap St. commercial building. At the time of the removal 92.81 tons of petroleum-contaminated soil were excavated and hauled to the Vonco V landfill in Duluth, Minnesota, for treatment and disposal. Six soil samples were collected from the sidewalls and base of the UST excavation and laboratory-analyzed for PVOCs and naphthalene. These samples all contained benzene at concentrations exceeding the NR 720 groundwater pathway RCL and two of the samples contained other PVOCs at concentrations exceeding groundwater pathway RCLs (Table 1). Tank removal activities were reported to the WDNR in a tank abandonment reported dated September 24, 2018 (TRC 2018).

Following the tank removal activities, additional soil excavation and sampling took place during utility work associated with the road reconstruction project in May 2018. Four additional soil samples were collected and analyzed for PVOCs and naphthalene, and two contained benzene at concentrations exceeding the NR 720 groundwater pathway RCL (Table 1). An additional 136.81 tons of contaminated soil were excavated and hauled to the Vonco V landfill for treatment and disposal. Management of contaminated soil during construction was reported to the WDNR in a report dated March 29, 2019 (TRC 2019).

The City of Superior was named the Responsible Party for the petroleum contamination in the ROW near the intersection of Belknap St. and Clough Ave. on the south side of Belknap St. (subject site, BRRTS #03-16-560358). Chlorinated volatile organic compounds (CVOCs) have been identified on the adjacent private property (Letsos Property, 902-904 Belknap St.). The owner of the Letsos Property is the Responsible Party for the CVOC contamination (BRRTS #02-16-560359).

2.2 Contact Information

Property Owner:
City of Superior
Attention: Mr. Todd Janigo, Public Works Director
1316 N 14th Street, Room 200
Superior, WI 54880
JanigoT@ci.superior.wi.us
715-395-7539

Consultant:
TRC Environmental Corporation
Attention: Steve Sellwood, Project Manager
708 Heartland Trail, Suite 3000
Madison, WI 53717
ssellwood@trccompanies.com
608-826-3608

Site Information:
Superior City ROW – Belknap & Clough, Superior, Wisconsin
(902-904 Belknap St ROW)
Douglas County
NE ¼ of NW ¼ of Section 23, T49N, R14W
Lat. 46.7205, Long. -92.09115
No parcel ID associated with ROW

2.3 Purpose and Scope

This report documents the site investigation conducted by TRC to define the extent of petroleum contamination at the site. This report includes a summary of site investigation activities completed, investigation results, and conclusions and recommendations.

3.0 Methods of Investigation

3.1 Site Investigation

On December 3 and 4, 2018, TRC and TRC's soil boring subcontractor, On-site Environmental Services, Inc. (OES), completed three Geoprobe® soil borings (GP-1/MW-1, GP-2/MW-2, and GP-3/MW-3) and installed three monitoring wells at the boring locations. The soil borings were sampled to depths of 25 to 30 feet bgs and the three monitoring wells were screened from 15 to 30 feet bgs. Soil boring/monitoring well locations are shown on Figure 2. A fourth monitoring well was planned to be installed in the median of Belknap St. north of the location of the former UST. However, due to utilities below the median, the well could not be installed there.

Soil samples were collected continuously at each boring location for field description according to the USCS and field-screened for staining, odors, and for VOCs using a PID. Soil boring logs are included in Appendix A. Two soil samples were collected from each boring and submitted for laboratory analysis. Five of the six samples were analyzed for PVOCs plus naphthalene while one of the samples was analyzed for VOCs.

Following soil sampling a groundwater monitoring well was installed at each soil boring location. Monitoring wells were constructed in accordance with NR 141. Following well installation, the top of PVC casing elevation of each well was surveyed relative to mean sea level using a nearby benchmark. Prior to collecting groundwater samples, the wells were developed by purging. Monitoring well construction forms and well development forms are included in Appendix A. Soil cuttings from the monitoring well installation were drummed and transported to the Vonco V landfill for disposal. Soil disposal documentation is included in Appendix B.

Groundwater samples were collected from the three site monitoring wells on May 9, 2019 and August 10, 2019. Groundwater samples were submitted for laboratory analysis for PVOCs and naphthalene. Monitoring well purge water was containerized and disposed in the City's sanitary sewer system.

4.0 Results

4.1 Geology and Hydrogeology

The subject site is located in the NE ¼ of the NW ¼, Section 23, Township 49 North, Range 14 West, at an approximate elevation of 632 feet above mean seal level (amsl). The area is characterized by flat topography. Superior Bay is located approximately 5,000 feet to the northeast at an elevation of approximately 600 feet amsl. The site is not within a floodplain and there are no wetlands at or near the property.

The site lies within the Lake Superior lowlands, an area underlain by till of the Miller Creek Formation (Clayton 1984). The shallow subsurface geology at the site consists of red clay deposits of the Miller Creek Formation. Bedrock below the site is expected to be sandstone of the Bayfield Group (Mudrey et al. 1982) and is expected to be greater than 200 feet deep. According to two nearby historical well logs, sandstone bedrock was encountered at a depth of approximately 270 feet.

The surface in the vicinity of the identified petroleum contamination is covered entirely by sidewalk, road, and building. The site geology below the surface materials generally consists of two feet or less of fill overlying clay. The clay extends at least to the maximum depth of investigation of 30 feet. Site geology is depicted in cross-section in Figures 3 and 4.

Water levels were measured in the three site monitoring wells during the groundwater sampling events in May and August 2019. Groundwater elevations are summarized in Table 2. The water level elevations vary by over 10 feet among the three wells. This is indicative of the low permeability of the clay in which the wells are screened. The low-permeability character of the clay makes it difficult to obtain stabilized water level measurements and also causes significant variation in hydraulic head over short distances. Due to the variability of the head measurements, groundwater flow direction cannot be reliably determined, however, because of the low permeability, advection of contaminants in the direction of groundwater flow is not a significant transport mechanism.

4.2 Soil Analytical Results

Laboratory results for all soil samples collected at this site on behalf of the WisDOT or the City of Superior from 2012 through December 2018 are summarized in Table 1. The laboratory report

for the December 2018 soil samples is included in Appendix C. Laboratory reports for earlier soil samples were previously submitted to the WDNR. Applicable NR 720 RCLs are included in Table 1. NR 720 RCLs were taken from the WDNR RCL spreadsheet update from December 2018.

Benzene was detected in a July 2012 soil sample (B22A 3-5') at a concentration exceeding the NR 720 non-industrial direct contact RCL. This is the only direct contact exceedance detected in the upper four feet at the site. Soil samples collected in close proximity to the former tank contain PVOCs and naphthalene at concentrations exceeding NR 720 groundwater pathway RCLs, however, the extent of contamination is well defined. The extent of petroleum soil contamination exceeding NR 720 RCLs is shown on Figures 3 through 5.

One WisDOT soil sample (B22B 3-5') contained tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene at concentrations exceeding groundwater pathway RCLs. This sample was collected adjacent to the site building approximately 100 feet to the south-southeast from the former petroleum UST. No petroleum compounds were detected in this sample. As mentioned above, the owner of the private property located at 902-904 Belknap St. is the responsible party for investigation of CVOCs associated with the site building.

MSA Professional Services (MSA) installed and sampled five soil borings (GP-1 through GP-5) at the site in April 2016 to investigate CVOC contamination on behalf of the private property owner. Benzene was detected in three of these soil samples at concentrations exceeding the NR 720 groundwater pathway RCL (MSA 2018). However, one of these samples (GP-2 7.5-10') was located approximately 100 feet southeast of the former tank and all nearby samples had no detected benzene, thus this sample result does not appear to be associated with the former UST. No other PVOCs were detected in the MSA soil samples. MSA's soil results table is included in Appendix D and the benzene results are included on Figure 5.

4.3 Groundwater Analytical Results

Groundwater samples were collected from the three site monitoring wells during two sampling events in 2019. Groundwater samples were analyzed for PVOCs and naphthalene and the laboratory results are summarized in Table 3. Contaminants were not detected in MW1 or MW3 during either sampling event. Benzene was detected in the groundwater samples from MW2, which is the source area well, at concentrations of 32.4 micrograms per liter (µg/L) and 180 µg/L, which exceed the NR 140 enforcement standard (ES). No other contaminants were detected in MW2. Laboratory analytical reports for groundwater samples are included in Appendix E.

A groundwater sample was collected from B22A in July 2012 and analyzed for VOCs. Benzene was detected at a concentration of 23,800 µg/L, which exceeds the NR 140 ES, and xylenes, naphthalene, trimethylbenzenes, and xylenes were detected at concentrations exceeding NR 140 PALs (Table 3). This sample was collected years before the UST and surrounding contaminated soil were removed and is therefore not representative of current conditions.

MSA collected groundwater samples from three of their soil borings (GP-1, GP-4, and GP-5) in April 2016. Benzene was detected in the groundwater sample from GP-1, which was installed near the former petroleum UST, at a concentration of 986 µg/L (MSA 2018). Benzene was not detected in the other two MSA groundwater samples. This sample was also collected before the UST removal and subsequent excavation of contaminated soil. MSA groundwater sample results are included in Appendix D.

Groundwater sample results indicate that the petroleum groundwater contamination at the site is very limited in extent (Figure 3, Figure 4, and Figure 6). This is consistent with an old petroleum release in a tight clay environment.

4.4 Vapor Intrusion

Based on information available on the WDNR's online database for the Letsos Property (BRRTS #02-16-560359), the Letsos Building has been extensively investigated for vapor intrusion (VI). Multiple rounds of indoor air sampling have been completed in multiple rooms in the building. The most recent table of indoor air results available on BRRTS (dated April 23, 2019) is included in Appendix D. The results indicate that only one indoor air sample (IA-4) collected in the Letsos Building has had petroleum compounds present at concentrations exceeding Wisconsin screening levels. IA-4 was collected in a ground-level room in May 2017. Petroleum compounds have never been detected at concentrations exceeding screening levels in an indoor air sample collected from the building basement. Because the petroleum contamination associated with the former UST is located outside the building below the ground surface, the potential route of concern for petroleum vapors to enter the building is through the basement. The concentrations of petroleum compounds detected in air sample IA-4, especially in comparison to the concentrations of petroleum compounds in basement air samples, suggest a source other than the former petroleum UST in the ROW. In a report dated May 7, 2018, MSA Professional Services suggests the petroleum detections "may be related to construction events taking place on Belknap Street during the sampling interval" (MSA 2018). No petroleum compounds have been detected at concentrations exceeding Wisconsin screening levels in any subsequent indoor air sample from any room in the Letsos Building.

VI remediation work has been completed at the Letsos Building to address CVOCs detected in indoor air. Remediation activities that have been completed include excavation of soil and debris from the basement (December 2016), installation of a new basement floor, installation of an indoor air mitigation system (September 2017), and installation of a subslab radon system (April 2018) (MSA 2018).

4.5 Receptors

Based on existing indoor air samples from the Letsos Building, petroleum vapors from the former UST are not present in the Letsos Building at concentrations exceeding Wisconsin screening levels. There are no other potential receptors of petroleum vapors from this site.

One soil sample from the site contained benzene at a concentration exceeding the NR 720 non-industrial direct contact RCL; however, the detected concentration was less than the industrial direct contact RCL for benzene. Given the site use as city street ROW, this sample does not present a direct contact risk.

Several site soil samples have PVOCs at concentrations exceeding NR 720 groundwater pathway RCLs. However, the extent of soil contamination exceeding NR 720 RCLs is limited and well defined.

Benzene is present in site groundwater at concentrations exceeding the NR 140 ES. The extent of groundwater exceeding the NR 140 ES is very limited in extent. The City of Superior is supplied

by a municipal water system; therefore, there are no potential receptors of groundwater contamination present at the site.

5.0 Conclusions and Recommendations

5.1 Conclusions

Based on the results of site investigation activities completed at the subject site we conclude that:

- The UST and 230 tons of contaminated soil from the source area have been removed the site.
- Remaining soil contamination does not pose a direct contact risk.
- Groundwater contamination is limited in extent and there are no groundwater receptors in the area.
- Petroleum vapors are not present in the Letsos Building at concentrations exceeding Wisconsin screening levels.

5.2 Recommendation

Based on the findings of this investigation, petroleum contamination at this site does not pose a risk to human health or the environment, therefore, we recommend case closure.

6.0 References

Clayton, L. 1984. Pleistocene Geology of the Superior Region, Wisconsin. University of Wisconsin-Extension, Geological and Natural History Survey, Information Circular Number 46.

MSA Professional Services. 2018. Summary Letter Report and Work Plan, Letsos Property – Belknap Street, 902-904 Belknap Street, Superior, WI 54880, BRRTS #02-16-560359. May 7, 2018.

Mudrey, M.G., Jr., Brown, B.A., and Greenburg, J.K. 1982. Bedrock Geologic Map of Wisconsin. University of Wisconsin-Extension, Geological and Natural History Survey.

TRC, 2018. Underground Storage Tank Abandonment Report, USH 2 – 902-904 Belknap St., Superior, Douglas County, Wisconsin. September 24, 2018.

TRC, 2019. Management of Petroleum-Contaminated Soil in 2018, USH 2, Superior, Douglas County, Wisconsin. March 29, 2019.

Table 1: Soil Results Summary
Superior City ROW, Belknap and Clough, 902-904 Belknap St, Superior, WI
BRRTS #03-16-560358

ANALYTES	Unit	NR 720 SOIL RCLs[3]			SAMPLE ID/SAMPLE DEPTH																									
		SOIL TO GROUNDWATER PATHWAY[1]	DIRECT CONTACT PATHWAY		B22A	B22B	B22C	B22D	B22E	B22F	B22G	B22H	B22I	B22J	B22K	SWN	SWS	SWE	SWW	BE	BW	STA 173+30, 10'R 9' BGS	STA 173+35, 15'R 8' BGS	STA 173+80, 30'R 7' BGS[6]	STA 173+35, 30'R 4.5' BGS[6]	GP-1 / MW-1		GP-2 / MW-2		GP-3 / MW-3	
			NON-INDUSTRIAL[2]	INDUSTRIAL[2]	3'-5'	3'-5'	7.5'-10'	7.5'-10'	5'-7.5'	2.5'-5'	8'-10'	8'-10'	8'-10'	8'-10'	8'-10'	7'	7'	7'	7'	15'	15'	9'	8'	7'	4.5'	0-2.5'	15-17.5'	7.5-10'	20-22.5'	0-2.5'	15-17.5'
DATE		-	-	-	July 19, 2012			August 20, 2015			July 7, 2016					May 3, 2018						May 11, 2018	May 18, 2018	May 17, 2018	May 23, 2018	December 3, 2018					
PID (ppm)	ppm	-	-	-	576.5	5.5	59.3	<1	<1	<1	<1	<1	<1	<1	<1	840	1,430	518	265	180	101	<1	3	<1	<1	<1	<1	<1	<1	<1	<1
VOCs																														
Benzene	(µg/kg)	5.1	1,600	7,070	***5,370***	<25.0	*6,140*	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	*9,060*	*14,100*	*1,410*	*8,110*	*643*	*286*	<25	*659*	<25	*41.1* J	<25.0	<25.0	*10,000*	*53.5* J	<25.0	<25.0
cis-1,2-Dichloroethene	(µg/kg)	41.2	156,000	2,340,000	<25.0	*920*	<25.0	<25.0	<25.0	<25.0	<25.0	*56.8* J	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cumene	(µg/kg)	-	268,000	268,000	61.2 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	(µg/kg)	1,570	8,020	35,400	*1,600*	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	*13,100*	*10,400*	458	190	62.3 J	<25	<25	<25	<25	<25	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Methyl tert-butyl ether	(µg/kg)	27	63,800	282,000	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<312	<200	<25	<25	<25	<25	<25	<25	<25	<25	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Methylene chloride	(µg/kg)	2.6	61,800	1,150,000	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
n-Butylbenzene	(µg/kg)	-	108,000	108,000	52.7 J	<40.4	<40.4	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
n-Propylbenzene	(µg/kg)	-	264,000	264,000	64.0 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
Naphthalene	(µg/kg)	658.2	5,520	24,100	102	<25.0	<25.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	*5,970*	*5,310*	137	<25	<25	<25	<25	<25	<25	66.4 J	<25.0	<25.0	<25.0	<25.0	<25.0	<40
p-Isopropyltoluene	(µg/kg)	-	162,000	162,000	82.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
sec-Butylbenzene	(µg/kg)	-	145,000	145,000	<25.1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
Tetrachloroethene	(µg/kg)	4.5	33,000	145,000	<25.0	*1,880*	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
Trichloroethene	(µg/kg)	3.6	1,300	8,410	<25.0	*621*	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<25.0
Toluene	(µg/kg)	1,107.2	818,000	818,000	260	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<312	<200	<25	<25	<25	<25	<25	<25	<25	<25	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,2,4-Trimethylbenzene	(µg/kg)	1382.1[4]	219,000	219,000	288	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	*43,600*	*35,000*	246	552	155	<25	<25	<25	<25	<25	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
1,3,5-Trimethylbenzene	(µg/kg)		182,000	182,000	66.1 J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	*21,400*	*17,200*	110	185	59.5 J	<25	<25	<25	<25	<25	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Xylenes	(µg/kg)	3,960	260,000	260,000	2,010	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	<75.0	*42,400*	*37,480*	1,285	1,950	305 J	<75	<75	<75	<75	<75	<75.0	<75.0	122 J	<75	<75.0	<75

Notes:
1. PID = Photoionization Detector
2. ppm = parts per million
3. µg/kg = micrograms per kilogram (ppb)
4. VOCs = Volatile Organic Compounds analyzed using EPA Method 8260B
5. Samples were collected by TRC and analyzed by Pace Analytical (WDNR Cert. #405132750)
6. RCLs = Residual Contaminant Levels.
7. J = Estimated concentration at or above the Limit of Detection and below the Limit of Quantitation.
8. *Italics* = indicates that the analyte exceeds the groundwater pathway RCL.
9. **Bold** = indicates that the analyte exceeds the direct contact pathway within the upper four feet soil.
10. - = Standard has not been established for this analyte.
11. -- = Sample not analyzed for this parameter.

Created by: T. Perkins 6/11/2018
Checked by: C. Olson 7/13/2018
Updated by: A. Enright 10/29/2018
Checked by: C. Olson10/30/2018
Updated by: A. Coxhead 8/12/2019
Checked by: T. Perkins 10/22/2019

Footnotes:
(1) Value is the generic RCL for the groundwater pathway.
(2) Value is the generic RCL for exposure by direct contact.
(3) Calculated from http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search using default exposure assumptions listed in NR 720.12(3).
(4) Standard is for combined 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.
(5) Sample ID STA 173+60, 30'R, 7' BGS in lab analytical report.
(6) Sample ID STA 173+25, 25'R, 4.5' BGS in lab analytical report.

Table 2: Groundwater Elevation Summary
Superior City ROW, Belknap and Clough, 904-904 Belknap St, Superior, WI
BRRTS #03-16-560358

DATE	REFERENCE ELEVATION*	DEPTH TO WATER	GROUNDWATER ELEVATION
MW-1			
5/9/2019	632.01	21.96	610.05
8/10/2019		22.07	609.94
MW-2			
5/9/2019	631.77	11.62	620.15
8/10/2019		9.28	622.49
MW-3			
5/9/2019	630.81	4.65	626.16
8/10/2019		5.23	625.58

Notes:

* Groundwater levels measured from top of PVC.

Created by: S. Sellwood 8/12/2019

Updated by: T. Perkins 10/24/2019

Table 3: Groundwater Results Summary
Superior City ROW, Belknap and Clough, 902-904 Belknap St, Superior, WI
BRRTS #03-16-560358

ANALYTE	UNITS	WDNR NR 140 GROUNDWATER STANDARDS		WELL ID						
				B22A	MW1		MW2		MW3	
		ES	PAL	7/19/2012	5/15/2019	8/10/2019	5/15/2019	8/10/2019	5/15/2019	8/10/2019
VOCs										
Benzene	ug/L	5	0.5	***23,800***	<0.25	<0.25	***32.4***	***180***	<0.25	<0.25
Ethylbenzene	ug/L	700	140	*393*	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
Methyl-tert-butyl ether	ug/L	60	12	<30.5	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Naphthalene	ug/L	100	10	*65.4* J	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2,4-Trimethylbenzene	ug/L	480(1)	96(1)	*186*	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
1,3,5-Trimethylbenzene	ug/L	480(1)	96(1)	*66.6*	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87
Toluene	ug/L	800	160	114	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Xylene (Total)	ug/L	2,000	400	*1,127*	<0.73	<0.73	<0.73	<0.73	<0.73	<0.73

Notes:

Created by: A. Coxhead 8/13/2019

NR 140 STANDARD = Public Health Groundwater Quality Standards as defined by Wisconsin Administrative Code NR 140.

Checked by: T. Perkins 8/13/2019

ES = NR140 Enforcement Standard

Updated by: T. Perkins 10/23/2019

PAL = NR140 Preventative Action Limit

Checked by: L. Hoerning 10/24/2019

J = estimated concentration

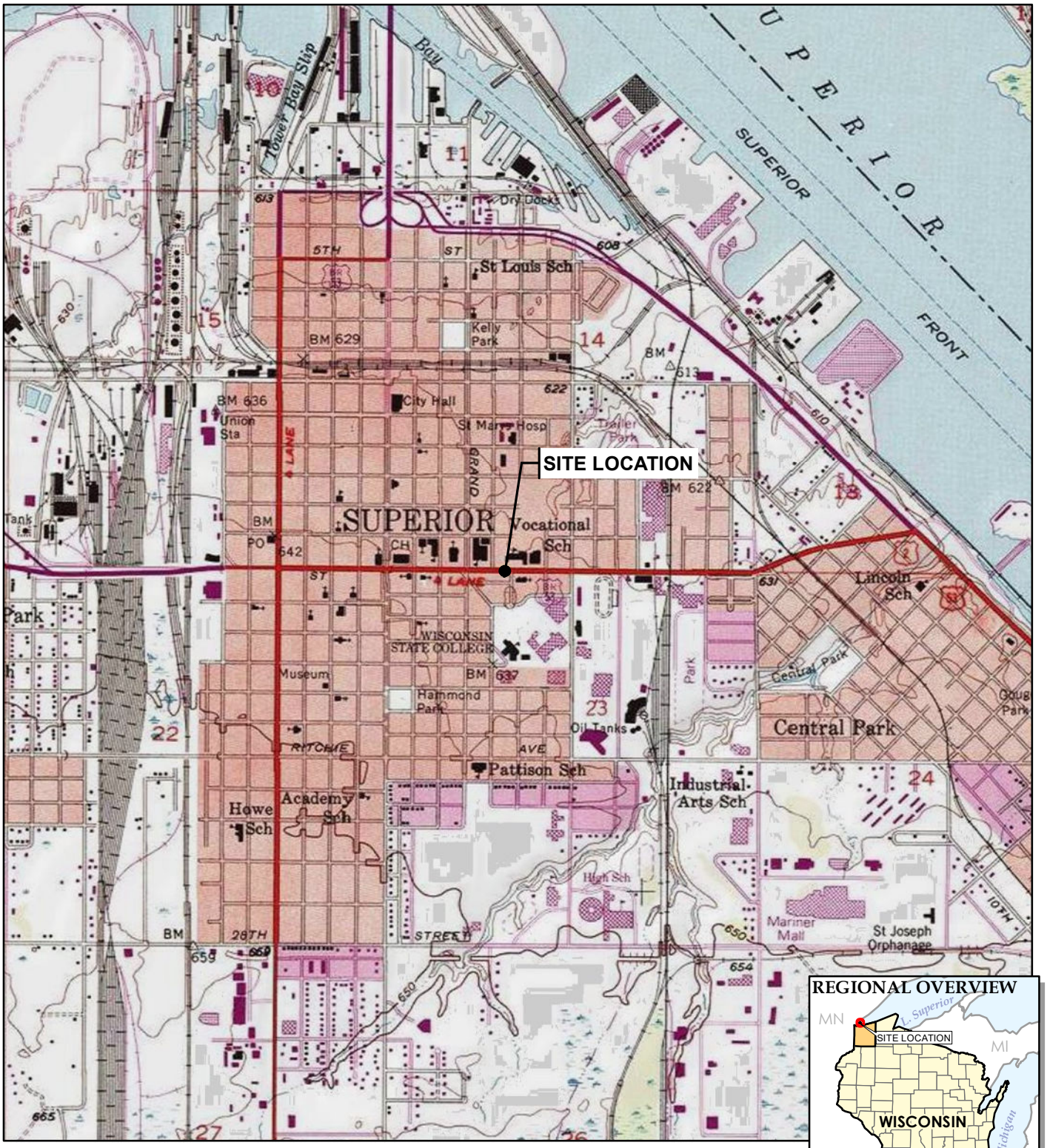
ITALIC = indicates that the analyte exceeds the WDNR NR140 PAL

BOLD = indicates that the analyte exceeds the WDNR NR140 ES

- = Sample was not analyzed for given analyte.

Footnotes:

(1) Standards are for Total Trimethylbenzene (1,2,4- and 1,3,5-)



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

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

0 2,000 4,000
FEET

TRC

708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

TRC - GIS

PROJECT:

CITY OF SUPERIOR ROW
902-904 BELKNAP STREET ROW
BRRTS #03-16-560358
SUPERIOR, WISCONSIN

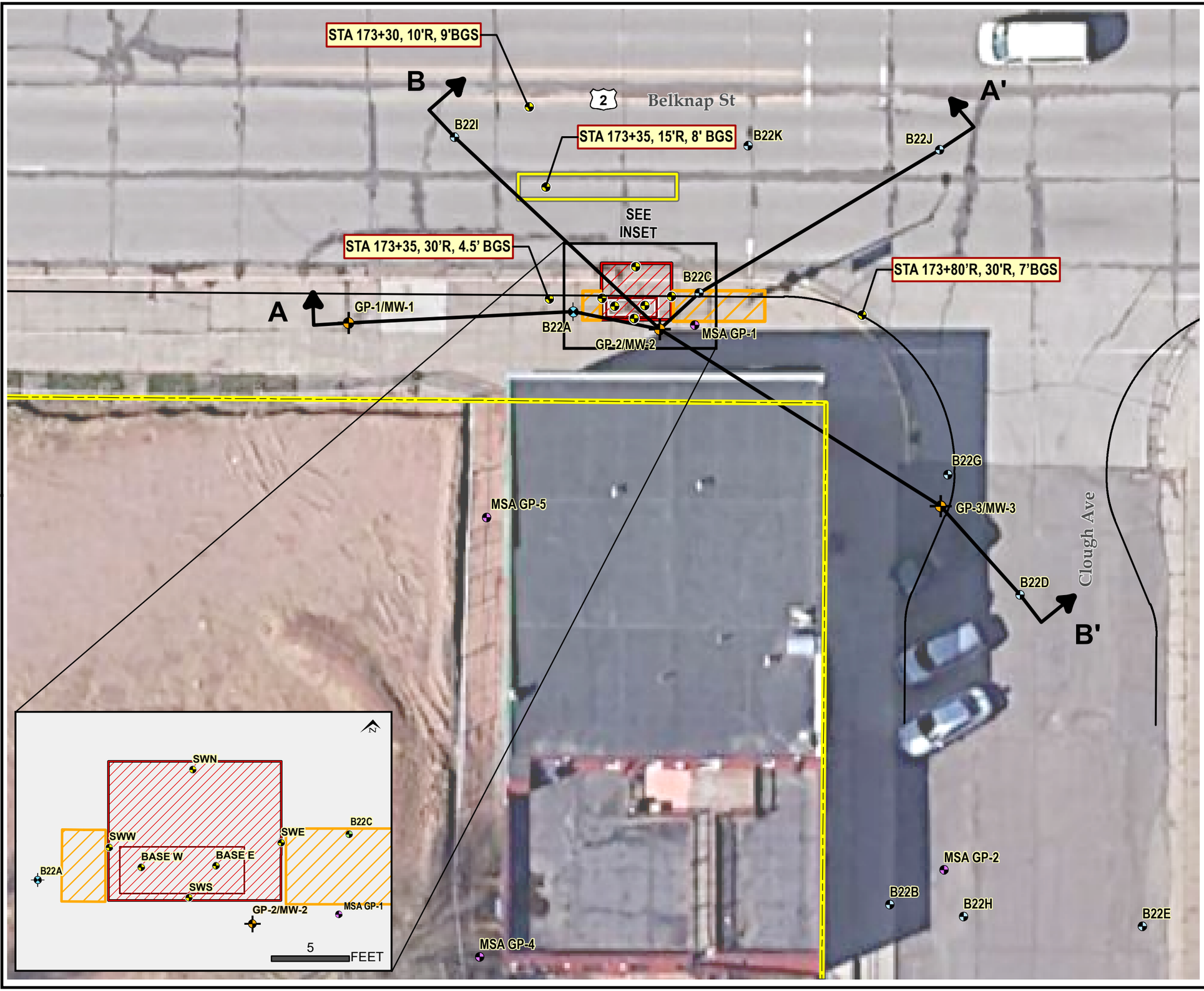
TITLE:

SITE LOCATION MAP

DRAWN BY:	A. ADAIR
CHECKED BY:	T. PERKINS
APPROVED BY:	S. SELLWOOD
DATE:	JANUARY 2020
PROJ. NO.:	315266
FILE:	315266_101_SLM.mxd

FIGURE 1

S:\1-PROJECTS\CityofSuperior\2019_315266\315266_101_SLM.mxd -- Saved By: AADAIR on 1/22/2020, 10:05:24 AM



LEGEND

- UST EXCAVATION AREA (SEE NOTE 3)
- UST
- CONTAMINATED SOIL ENCOUNTERED DURING UTILITY CONSTRUCTION AND DISPOSED OF BY LANDFILL (SEE NOTE 4)
- LOW-LEVEL CONTAMINATED SOIL ENCOUNTERED DURING UTILITY CONSTRUCTION AND REUSED ONSITE (SEE NOTE 5)
- SOIL SAMPLE LOCATION
- MSA GEOPROBE BORING (SEP. 2016)
- SOIL BORING (JULY 2012, AUG 2015 OR JULY 2016)
- SOIL BORING / TEMP WELL (JULY 2012)
- GEOPROBE SOIL BORING / MONITORING WELL
- RIGHT-OF-WAY BOUNDARY
- CROSS SECTION LINE

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO, 2016.
2. SITE FEATURES ARE APPROXIMATE.
3. EXTENTS OF SOIL EXCAVATED DURING UST REMOVAL ON 5/3/2018 DURING WisDOT RECONSTRUCTION OF USH 2. EVIDENCE OF SOIL CONTAMINATION WAS OBSERVED (I.E., PID > 10 PPM, PETROLEUM ODORS, SOIL STAINING). SOIL WAS TREATED AND DISPOSED OF AT LANDFILL.
4. EXTENTS OF SOIL EXCAVATED DURING UTILITY CONSTRUCTION ALONG USH 2 NEAR THE FORMER UST LOCATION. EVIDENCE OF SOIL CONTAMINATION WAS OBSERVED (I.E., PID > 10 PPM, PETROLEUM ODORS, SOIL STAINING). SOIL WAS TREATED AND DISPOSED OF AT LANDFILL.
5. EXTENTS OF SOIL EXCAVATED DURING UTILITY CONSTRUCTION ALONG USH 2 NEAR THE FORMER UST LOCATION. EVIDENCE OF LOW-LEVEL SOIL CONTAMINATION WAS OBSERVED (I.E., PID < 10 PPM, PETROLEUM ODORS, SOIL STAINING). SOIL WAS REUSED ON SITE IN ACCORDANCE WITH SPECIAL PROVISIONS.
6. MSA GEOPROBE BORING LOCATIONS FROM "SITE LAYOUT MAP" PREPARED BY MSA PROFESSIONAL SERVICES, DATED 9/19/16.

0 15 30 Feet

1 " = 15 '

1:180

N

PROJECT:
CITY OF SUPERIOR ROW
902-904 BELKNAP STREET ROW
BRRTS #03-16-560358
SUPERIOR, WISCONSIN

TITLE:
SITE MAP

DRAWN BY:	A. ADAIR	PROJ. NO.:	315266
CHECKED BY:	T. PERKINS		
APPROVED BY:	S. SELLWOOD		**FIGURE 2**
DATE:	JANUARY 2020		

TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

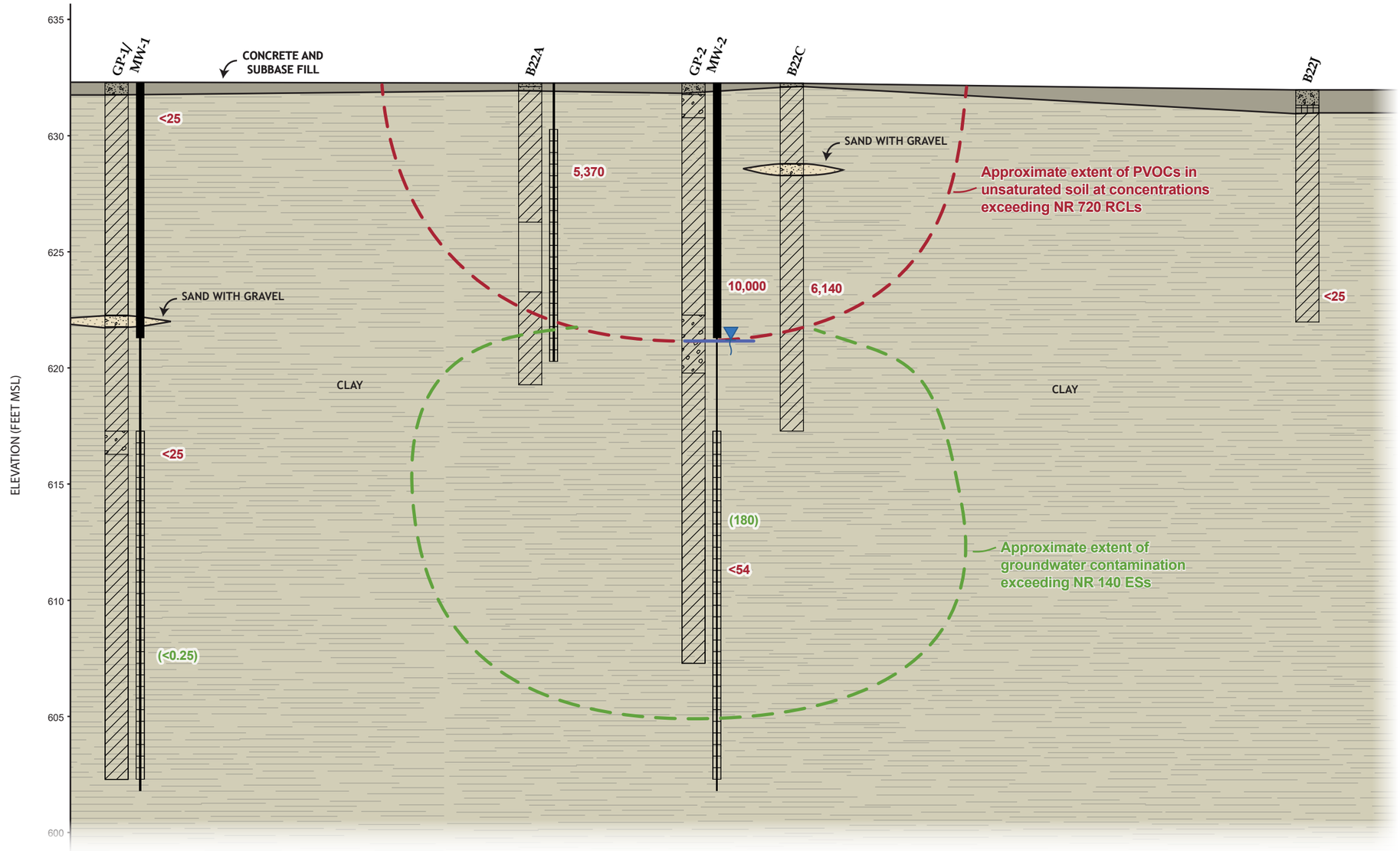
FILE NO.: 315266_202_SM.mxd

Plot Date: 1/22/2020, 10:04:03 AM by AADAIR -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\City of Superior\2019_315266\315266_202_SM.mxd
Coordinate System: NAD 1983 HARN WISCRS Douglas County Feet (Foot US)
Map Rotation: 0

TRC - GIS

A - WEST

A' - EAST



BOREHOLE LOG SYMBOLOGY

- CONCRETE
- ASPHALT
- FILL
- SAND
- SAND WITH GRAVEL
- CLAY
- SANDY CLAY
- GRAVELLY CLAY
- CLAY WITH SAND AND GRAVEL
- WELL SEAL
- WELL CASING
- WELL SCREEN

LEGEND

SOIL UNITS

- CONCRETE AND SUBBASE FILL
- CLAY
- SAND
- SAND WITH GRAVEL

- APPROXIMATE APPARENT WATER TABLE
- <25 BENZENE SOIL CONCENTRATION (µg/kg)
- (<0.25) BENZENE GROUNDWATER CONCENTRATION (µg/L) ON 8/10/2019

L. AUNER

5
2.5
0

Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 5'
2x Vertical Exaggeration
(Scale is Approximate)

0 5 10

PROJECT:
CITY OF SUPERIOR ROW
902-904 BELKNAP STREET ROW
BRRTS #03-16-560358
SUPERIOR, WISCONSIN

TITLE:
GEOLOGIC CROSS SECTION A-A'

DRAWN BY:	L. AUNER	PROJ NO.:	315266
CHECKED BY:	S. SELLWOOD		
APPROVED BY:	D. HAAK		
DATE:	FEBRUARY 2020		

FIGURE 3

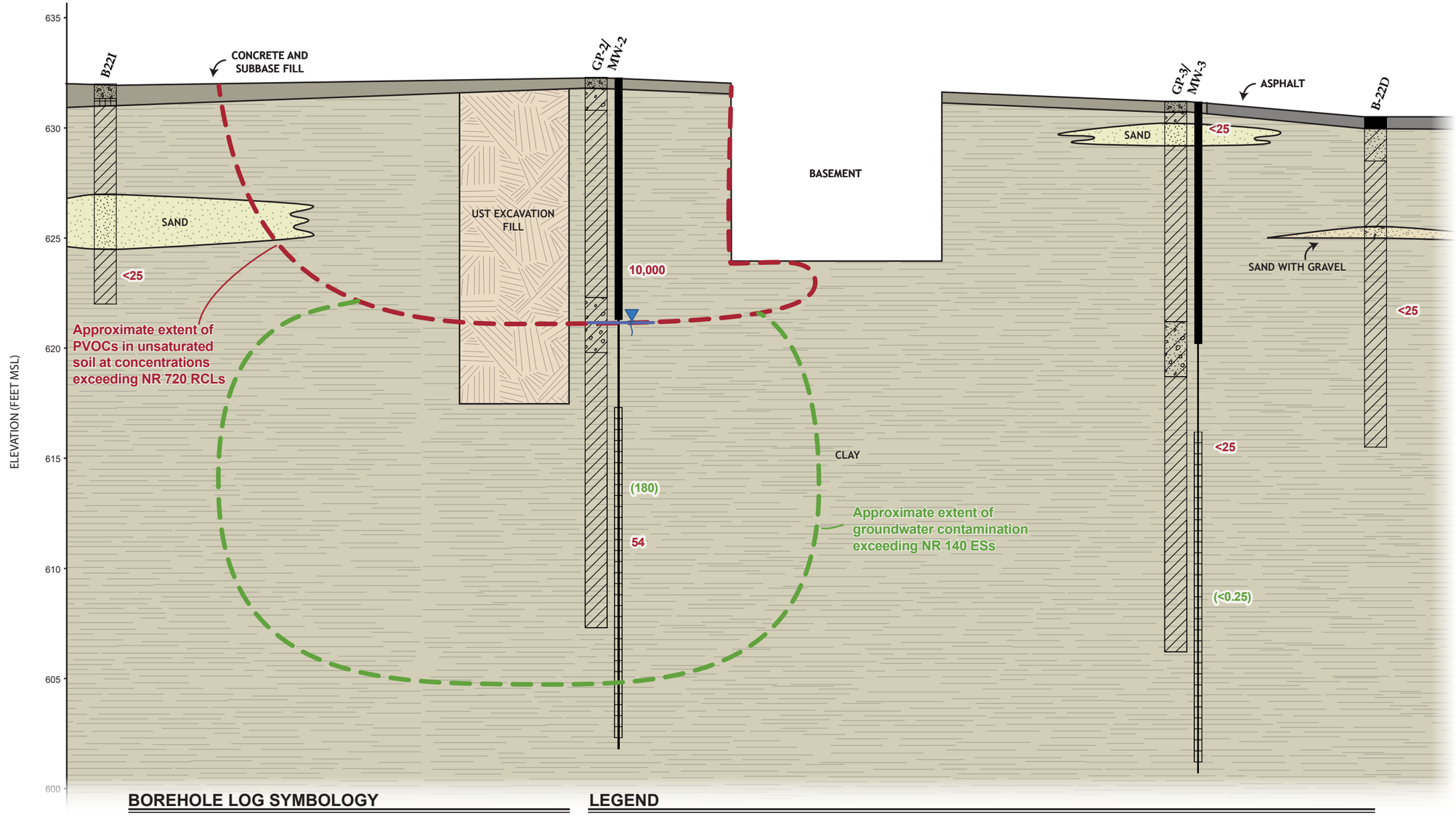
TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

FILE NO.: 315266_ai01.ai

File Path: P:\AI\CityOfSuperior\315266_ai01.ai

B - NORTHWEST

B' - SOUTHEAST



BOREHOLE LOG SYMBOLOGY

- CONCRETE
- ASPHALT
- FILL
- SAND
- SAND WITH GRAVEL
- CLAY
- SANDY CLAY
- GRAVELLY CLAY
- CLAY WITH SAND AND GRAVEL
- WELL SEAL
- WELL CASING
- WELL SCREEN

LEGEND

SOIL UNITS

- CONCRETE AND SUBBASE FILL
- ASPHALT
- CLAY
- SAND
- SAND WITH GRAVEL
- UST EXCAVATION FILL

- APPROXIMATE APPARENT WATER TABLE
- <25 — BENZENE SOIL CONCENTRATION (µg/kg)
- (<0.25) — BENZENE GROUNDWATER CONCENTRATION (µg/L) ON 8/10/2019

5
2.5
0

Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 5'
2x Vertical Exaggeration
(Scale is Approximate)

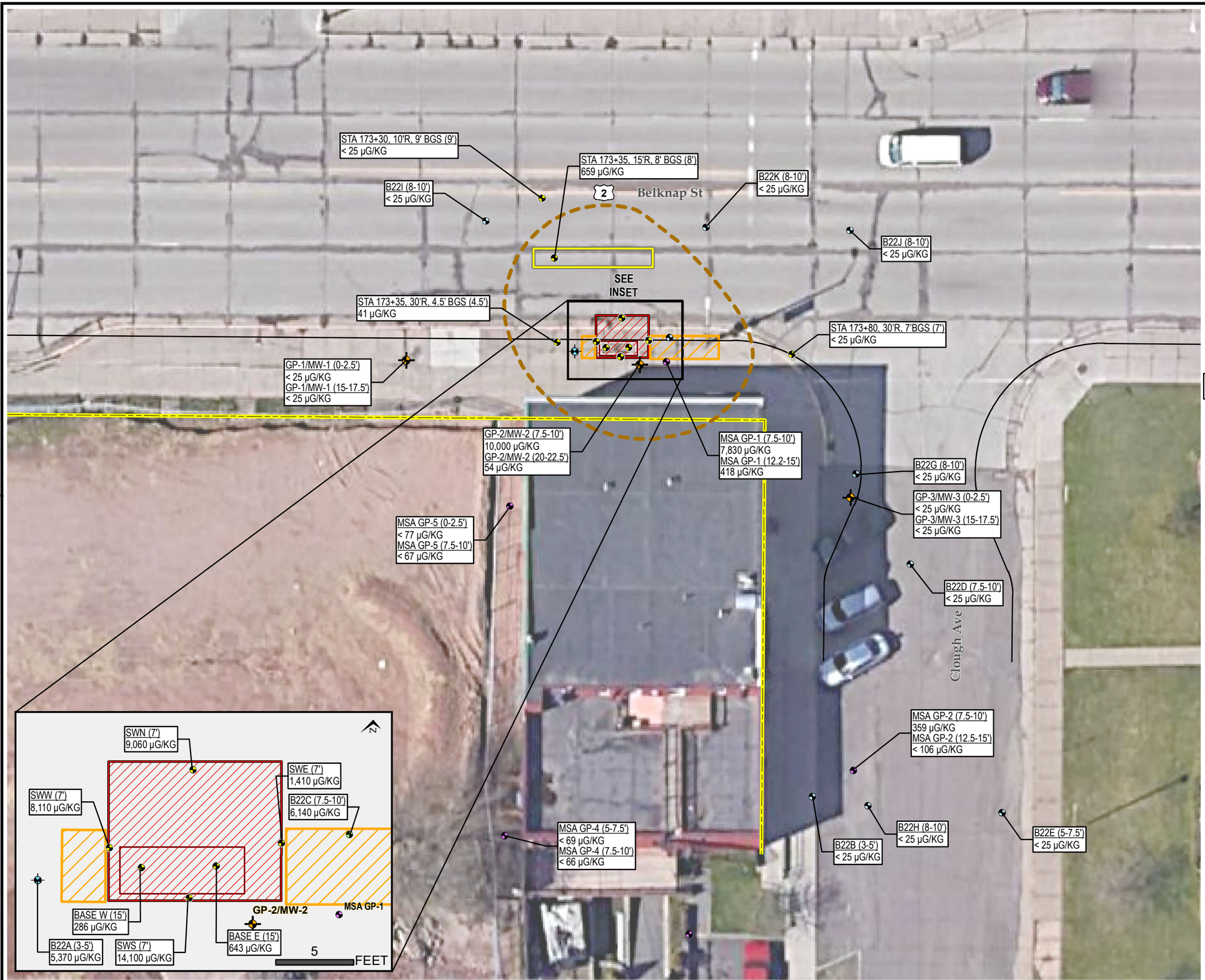
0 5 10

PROJECT:	CITY OF SUPERIOR ROW 902-904 BELKNAP STREET ROW BRRTS #03-16-560358 SUPERIOR, WISCONSIN
TITLE:	GEOLOGIC CROSS SECTION B-B'
DRAWN BY:	L. AUNER
CHECKED BY:	S. SELLWOOD
APPROVED BY:	D. HAAK
DATE:	FEBRUARY 2020
PROJ NO.:	315266
	FIGURE 4

TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

FILE NO.: 315266_ai02.ai

File Path: P:\AllCityOfSuperior\315266_ai02.ai



LEGEND

- UST EXCAVATION AREA (SEE NOTE 3)
- UST
- CONTAMINATED SOIL ENCOUNTERED DURING UTILITY CONSTRUCTION AND DISPOSED OF BY LANDFILL (SEE NOTE 4)
- LOW-LEVEL CONTAMINATED SOIL ENCOUNTERED DURING UTILITY CONSTRUCTION AND REUSED ONSITE (SEE NOTE 5)
- APPROXIMATE EXTENT OF PVOCS IN SOIL SAMPLES AT CONCENTRATIONS EXCEEDING NR 720 RCL'S
- SOIL SAMPLE LOCATION
- MSA GEOPROBE BORING (SEP. 2016)
- SOIL BORING (JULY 2012, AUG 2015 OR JULY 2016)
- SOIL BORING / TEMP WELL (JULY 2012)
- GEOPROBE SOIL BORING / MONITORING WELL
- RIGHT-OF-WAY BOUNDARY
- GP-3/MW-3 / < 0.25 µG/KG — SAMPLE ID (DEPTH INTERVAL) / BENZENE CONCENTRATION (µG/KG)

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO, 2016.
2. SITE FEATURES ARE APPROXIMATE.
3. EXTENTS OF SOIL EXCAVATED DURING UST REMOVAL ON 5/3/2018 DURING WisDOT RECONSTRUCTION OF USH 2. EVIDENCE OF SOIL CONTAMINATION WAS OBSERVED (I.E., PID > 10 PPM, PETROLEUM ODORS, SOIL STAINING). SOIL WAS TREATED AND DISPOSED OF AT LANDFILL.
4. EXTENTS OF SOIL EXCAVATED DURING UTILITY CONSTRUCTION ALONG USH 2 NEAR THE FORMER UST LOCATION. EVIDENCE OF SOIL CONTAMINATION WAS OBSERVED (I.E., PID > 10 PPM, PETROLEUM ODORS, SOIL STAINING). SOIL WAS TREATED AND DISPOSED OF AT LANDFILL.
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6. MSA GEOPROBE BORING LOCATIONS FROM "SITE LAYOUT MAP" PREPARED BY MSA PROFESSIONAL SERVICES, DATED 9/19/16.

0 20 40 Feet

1 " = 20 '

1:240

PROJECT:
CITY OF SUPERIOR ROW
902-904 BELKNAP STREET ROW
BRRTS #03-16-560358
SUPERIOR, WISCONSIN

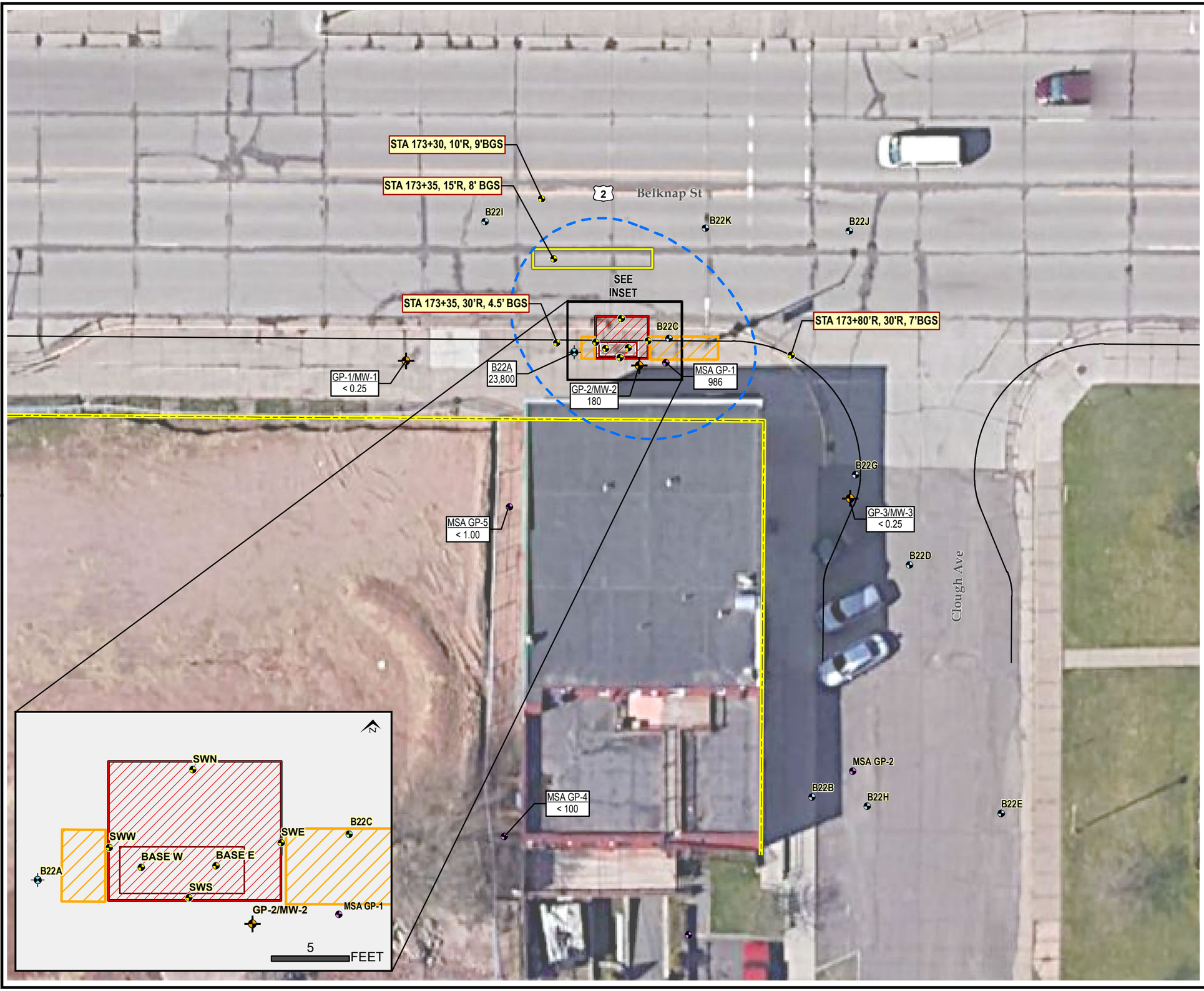
TITLE:
SOIL RESULTS MAP

DRAWN BY:	A. ADAIR	PROJ. NO.:	315266
CHECKED BY:	T. PERKINS		
APPROVED BY:	S. SELLWOOD		**FIGURE 5**
DATE:	JANUARY 2020		

TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

FILE NO.: 315266_203_Soil.mxd

TRC - GIS
Coordinate System: NAD 1983 HARN WISCRS Douglas County Feet (Foot US)
Map Rotation: 0
Plot Date: 1/22/2020, 10:01:29 AM by AADAIR -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\CityofSuperior\2019_315266\315266_203_Soil.mxd



LEGEND

- UST EXCAVATION AREA (SEE NOTE 3)
- UST
- CONTAMINATED SOIL ENCOUNTERED DURING UTILITY CONSTRUCTION AND DISPOSED OF BY LANDFILL (SEE NOTE 4)
- LOW-LEVEL CONTAMINATED SOIL ENCOUNTERED DURING UTILITY CONSTRUCTION AND REUSED ONSITE (SEE NOTE 5)
- APPROXIMATE EXTENT OF PVOCS ON GROUNDWATER AT CONCENTRATIONS EXCEEDING NR 140 ES'S
- SOIL SAMPLE LOCATION
- MSA GEOPROBE BORING (SEP. 2016)
- SOIL BORING (JULY 2012, AUG 2015 OR JULY 2016)
- SOIL BORING / TEMP WELL (JULY 2012)
- GEOPROBE SOIL BORING / MONITORING WELL
- RIGHT-OF-WAY BOUNDARY
- GP-3/MW-3 < 0.25 — SAMPLE ID / BENZENE CONCENTRATION (µG/L)

NOTES

1. BASE MAP IMAGERY FROM GOOGLE EARTH PRO, 2016.
2. SITE FEATURES ARE APPROXIMATE.
3. EXTENTS OF SOIL EXCAVATED DURING UST REMOVAL ON 5/3/2018 DURING WisDOT RECONSTRUCTION OF USH 2. EVIDENCE OF SOIL CONTAMINATION WAS OBSERVED (I.E., PID > 10 PPM, PETROLEUM ODORS, SOIL STAINING). SOIL WAS TREATED AND DISPOSED OF AT LANDFILL.
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6. MSA GEOPROBE BORING LOCATIONS FROM "SITE LAYOUT MAP" PREPARED BY MSA PROFESSIONAL SERVICES, DATED 9/19/16.

0 20 40 Feet

1 " = 20 '
1:240

PROJECT:
CITY OF SUPERIOR ROW
902-904 BELKNAP STREET ROW
BRRTS #03-16-560358
SUPERIOR, WISCONSIN

TITLE:
GROUNDWATER RESULTS MAP

DRAWN BY:	A. ADAIR	PROJ. NO.:	315266
CHECKED BY:	T. PERKINS		
APPROVED BY:	S. SELLWOOD		**FIGURE 6**
DATE:	JANUARY 2020		

TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

FILE NO.: 315266_204_SM.mxd

Coordinate System: NAD 1983 HARN WISCRS Douglas County Feet (Foot US)
Map Rotation: 0
Plot Date: 1/22/2020, 10:25:42 AM by AADAIR -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\CityofSuperior\2019_315266\315266_204_SM.mxd

TRC - GIS

Appendix A: Soil Boring Logs, Well Construction Forms, Well Development Forms

TRC Field Soil Boring Log Information

TRC Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Wis DOT	7/19/12	7/19/12	B22A/TW

Boring Drilled By	Drilling Method
Dusty - On-site Env.	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
				Inches

Boring Location: State Plane | 1/4 of | 1/4 of Section | T | N,R | Easting | Northing

Local Grid Location (If applicable): ☐ N ☐ S Feet ☐ E ☐ W Feet

County	State	DNR County Code	Civil Town/City/ or Village
Douglas	WI		Superior

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
	2.5'			2" of concreteon top 2" of sand on top of a sand/clay mixture. wet sand.		87.6			1-3'
				Red clay, Dense, wet, Plastic, gas odor, Black organics mixed in with clay.		576.5			3-5'
	2'			5' Went through 3' Void in ground, could be a UST, Solvent odor, very wet Red clay. Hit void @ 6' under surface. wood chip layer @ 5", into 2.5' sample. Clay is Dense, plastic, wet. only took sample for 5-10' because of void.		357.7			5-10'
	3			10' Clay is Dark Red brown w/ alot of organics, Wet, plastic, Dense.		197.6			10-13'
				13' B22A 3-5' 1310 PVOC VOC DRO GRO WATER SAMPLE COLLECTED WCS taken from this sight EOB @ 13'					

Logged By: Richard R Ott

Checked By:

F-204A (R 12-94)

TRC Field Soil Boring Log Information

TRC Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Wis DOT - Belknap	7/19/12	7/19/12	B22B(1)

Boring Drilled By	Drilling Method
Dusty On-site Env.	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
				2 Inches

Boring Location: State Plane | 1/4 of | 1/4 of Section | T | N,R | Easting | Northing

Local Grid Location (If applicable): ☐ N ☐ S Feet ☐ E ☐ W Feet

County	State	DNR County Code	Civil Town/City/ or Village
Douglas	WI		Superior

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
	2'			Asphalt above Fill comprised of sand, iron ore tailings, larger pebbles, black mud matrix, Wet.					
				Red clay down to 3' Dense, Plastic, little moisture, NO odor.		3.1			0-4'
				Wood organics (decomposed), pebbles and brown mud mixture, wet, non plastic and no odor					
			4'	refusal @ 4' by metal object, bottom of bit was shined off. no Sampleing done on borehole. EOB @ 4'					

Logged By: Wesley Berge

Checked By:

F-204A (R 12-94)

TRC Field Soil Boring Log Information

TRC Project No:

Project Name	Start Date	End Date	Boring Number
Wis DOT-Belknap	7/19/12	7/19/12	B22B(2)

Boring Drilled By	Drilling Method
Dusty On-site Env.	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
				Inches

Boring Location: State Plane — Easting — Northing — Local Grid Location (If applicable) ☐ N ☐ E Feet ☐ S Feet ☐ W

1/4 of — 1/4 of Section — T — N,R

County	State	DNR County Code	Civil Town/City/ or Village
Douglas	WI		Superior

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
	2.5'			Top 1" is cement					
				6" of red/orange sand - dry not dense, not plastic no odor		1.7			1-3'
				8 in of Fill comprised of ore tailings, pebbles and black/brown mud. No odor, not dense, moist.					
				black/brown organics @ bottom 1' comprised of wood chips and pebbles		5.5			3-5'
			5'						
		5'		Red clay, dense, no odor, little moist. Plastic, sample came out of tube before being cut open.		4.6			5-7.5'
						6.4			7.5-10'
		3'	10	Red clay, dense, moist, no odor, very plastic.		2.0			10-13'
			13'	Moved hole 3' from B22B(1). EOB @ 13' 3-5' B22B 1405					

Logged By: [signature] Checked By: [signature]

F-204A (R 12-94)

TRC Field Soil Boring Log Information

TRC Project No:

Page 1 of 1

Project Name	Start Date	End Date	Boring Number
Wis DOT-Belknap	7/19/12	7/19/12	B22C

Boring Drilled By	Drilling Method
Dusty - On Site Env.	Geoprobe

Drill Rig	Common Well Name	Initial Water Level	Surface Elevation	Borehole Diameter
				2 Inches

Boring Location
State Plane Easting Northing
1/4 of 1/4 of Section T N,R

Local Grid Location (If applicable)
☐ N ☐ E
Feet ☐ S Feet ☐ W

County	State	DNR County Code	Civil Town/City/ or Village
Douglas	WI		Superior

Number	Length (In) Recovered	Blow Counts	Depth In Feet	Group Name, Percent & Range of Particle Sizes, Plasticity, Color, Odor, Moisture, Density/Consistency, Additional Comments, Geologic Origin (Stratigraphic Unit)	Sample Type	PID/FID	Standard Penetration	Well Diagram	RQD/ Comments
	3.75'			Top 2" Cement,		2.9			0-2.5
				Dark Brown Clay w/ Black organics, semi dense, semi plastic, Gas odor. wet @ 3'.					
				wet sand and gravel @ 3.5' w/ odor, non plastic, not very dense.					
				Red/Dark Brown clay w/ odor, semi plastic moist.		15.0			2.5-5
			5'	wet w/ soft clay on top 2' w/ semi soft/Dense clay on the bottom.		10.9			5-7.5
	3'			not much odor coming from any part of sample. organics @ bottom 1' of sample.		593			7.5-10
			10'						
	3'			Red clay: dense, moist, Highly organic @ 13'. Much silt towards the bottom of the sample, Organic odor, plastic (in clay), non-plastic in organics.		62.8			10-13
				B22C 7.5-10 1955					

Logged By: Wesley Brueger

Checked By:

F-204A (R 12-94)

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
USH 2 (Belknap Street) (ID# 8680-00-01)		B-22D

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental	8/20/2015	8/20/2015	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,481 N, 1,444,114 E S/C/(N)
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 13.391" Long -92° 5' 27.228"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

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
1 GP	60 42		1	**ASPHALT**, with base sand and gravel.										
			2	**LEAN CLAY WITH SAND (CL)**, fine to medium grained sand, non-plastic, 10R 3/2 red, dry, stiff.	CL			1.3	7.5					
			3	**LEAN CLAY (CL)**, low plasticity, 10R 5/6 red with dark gray streaking, no odor, dry to moist, stiff to soft. Wood decomposition at 2.75-3 feet bgs and 3-3.25 feet bgs.	CL			1.2	1.5					
			4											
			5											
2 GP	60 30		6	**WELL GRADED SAND AND GRAVEL (SW)**, fine to coarse grained, wet.	SW									
			7	**LEAN CLAY (CL)**, little sand (fine grained), low plasticity, 10R 5/6 red with dark gray and black streaking, slight non-chlorinated, non-petroleum odor in wet area.				<1	1.75					
			8					<1	1					Soil sample collected from 7.5-10 feet bgs.
			9											
			10											
3 GP	60 60		11	As above. Slight to moderate plasticity, 10R 5/6 red, no odor, medium stiffness.	CL			<1	2					
			12											
			13					<1	1.5					
			14											
			15											
				E.O.B. at 15 feet bgs.										

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

Signature Wesley M Burger Firm TRC Environmental Corp 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
USH 2 (Belknap Street) (ID# 8680-00-01)		B-22E

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental	8/20/2015	8/20/2015	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,428 N, 1,444,132 E S/C/(N)
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 12.873" Long -92° 5' 26.948"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

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
1 GP	60 / 42		1	**ASPHALT** with base layer sand and gravel.										
			1	**LEAN CLAY (CL)**, medium plasticity, 10R 5/6 red, no odor, dry, soft.				3	0.75					
			2											
			3					2.8	1.75					
			4											
			5											
2 GP	60 / 36		5	As above.	CL									
			6					<1	2.0					Soil sample collected from 5-7.5 feet bgs.
			7											
			8					<1	1.75					
			9											
			10											
3 GP	60 / 48		10	**LEAN CLAY WITH SAND (CL)**, non-plastic, 10R 5/6 red, no odor, moist to	CL									
			11	wet, loose.				<1	1.25					
			11	**LEAN CLAY (CL)**, 10R 5/6 red, no odor,										
			12	moist, soft.										
			13		CL			<1	0.75					
			14											
			15											
			15	E.O.B. at 15 feet bgs.										

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

Signature Wesley Johnson Firm TRC Environmental Corp 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
USH 2 (Belknap Street) (ID# 8680-00-01)		B-22F

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental	8/20/2015	8/20/2015	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,332 N, 1,444,107 E S/C/(N)
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 11.922" Long -92° 5' 27.273"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

Sample Number and Type	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
1 GP	60 48		1	**ASPHALT** with base layer sand and gravel.										
			1	**LEAN CLAY (CL)**, trace fine to coarse grained sand, medium plasticity, 10R 5/6 red, no odor, dry to moist, soft.	CL			<1	1.5					
			2		OL									
			2		CL									
			3	**ORGANIC SILT (OL).**	CL			<1	1.5					Soil sample collected from 2.5-5 feet bgs.
			3	**LEAN CLAY (CL)**, trace fine to coarse grained sand, medium plasticity, 10R 5/6 red, no odor, dry to moist, soft.	OL									
			4		CL									
			5	**WOODY LAYER.**										
2 GP	60 60		6	**LEAN CLAY (CL)**, trace fine to coarse grained sand, medium plasticity, 10R 5/6 red, no odor, dry to moist, soft.				<1	1.25					
			7	**ORGANIC SILT (OL).**										
			8	**LEAN CLAY (CL)**, trace fine to coarse grained sand, medium plasticity, 10R 5/6 red, no odor, dry to moist, soft.				<1	1.0					
			9											
			10	**FAT CLAY (CL)**, trace fine gravel, very plastic, 10R 5/6 red, no odor, moist, soft.	CH									
3 GP	60 60		11	As above.				<1	1.0					
			12											
			13					<1	1.5					
			14											
			15	E.O.B. at 15 feet bgs.										

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

Signature Wesley J. Burger Firm TRC Environmental Corp 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
USH 2 (Belknap Street) (ID# 8680-00-01)		B22G

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Twin Ports Testing, Inc.	7/7/2016	7/7/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,500 N, 1,444,103 E S/C/Ⓝ
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 13.579" Long -92° 5' 27.393"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

Sample Number and Type	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
1 GP	60 36		1	**CONCRETE**										
				SUBBASE, sand and gravel.										
			1	**LEAN CLAY (CL)**, plastic, 5YR 4/6 yellowish red, musky odor, no moisture, very stiff.				<1	2.8					
			2											
			3					<1	2.2					
			4											
2 GP	60 60		5	As above, color change to 2.5YR 4/1 dark reddish grey with mottles of original 5YR 4/6 yellowish red, stiff.	CL									
			6					<1	1.9					
			7											
			8					<1	2.3					Soil sample from 8.0' - 10.0' bgs.
			9											
			10	E.O.B. at 10' bgs.										

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Signature	Firm	Tel:
	TRC Environmental	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
USH 2 (Belknap Street) (ID# 8680-00-01)		B22H

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Twin Ports Testing, Inc.	7/7/2016	7/7/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,429 N, 1,444,104 E S/C/N
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 12.887" Long -92° 5' 27.355"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

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
1 GP	60 48		1	**CONCRETE**										
				SUBBASE, sand and gravel; subbase grades into underlaying clay.				<1	2.9					
			2	**LEAN CLAY (CL)**, plastic, 5YR 4/6 yellowish red, no odor, no moisture, very stiff.										
			3					<1	2.0					
			4											
2 GP	60 60		5	As above.	CL									
			6					<1	2.0					
			7											
			8					<1	2.1					Soil sample from 8.0' - 10.0' bgs.
			9											
			10	E.O.B. at 10' bgs.										

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	TRC Environmental	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
USH 2 (Belknap Street) (ID# 8680-00-01)		B22I

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Twin Ports Testing, Inc.	7/7/2016	7/7/2016	Geoprobe

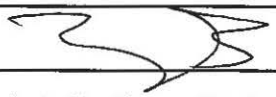
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,555 N, 1,444,026 E S/C/N
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 14.105" Long -92° 5' 28.518"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

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
1 GP	60 / 24		0	**CONCRETE**										
			1	**SUBBASE**, sand and gravel; subbase grades into underlaying clay.				<1	3.5					
			2	**LEAN CLAY (CL)**, plastic, 7.5YR 4/2 brown, earthy-sweet odor, no moisture, very stiff.	CL									
			3											
			4	As above, clay underlain by rotting timbers; black, damp, no odor.										
2 GP	60 / 18		5	**WELL-GRADED SAND (SW)**, fine to coarse grained, sub-rounded to sub-angular, cohesive, 7.5YR 3/2 dark brown, no odor, moist.	SW			1.1	3.2					
			6											
			7											
			8	**LEAN CLAY (CL)**, plastic, 5YR 4/6 yellowish red, no odor, no moisture, stiff.	CL			<1	1.7					Soil sample from 8.0' - 10.0' bgs.
			9											
			10	E.O.B. at 10' bgs.										

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

Signature  Firm TRC Environmental 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
USH 2 (Belknap Street) (ID# 8680-00-01)		B22J

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Twin Ports Testing, Inc.	7/7/2016	7/7/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,551 N, 1,444,103 E S/C/N
1/4 of 1/4 of Section , T N, R

Lat 46° 43' 14.087"
Long -92° 5' 27.413"

Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

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
1 GP	60 48		0	**CONCRETE**										
			1	**SUBBASE**, sand and gravel; subbase grades into underlaying clay.				0.7	2.6					
			2	**LEAN CLAY (CL)**, plastic, 5YR 4/6 yellowish red, no odor, no moisture, very stiff.										
			3					0.3	2.4					
			4											
2 GP	60 60		5	As above.	CL									
			6	As above, wet sample sleeve from 6' to 7.5' interval; sample core itself in this interval is of similar moisture to rest of sample.				0.3	2.4					
			7											
			8	As above, stiff.				0.3	1.8					Soil sample from 8.0' - 10.0' bgs.
			9											
			10	E.O.B. at 10' bgs.										

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

Signature Firm TRC Environmental 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
USH 2 (Belknap Street) (ID# 8680-00-01)		B22K

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Twin Ports Testing, Inc.	7/7/2016	7/7/2016	Geoprobe

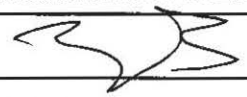
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573,552 N, 1,444,073 E S/C/(N)
1/4 of 1/4 of Section , T N, R
Lat 46° 43' 14.093"
Long -92° 5' 27.85"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

Sample Number and Type	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
1 GP	60 48		0	**CONCRETE**										
			1	**SUBBASE**, sand and gravel; subbase grades into underlaying clay.				<1	4.0					
			2	**LEAN CLAY (CL)**, plastic, 5YR 4/2 dark reddish grey, no odor, no moisture, very stiff.										
			3	As above, black organic rich 2" seam at 2.5' bgs.				<1	2.6					
			4											
2 GP	60 48		5	As above; slightly softer and fatter with depth.	CL									
			6					<1	2.5					
			7											
			8	As above, stiff.				<1	1.3					Soil sample from 8.0' - 10.0' bgs.
			9											
			10	E.O.B. at 10' bgs.										

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

Signature  Firm TRC Environmental 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 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
902-904 Belknap Street ROW (BRRTS #02-16-560359)		GP-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental	12/3/2018	12/3/2018	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-1	Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573526 N, 1444009 E S / C / (N)
NE 1/4 of NW 1/4 of Section 23, T 49 N, R 14 W
Lat 46° 43' 13.808" Long 92° 5' 28.753"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

Sample Number and Type	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
1 GP	60 24		0	**CONCRETE**										
				LEAN CLAY (CL), low plasticity, dark reddish grey (10R 4/3), no odor, moist.				1.0	1.5					Sample collected at 0-2.5' bgs.
			2	As above, dark red (10R 5/6).										
			4					1.8						
2 GP	60 36		6	Dark brown organics mixed with clay from 6-7 ft. bgs.	CL			3.9						
			8											
			10					1.8						
3 GP	60 60			**WELL GRADED SAND WITH GRAVEL (SW)**, fine to coarse grained sand, medium gravel, dark red (10R 5/6), no odor, moist.	SW									
			12	**LEAN CLAY (CL)** , low plasticity, dark red (10R 5/6), no odor, moist.	CL			2.7						
			14					2.8						
4 GP	60 60			**LEAN CLAY WITH GRAVEL (CL)** , low plasticity, dark red (10R 5/6), no odor, moist.	CL				0.5					
			16	**LEAN CLAY (CL)** , low plasticity, red (10R 5/8), no odor, moist.				3.0	1.25					Sample collected at 15-17.5' bgs.
			18	As above, wet.	CL									
								5.0						
			20											

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

Signature	Firm	Tel:
	TRC Environmental 708 Heartland Trail, Suite 3000 Madison, WI 53717	(608) 826-3600 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 Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-1 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
5 GP	60 60			As above, lean clay, low plasticity, red (10R 5/8), no odor, wet.				3.4						
			22											
			24					1.3						
6 GP	60 60				CL									
			26					3.2						
			28											
								<1						
			30	E.O.B. at 30 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
902-904 Belknap Street ROW (BRRTS #02-16-560359)		GP-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental	12/3/2018	12/3/2018	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-2	Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573524 N, 1444058 E S/C/(N)
NE 1/4 of NW 1/4 of Section 23, T 49 N, R 14 W
Lat 46° 43' 13.799"
Long 92° 5' 28.045"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

Sample Number and Type	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
1 GP	60 24		0	**CONCRETE**										
				LEAN CLAY WITH GRAVEL (CL), low plasticity, dark red (10R 5/6), no odor, dry.	CL			3.9	2.25					
			2	**LEAN CLAY (CL)**, low plasticity, dark red (10R 5/6), no odor, moist.										
			4					2.0						
2 GP	60 32		6	Dark brown organics mixed with clay from 6-7 ft. bgs.	CL			96.8	0.5					
			8					212						Sample collected at 7.5-10' bgs.
3 GP	60 36		10	**LEAN CLAY WITH GRAVEL (CL)**, low plasticity, dark red (10R 5/6), no odor, moist.	CL			56.2	1					
			12	**LEAN CLAY (CL)** , low plasticity, red (10R 5/8), no odor, moist.				8.4	2					
4 GP	60 60		14						1.75					
			16	As above, wet.	CL			2.2						
			18					2.5						
			20											

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

Signature	Firm	Tel: (608) 826-3600
	TRC Environmental 708 Heartland Trail, Suite 3000 Madison, WI 53717	Fax:

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-2 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	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
5 GP	60 48		22	As above, lean clay, low plasticity, red (10R 5/8), no odor, moist.	CL			4.5						Sample collected at 20-22.5' bgs.
			24					3.9						
				E.O.B. at 25 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
902-904 Belknap Street ROW (BRRTS #02-16-560359)		GP-3

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental	12/3/2018	12/3/2018	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-3	Feet MSL	Feet MSL	2.1 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 573495 N, 1444102 E S/C/(N)
NE 1/4 of NW 1/4 of Section 23, T 49 N, R 14 W
Lat 46° 43' 13.523" Long 92° 5' 27.404"
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Douglas	16	Superior

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
1 GP	60 18		0	**CONCRETE**										
				LEAN CLAY WITH GRAVEL (CL), low plasticity, greyish red (10R 5/4), no odor, dry.	CL									
					SW			1.3						Sample collected at 0-2.5' bgs.
			2	**WELL GRADED SAND (SW)**, greyish red (10R 5/4), no odor, dry.					1.5					
				LEAN CLAY (CL), low plasticity, red (10R 5/8), no odor, moist.										
			4					<1						
2 GP	60 36		6		CL			1.5						
				Dark brown organics mixed with clay from 7-10 ft. bgs.										
			8					1.3						
3 GP	60 36		10	**LEAN CLAY WITH SAND AND GRAVEL (CL)**, low plasticity, red (10R 5/8), no odor, moist.					0.75					
				As above, with timber debris.	CL			1.8	0.5					
			12	**LEAN CLAY (CL)** , low plasticity, red (10R 5/8), no odor, moist.					1.5					
			14					<1						
4 GP	60 60		16		CL			2.2						Sample collected at 15-17.5' bgs.
			18											
				As above, wet.				<1						
			20											

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

Signature	Firm	Tel:
	TRC Environmental 708 Heartland Trail, Suite 3000 Madison, WI 53717	(608) 826-3600 Fax:

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-3 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
5 GP	60 36		22	As above, lean clay, low plasticity, red (10R 5/8), no odor, wet.	CL			<1						
			24					<1						
				E.O.B. at 25 feet bgs.										

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: 902-904 Belknap Street ROW (BRRTS #02-16-560359)	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: MW-1
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 46° 43' 13.8" Long. 92° 5' 28.8" or St. Plane 573,526 ft. N, 1,444,009 ft. E. S / C / (N)	Wis. Unique Well No. / DNR Well Number
Facility ID		Date Well Installed: 12/04/2019
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NE 1/4 of NW 1/4 of Sec. 23, T. 49 N, R. 14 ☐ E. ☒ W.	Well Installed By: (Person's Name and Firm) Tony Kapugi, On-Site Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 632.01 ft. MSL

C. Land surface elevation ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 1.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ☒ 4 1
____ Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1
Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
NA

E. Bentonite seal, top ____ ft. MSL or 1.0 ft.

F. Fine sand, top ____ ft. MSL or 11.0 ft.

G. Filter pack, top ____ ft. MSL or 13.0 ft.

H. Screen joint, top ____ ft. MSL or 15.0 ft.

I. Well bottom ____ ft. MSL or 30.0 ft.

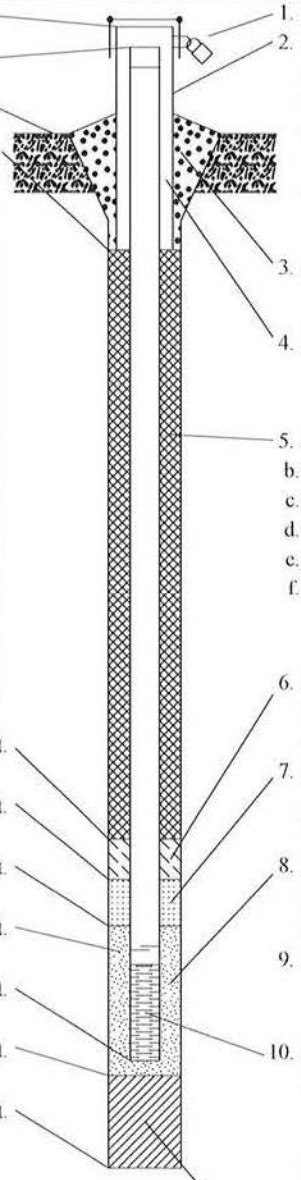
J. Filter pack, bottom ____ ft. MSL or 30.5 ft.

K. Borehole, bottom ____ ft. MSL or 30.5 ft.

L. Borehole, diameter 8.5 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4
____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☒ 0 1
____ Other ☐ _ _
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Sand Other ☒ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. 3.5 Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ☐ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 3 2
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. 30/100 Sidley
b. Volume added 0.5 ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. R.W. Sidley, Inc./Silica/Bluestone
b. Volume added 0.5 ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
____ Other ☐
10. Screen material: PVC
a. Screen Type: Factory cut ☒ 1 1
Continuous slot ☐ 0 1
____ Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4
____ Other ☐

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

Signature	Firm	
	TRC Environmental 708 Heartland Trail, Suite 3000 Madison, WI 53717	Tel: (608) 826-3600 Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name 902-904 Belknap Street ROW (BRRTS #02-16-560359)	Local Grid Location of Well ☐ N. ☐ S. ft. ☐ E. ☐ W. ft.	Well Name MW-2
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 46° 43' 13.8" Long. 92° 5' 28.0" or	Wis. Unique Well No. / DNR Well Number
Facility ID	St. Plane 573,524 ft. N, 1,444,058 ft. E. S/C/(N)	Date Well Installed 12/04/2019
Type of Well Well Code 11/mw	Section Location of Waste/Source NE 1/4 of NW 1/4 of Sec. 23, T. 49 N, R. 14 ☐ E. ☒ W.	Well Installed By: (Person's Name and Firm) Tony Kapugi On-Site Environmental
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation 631.77 ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
_____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
NA

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 11.0 ft.

G. Filter pack, top _____ ft. MSL or 13.0 ft.

H. Screen joint, top _____ ft. MSL or 15.0 ft.

I. Well bottom _____ ft. MSL or 30.0 ft.

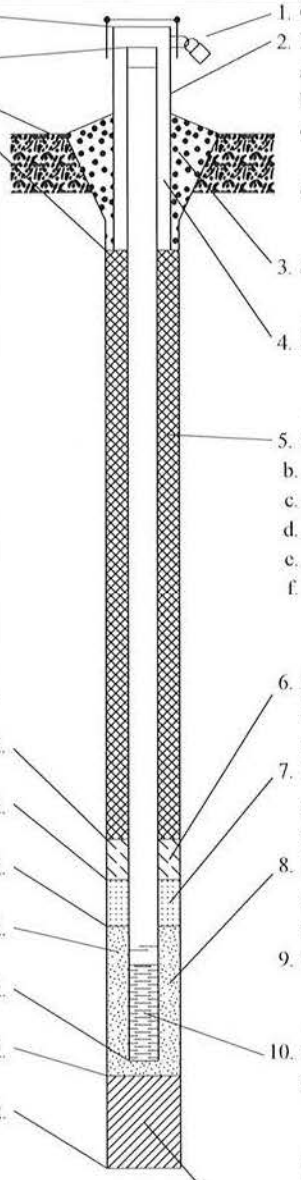
J. Filter pack, bottom _____ ft. MSL or 30.5 ft.

K. Borehole, bottom _____ ft. MSL or 30.5 ft.

L. Borehole, diameter 8.5 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04
_____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
_____ Other ☐ __
4. Material between well casing and protective pipe:
Bentonite ☐ 30
Sand Other ☒ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. 3.5 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☐ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 32
c. _____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. 30/100 Sidley
b. Volume added 0.5 ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. R.W. Sidley, Inc./Silica/Bluestone
b. Volume added 0.5 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
_____ Other ☐
10. Screen material: PVC
a. Screen Type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 14
_____ Other ☐

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

Signature	Firm	
	TRC Environmental 708 Heartland Trail, Suite 3000 Madison, WI 53717	Tel: (608) 826-3600 Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name 902-904 Belknap Street ROW (BRRTS #02-16-560359)	Local Grid Location of Well ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name MW-3
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 46° 43' 13.5" Long. 92° 5' 27.4" or	Wis. Unique Well No. / DNR Well Number
Facility ID	St. Plane 573,495 ft. N, 1,444,102 ft. E. S / C / (N)	Date Well Installed 12/04/2019
Type of Well Well Code 11/mw	Section Location of Waste/Source NE 1/4 of NW 1/4 of Sec. 23, T. 49 N, R. 14 ☐ E. ☒ W.	Well Installed By: (Person's Name and Firm) Tony Kapugi On-Site Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation ____ ft. MSL

B. Well casing, top elevation 630.81 ft. MSL

C. Land surface elevation ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 1.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
NA

E. Bentonite seal, top ____ ft. MSL or 1.0 ft.

F. Fine sand, top ____ ft. MSL or 11.0 ft.

G. Filter pack, top ____ ft. MSL or 13.0 ft.

H. Screen joint, top ____ ft. MSL or 15.0 ft.

I. Well bottom ____ ft. MSL or 30.0 ft.

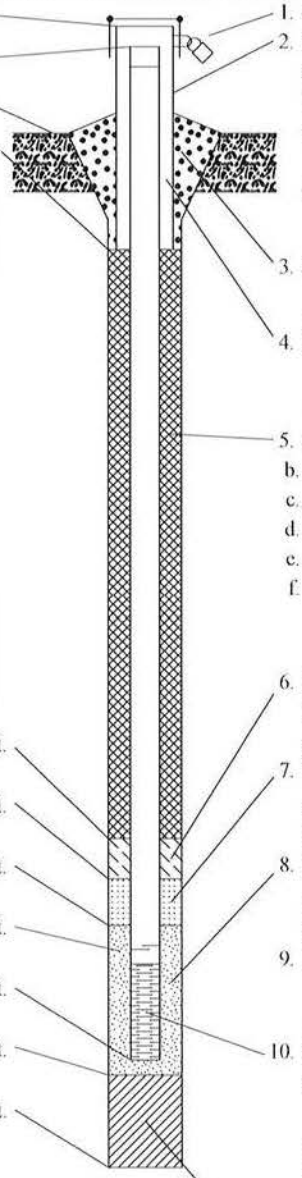
J. Filter pack, bottom ____ ft. MSL or 30.5 ft.

K. Borehole, bottom ____ ft. MSL or 30.5 ft.

L. Borehole, diameter 8.5 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04
____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
____ Other ☐ __
4. Material between well casing and protective pipe:
Bentonite ☐ 30
Sand Other ☒ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. 3.5 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☐ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 32
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. 30/100 Sidley
b. Volume added 0.5 ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. R.W. Sidley, Inc./Silica/Bluestone
b. Volume added 0.5 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
____ Other ☐
10. Screen material: PVC
a. Screen Type: Factory cut ☒ 11
Continuous slot ☐ 01
____ Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 14
____ Other ☐

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

Signature	Firm	
	TRC Environmental 708 Heartland Trail, Suite 3000 Madison, WI 53717	Tel: (608) 826-3600 Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County	Well Name
902-904 Belknap Street ROW (BRRTS #02-16-560359)	Douglas	MW-1

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	16		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method:

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed, and pumped	☐	70
compressed air	☐	20
bailed only	☒	10
pumped only	☐	51
pumped slowly	☐	50
other _____	☐	__

3. Time spent developing well: 30 min.

4. Depth of well (from top of well casing): 29.93 ft.

5. Inside diameter of well: 2.05 in.

6. Volume of water in filter pack and well casing: 11.8 gal.

7. Volume of water removed from well: 7.5 gal.

8. Volume of water added (if any): gal.

9. Source of water added: NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	21.96 ft.	28.05 ft.
Date b.	5/9/2019	5/9/2019
Time c.	☐ a.m. 12:45 ☒ p.m.	☐ a.m. 01:15 ☒ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Dark brown	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown
14. Total suspended solids	mg/l	mg/l
15. COD	mg/l	mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Person's Name and Firm
Tom Perkins
TRC Environmental

17. Additional comments on development:

Facility Address or Owner/Responsible Party Address

Name:

Firm: City of Superior

Street: 1316 N. 14th Street

City/State/Zip: Superior, WI 54880

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

Signature:

Print Name: Tom W. Perkins

Firm: TRC Environmental

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County	Well Name
902-904 Belknap Street ROW (BRRTS #02-16-560359)	Douglas	MW-2

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	16		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method:

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed, and pumped	☐	70
compressed air	☐	20
bailed only	☒	10
pumped only	☐	51
pumped slowly	☐	50
other _____	☐	__

3. Time spent developing well: 45 min.

4. Depth of well (from top of well casing): 30.12 ft.

5. Inside diameter of well: 2.05 in.

6. Volume of water in filter pack and well casing: 27.0 gal.

7. Volume of water removed from well: 15.0 gal.

8. Volume of water added (if any): gal.

9. Source of water added: NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	11.62 ft.	27.45 ft.
Date b.	5/9/2019	5/9/2019
Time c.	☐ a.m. 12:00 ☒ p.m.	☐ a.m. 12:45 ☒ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Dark brown	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	mg/l	mg/l
15. COD	mg/l	mg/l

16. Well developed by: Person's Name and Firm
Tom Perkins
TRC Environmental

17. Additional comments on development:

Facility Address or Owner/Responsible Party Address

Name:

Firm: City of Superior

Street: 1316 N. 14th Street

City/State/Zip: Superior, WI 54880

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

Signature:

Print Name: Tom W. Perkins

Firm: TRC Environmental

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County	Well Name
902-904 Belknap Street ROW (BRRTS #02-16-560359)	Douglas	MW-3

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	16		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method:

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed, and pumped	☐	70
compressed air	☐	20
bailed only	☒	10
pumped only	☐	51
pumped slowly	☐	50
other _____	☐	__

3. Time spent developing well: 55 min.

4. Depth of well (from top of well casing): 29.95 ft.

5. Inside diameter of well: 2.05 in.

6. Volume of water in filter pack and well casing: 37.4 gal.

7. Volume of water removed from well: 17.5 gal.

8. Volume of water added (if any): gal.

9. Source of water added: NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	4.65 ft.	27.05 ft.
Date b.	5/9/2019	5/9/2019
Time c.	☒ a.m. 10:35 ☐ p.m.	☒ a.m. 11:30 ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Dark brown	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	mg/l	mg/l
15. COD	mg/l	mg/l

16. Well developed by: Person's Name and Firm
Tom Perkins
TRC Environmental

17. Additional comments on development:

Facility Address or Owner/Responsible Party Address

Name:

Firm: City of Superior

Street: 1316 N. 14th Street

City/State/Zip: Superior, WI 54880

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

Signature:

Print Name: Tom W. Perkins

Firm: TRC Environmental

NOTE: See instructions for more information including a list of county codes and well type codes.

Appendix B: Soil Disposal Documentation

Vonco V Duluth, LLC
1100 West Gary Street
Duluth, MN 55808
(218) 626-3830

001286
City of Superior
2301 Hill Ave

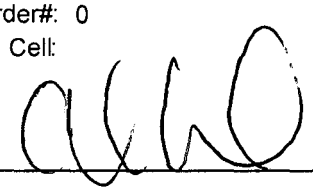
TICKET #: **307919**
Operator: DeAnna
In : 04/05/2019 8:21 am
Out: 04/05/2019 8:24 am
Vehicle: City of Superior pic

INBOUND
INVOICE

Contract: 19-007-I City of Superior 902-904 Belkna

Reference: 6- 55 gallon drums

Work Order#: 0
Cell:

Signature: 

GROSS	12,580.00	LB	Manual In
TARE	8,640.00	LB	Scale Out
NET	3,940.00	LB	1.97 TN

Quantity		Description	Rate	Extension	Tax	Total
1.97	TN	Contaminated Soil Tons				
1.00		Environmental Fee - 10				

Vonco V Duluth, LLC
PHONE: 218-626-3830

INDUSTRIAL/NON-HAZARDOUS MATERIAL TRANSPORT AND DISPOSAL MANIFEST

GENERATOR

1. **Work Site Name** 902 - 904 Belknap Street
   Address 902 - 904 Belknap Street
   City, St., Zip Superior, WI 54880
   Owner's Name Todd Janigo
   Owner's Phone No. (715) 395-7334
2. **Consultant/Contractor** NA
   Address NA
   City, St., Zip NA
   Owner's Phone No. NA

PROFILE #: 19-007-I

3. **Waste Disposal Site:** **Vonco V Duluth, LLC**
   Mailing Address City, State, Zip: **1100 West Gary Street, Duluth, MN 55808**
4. **Responsible Agency:** **MN Pollution Control Agency**
   Address: **520 Lafayette Road**
   City, State, Zip: **St. Paul, MN 55155-3898**

5. Description of Materials	6. Containers (No.-Type)	7. Total Quantity (m^3 or yd^3)
Petroleum Contaminated Soil	6 - 55 Gallon Drums	2 yd3

8. **Special Handling Instructions and Additional Information**

9. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. The above listed material(s) is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law.

Name & Title (Printed or Typed) Nathan Johnstad Signature [signature] Date 4/5/19

TRANSPORTER

10. **Transporter 1** (Acknowledgement of receipt of materials)
    Name/Title Chris Wiberg Signature [signature] Date 4/5/19
    Address 2301 Hill ave Superior WI City, St., Zip 54880 Phone No. 7153940244
11. **Transporter 2** (Acknowledgement of receipt of materials)
    Name/Title _____ Signature _____ Date _____
    Address _____ City, St., Zip _____ Phone No. _____

DISPOSAL SITE

12. **Discrepancy Indication Space** Clo

Ticket # 307919 Tons 1.97 Yards _____
E _____ N _____ Elev. _____

13. **Waste Disposal Site Owner or Operator:** Certification of receipt of non-hazardous materials covered by this manifest except as noted in item 12.

Name/Title (Printed or Typed) DW
Signature [signature] Date 4/5/19

CONTRACTOR - WHITE TRANSPORTER - CANARY WASTE DISPOSAL SITE - PINK GENERATOR/OPERATOR - GOLD

Appendix C: Laboratory Report for December 2018 Soil Samples

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

December 12, 2018

Steve Sellwood
TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717

RE: Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Dear Steve Sellwood:
Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Tom Perkins, TRC Madison
Peggy Popp, TRC - Madison

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40180525001	**GP-1 (0-2.5' BGS)**	Solid	12/03/18 12:15	12/06/18 09:05
40180525002	**GP-1 (15-17.5' BGS)**	Solid	12/03/18 12:20	12/06/18 09:05
40180525003	**GP-3 (0-2.5' BGS)**	Solid	12/03/18 16:30	12/06/18 09:05
40180525004	**GP-3 (15-17.5' BGS)**	Solid	12/03/18 16:35	12/06/18 09:05
40180525005	**GP-2 (7.5-10' BGS)**	Solid	12/03/18 16:10	12/06/18 09:05
40180525006	**GP-2 (20-22.5 BGS)**	Solid	12/03/18 16:15	12/06/18 09:05

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40180525001	**GP-1 (0-2.5' BGS)**	WI MOD GRO	PMS	10
		ASTM D2974-87	TEL	1
40180525002	**GP-1 (15-17.5' BGS)**	WI MOD GRO	PMS	10
		ASTM D2974-87	TEL	1
40180525003	**GP-3 (0-2.5' BGS)**	WI MOD GRO	PMS	10
		ASTM D2974-87	TEL	1
40180525004	**GP-3 (15-17.5' BGS)**	EPA 8260	MDS	64
		ASTM D2974-87	TEL	1
40180525005	**GP-2 (7.5-10' BGS)**	WI MOD GRO	PMS	10
		ASTM D2974-87	TEL	1
40180525006	**GP-2 (20-22.5 BGS)**	WI MOD GRO	PMS	10
		ASTM D2974-87	TEL	1

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40180525001	**GP-1 (0-2.5' BGS)**					
ASTM D2974-87	Percent Moisture	8.4	%	0.10	12/10/18 15:33	
40180525002	**GP-1 (15-17.5' BGS)**					
ASTM D2974-87	Percent Moisture	26.0	%	0.10	12/10/18 15:33	
40180525003	**GP-3 (0-2.5' BGS)**					
ASTM D2974-87	Percent Moisture	10.5	%	0.10	12/10/18 15:33	
40180525004	**GP-3 (15-17.5' BGS)**					
ASTM D2974-87	Percent Moisture	25.8	%	0.10	12/10/18 15:33	
40180525005	**GP-2 (7.5-10' BGS)**					
WI MOD GRO	Benzene	10000	ug/kg	81.9	12/07/18 13:17	
WI MOD GRO	m&p-Xylene	122J	ug/kg	164	12/07/18 13:17	
ASTM D2974-87	Percent Moisture	26.8	%	0.10	12/10/18 15:33	
40180525006	**GP-2 (20-22.5 BGS)**					
WI MOD GRO	Benzene	53.5J	ug/kg	86.7	12/10/18 09:35	
ASTM D2974-87	Percent Moisture	30.8	%	0.10	12/10/18 15:34	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Method: **WI MOD GRO**
Description: WIGRO GCV
Client: TRC - MADISON
Date: December 12, 2018

General Information:
5 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with TPH GRO/PVOC WI ext. with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Method: **EPA 8260**
Description: 8260 MSV Med Level Normal List
Client: TRC - MADISON
Date: December 12, 2018

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 308648

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40180525004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1802969)
  - 1,1,1-Trichloroethane
  - Chloroform

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Sample: GP-1 (0-2.5' BGS) **Lab ID: 40180525001** Collected: 12/03/18 12:15 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	12/07/18 08:00	12/07/18 12:00	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:00	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	12/07/18 08:00	12/07/18 12:00	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**8.4**	%	0.10	0.10	1		12/10/18 15:33		

Sample: GP-1 (15-17.5' BGS) **Lab ID: 40180525002** Collected: 12/03/18 12:20 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	12/07/18 08:00	12/07/18 12:25	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:25	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1	12/07/18 08:00	12/07/18 12:25	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.0**	%	0.10	0.10	1		12/10/18 15:33		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Sample: GP-3 (0-2.5' BGS) **Lab ID: 40180525003** Collected: 12/03/18 16:30 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	12/07/18 08:00	12/07/18 12:51	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 12:51	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	12/07/18 08:00	12/07/18 12:51	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.5**	%	0.10	0.10	1		12/10/18 15:33		

Sample: GP-3 (15-17.5' BGS) **Lab ID: 40180525004** Collected: 12/03/18 16:35 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	630-20-6	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	71-55-6	M1,W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	79-34-5	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	79-00-5	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-34-3	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-35-4	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	563-58-6	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	87-61-6	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	96-18-4	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	12/07/18 08:00	12/07/18 13:58	120-82-1	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	95-63-6	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	12/07/18 08:00	12/07/18 13:58	96-12-8	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	106-93-4	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	95-50-1	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	107-06-2	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	78-87-5	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	108-67-8	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	541-73-1	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	142-28-9	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	106-46-7	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	594-20-7	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	95-49-8	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Sample: GP-3 (15-17.5' BGS) **Lab ID: 40180525004** Collected: 12/03/18 16:35 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	106-43-4	W
Benzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	12/07/18 08:00	12/07/18 13:58	74-83-9	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	12/07/18 08:00	12/07/18 13:58	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	12/07/18 08:00	12/07/18 13:58	67-66-3	M1,W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	74-87-3	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	124-48-1	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	74-95-3	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-71-8	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	98-82-8	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	1634-04-4	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-09-2	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	12/07/18 08:00	12/07/18 13:58	91-20-3	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	100-42-5	W
Tetrachloroethene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	108-88-3	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-69-4	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	75-01-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	156-59-2	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	10061-01-5	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	12/07/18 08:00	12/07/18 13:58	179601-23-1	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	104-51-8	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	103-65-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	95-47-6	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	99-87-6	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	98-06-6	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	156-60-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:58	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	94	%	57-148		1	12/07/18 08:00	12/07/18 13:58	1868-53-7	
Toluene-d8 (S)	101	%	58-142		1	12/07/18 08:00	12/07/18 13:58	2037-26-5	
4-Bromofluorobenzene (S)	96	%	48-130		1	12/07/18 08:00	12/07/18 13:58	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Sample: GP-3 (15-17.5' BGS) **Lab ID: 40180525004** Collected: 12/03/18 16:35 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**25.8**	%	0.10	0.10	1		12/10/18 15:33		

Sample: GP-2 (7.5-10' BGS) **Lab ID: 40180525005** Collected: 12/03/18 16:10 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**10000**	ug/kg	81.9	34.1	1	12/07/18 08:00	12/07/18 13:17	71-43-2	
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	108-67-8	W
m&p-Xylene	**122J**	ug/kg	164	68.3	1	12/07/18 08:00	12/07/18 13:17	179601-23-1	
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/07/18 13:17	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1	12/07/18 08:00	12/07/18 13:17	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.8**	%	0.10	0.10	1		12/10/18 15:33		

Sample: GP-2 (20-22.5 BGS) **Lab ID: 40180525006** Collected: 12/03/18 16:15 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**53.5J**	ug/kg	86.7	36.1	1	12/07/18 08:00	12/10/18 09:35	71-43-2	
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	12/07/18 08:00	12/10/18 09:35	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	12/07/18 08:00	12/10/18 09:35	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	12/07/18 08:00	12/10/18 09:35	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Sample: GP-2 (20-22.5 BGS) **Lab ID: 40180525006** Collected: 12/03/18 16:15 Received: 12/06/18 09:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**30.8**	%	0.10	0.10	1		12/10/18 15:34		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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QUALITY CONTROL DATA

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

QC Batch: 308631 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 40180525001, 40180525002, 40180525003, 40180525005, 40180525006

METHOD BLANK: 1802917 Matrix: Solid
Associated Lab Samples: 40180525001, 40180525002, 40180525003, 40180525005, 40180525006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	12/07/18 09:52	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	12/07/18 09:52	
Benzene	ug/kg	<25.0	50.0	12/07/18 09:52	
Ethylbenzene	ug/kg	<25.0	50.0	12/07/18 09:52	
m&p-Xylene	ug/kg	<50.0	100	12/07/18 09:52	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	12/07/18 09:52	
Naphthalene	ug/kg	<25.0	50.0	12/07/18 09:52	
o-Xylene	ug/kg	<25.0	50.0	12/07/18 09:52	
Toluene	ug/kg	<25.0	50.0	12/07/18 09:52	
a,a,a-Trifluorotoluene (S)	%	99	80-120	12/07/18 09:52	

LABORATORY CONTROL SAMPLE & LCSD: 1802918 1802919

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1090	1060	109	106	80-120	3	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1060	1020	106	102	80-120	3	20	
Benzene	ug/kg	1000	1060	1040	106	104	80-120	2	20	
Ethylbenzene	ug/kg	1000	1080	1060	108	106	80-120	2	20	
m&p-Xylene	ug/kg	2000	2140	2090	107	104	80-120	2	20	
Methyl-tert-butyl ether	ug/kg	1000	1050	1030	105	103	80-120	2	20	
Naphthalene	ug/kg	1000	1090	1070	109	107	80-120	2	20	
o-Xylene	ug/kg	1000	1070	1040	107	104	80-120	3	20	
Toluene	ug/kg	1000	1060	1040	106	104	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				101	101	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

QC Batch: 308648
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40180525004

METHOD BLANK: 1802966
Matrix: Solid
Associated Lab Samples: 40180525004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	12/07/18 10:07	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	12/07/18 10:07	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	12/07/18 10:07	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	12/07/18 10:07	
1,1-Dichloroethane	ug/kg	<17.6	50.0	12/07/18 10:07	
1,1-Dichloroethene	ug/kg	<17.6	50.0	12/07/18 10:07	
1,1-Dichloropropene	ug/kg	<14.0	50.0	12/07/18 10:07	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	12/07/18 10:07	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	12/07/18 10:07	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	12/07/18 10:07	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	12/07/18 10:07	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	12/07/18 10:07	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	12/07/18 10:07	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	12/07/18 10:07	
1,2-Dichloroethane	ug/kg	<15.0	50.0	12/07/18 10:07	
1,2-Dichloropropane	ug/kg	<16.8	50.0	12/07/18 10:07	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	12/07/18 10:07	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	12/07/18 10:07	
1,3-Dichloropropane	ug/kg	<12.0	50.0	12/07/18 10:07	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	12/07/18 10:07	
2,2-Dichloropropane	ug/kg	<12.6	50.0	12/07/18 10:07	
2-Chlorotoluene	ug/kg	<15.8	50.0	12/07/18 10:07	
4-Chlorotoluene	ug/kg	<13.0	50.0	12/07/18 10:07	
Benzene	ug/kg	<9.2	20.0	12/07/18 10:07	
Bromobenzene	ug/kg	<20.6	50.0	12/07/18 10:07	
Bromochloromethane	ug/kg	<21.4	50.0	12/07/18 10:07	
Bromodichloromethane	ug/kg	<9.8	50.0	12/07/18 10:07	
Bromoform	ug/kg	<19.8	50.0	12/07/18 10:07	
Bromomethane	ug/kg	<69.9	250	12/07/18 10:07	
Carbon tetrachloride	ug/kg	<12.1	50.0	12/07/18 10:07	
Chlorobenzene	ug/kg	<14.8	50.0	12/07/18 10:07	
Chloroethane	ug/kg	<67.0	250	12/07/18 10:07	
Chloroform	ug/kg	<46.4	250	12/07/18 10:07	
Chloromethane	ug/kg	<20.4	50.0	12/07/18 10:07	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	12/07/18 10:07	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	12/07/18 10:07	
Dibromochloromethane	ug/kg	<17.9	50.0	12/07/18 10:07	
Dibromomethane	ug/kg	<19.3	50.0	12/07/18 10:07	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	12/07/18 10:07	
Diisopropyl ether	ug/kg	<17.7	50.0	12/07/18 10:07	
Ethylbenzene	ug/kg	<12.4	50.0	12/07/18 10:07	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

METHOD BLANK: 1802966 Matrix: Solid
Associated Lab Samples: 40180525004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	12/07/18 10:07	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	12/07/18 10:07	
m&p-Xylene	ug/kg	<34.4	100	12/07/18 10:07	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	12/07/18 10:07	
Methylene Chloride	ug/kg	<16.2	50.0	12/07/18 10:07	
n-Butylbenzene	ug/kg	<10.5	50.0	12/07/18 10:07	
n-Propylbenzene	ug/kg	<11.6	50.0	12/07/18 10:07	
Naphthalene	ug/kg	<40.0	250	12/07/18 10:07	
o-Xylene	ug/kg	<14.0	50.0	12/07/18 10:07	
p-Isopropyltoluene	ug/kg	<12.0	50.0	12/07/18 10:07	
sec-Butylbenzene	ug/kg	<11.9	50.0	12/07/18 10:07	
Styrene	ug/kg	<9.0	50.0	12/07/18 10:07	
tert-Butylbenzene	ug/kg	<9.5	50.0	12/07/18 10:07	
Tetrachloroethene	ug/kg	<12.9	50.0	12/07/18 10:07	
Toluene	ug/kg	<11.2	50.0	12/07/18 10:07	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	12/07/18 10:07	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	12/07/18 10:07	
Trichloroethene	ug/kg	<23.6	50.0	12/07/18 10:07	
Trichlorofluoromethane	ug/kg	<24.7	50.0	12/07/18 10:07	
Vinyl chloride	ug/kg	<21.1	50.0	12/07/18 10:07	
4-Bromofluorobenzene (S)	%	109	48-130	12/07/18 10:07	
Dibromofluoromethane (S)	%	110	57-148	12/07/18 10:07	
Toluene-d8 (S)	%	105	58-142	12/07/18 10:07	

LABORATORY CONTROL SAMPLE: 1802967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	3060	122	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2310	92	68-130	
1,1,2-Trichloroethane	ug/kg	2500	2380	95	70-130	
1,1-Dichloroethane	ug/kg	2500	2740	110	67-132	
1,1-Dichloroethene	ug/kg	2500	2510	100	67-128	
1,2,4-Trichlorobenzene	ug/kg	2500	2240	90	51-131	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2170	87	49-117	
1,2-Dibromoethane (EDB)	ug/kg	2500	2180	87	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2360	95	70-130	
1,2-Dichloroethane	ug/kg	2500	2970	119	65-137	
1,2-Dichloropropane	ug/kg	2500	2280	91	75-126	
1,3-Dichlorobenzene	ug/kg	2500	2410	96	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2450	98	70-130	
Benzene	ug/kg	2500	2730	109	70-130	
Bromodichloromethane	ug/kg	2500	2640	105	70-130	
Bromoform	ug/kg	2500	1870	75	57-117	
Bromomethane	ug/kg	2500	3250	130	48-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

LABORATORY CONTROL SAMPLE: 1802967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2800	112	65-133	
Chlorobenzene	ug/kg	2500	2460	98	70-130	
Chloroethane	ug/kg	2500	2710	108	37-165	
Chloroform	ug/kg	2500	2970	119	72-126	
Chloromethane	ug/kg	2500	1670	67	34-120	
cis-1,2-Dichloroethene	ug/kg	2500	2400	96	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2440	98	69-130	
Dibromochloromethane	ug/kg	2500	2420	97	68-130	
Dichlorodifluoromethane	ug/kg	2500	2320	93	22-100	
Ethylbenzene	ug/kg	2500	2470	99	79-121	
Isopropylbenzene (Cumene)	ug/kg	2500	2380	95	70-130	
m&p-Xylene	ug/kg	5000	4860	97	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2740	109	66-129	
Methylene Chloride	ug/kg	2500	2520	101	68-129	
o-Xylene	ug/kg	2500	2260	90	70-130	
Styrene	ug/kg	2500	2510	100	70-130	
Tetrachloroethene	ug/kg	2500	2380	95	70-130	
Toluene	ug/kg	2500	2580	103	80-123	
trans-1,2-Dichloroethene	ug/kg	2500	2630	105	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2440	98	67-130	
Trichloroethene	ug/kg	2500	2780	111	70-130	
Trichlorofluoromethane	ug/kg	2500	3070	123	64-134	
Vinyl chloride	ug/kg	2500	2180	87	52-122	
4-Bromofluorobenzene (S)	%			107	48-130	
Dibromofluoromethane (S)	%			106	57-148	
Toluene-d8 (S)	%			105	58-142	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1802968 1802969

Parameter	Units	40180525004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<25.0	1680	1680	1990	2220	118	132	62-130	11	20	M1
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1680	1680	1720	1640	102	97	64-137	5	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1680	1680	1720	1730	102	103	70-130	1	20	
1,1-Dichloroethane	ug/kg	<25.0	1680	1680	1710	1870	102	111	65-132	9	20	
1,1-Dichloroethene	ug/kg	<25.0	1680	1680	1660	1850	99	110	50-128	10	21	
1,2,4-Trichlorobenzene	ug/kg	<47.6	1680	1680	1710	1760	102	104	51-148	3	20	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1680	1680	1790	1510	106	89	43-134	17	23	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1680	1680	1470	1530	87	91	70-130	4	20	
1,2-Dichlorobenzene	ug/kg	<25.0	1680	1680	1730	1810	103	107	70-130	5	20	
1,2-Dichloroethane	ug/kg	<25.0	1680	1680	2140	2150	127	127	65-139	0	20	
1,2-Dichloropropane	ug/kg	<25.0	1680	1680	1480	1560	88	93	74-128	6	20	
1,3-Dichlorobenzene	ug/kg	<25.0	1680	1680	1980	1790	117	106	70-130	10	20	
1,4-Dichlorobenzene	ug/kg	<25.0	1680	1680	1840	1750	109	104	70-130	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1802968 1802969

Parameter	Units	40180525004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<25.0	1680	1680	1890	2100	112	124	66-132	11	20	
Bromodichloromethane	ug/kg	<25.0	1680	1680	1860	1850	110	110	69-130	0	20	
Bromoform	ug/kg	<25.0	1680	1680	1310	1370	78	82	57-130	5	20	
Bromomethane	ug/kg	<69.9	1680	1680	1810	1930	108	115	34-145	6	20	
Carbon tetrachloride	ug/kg	<25.0	1680	1680	1900	2110	113	125	54-133	10	20	
Chlorobenzene	ug/kg	<25.0	1680	1680	1570	1770	93	105	70-130	12	20	
Chloroethane	ug/kg	<67.0	1680	1680	1690	1830	100	109	33-165	8	20	
Chloroform	ug/kg	<46.4	1680	1680	2020	2210	120	131	72-128	9	20	M1
Chloromethane	ug/kg	<25.0	1680	1680	807	806	48	48	20-120	0	20	
cis-1,2-Dichloroethene	ug/kg	<25.0	1680	1680	1610	1730	96	103	69-130	7	20	
cis-1,3-Dichloropropene	ug/kg	<25.0	1680	1680	1560	1720	93	102	65-130	10	20	
Dibromochloromethane	ug/kg	<25.0	1680	1680	1520	1760	90	104	65-130	15	20	
Dichlorodifluoromethane	ug/kg	<25.0	1680	1680	791	996	47	59	10-109	23	29	
Ethylbenzene	ug/kg	<25.0	1680	1680	1710	1800	101	107	63-127	5	20	
Isopropylbenzene (Cumene)	ug/kg	<25.0	1680	1680	1650	1790	98	106	66-130	8	20	
m&p-Xylene	ug/kg	<50.0	3370	3370	3320	3300	99	98	70-130	1	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1680	1680	1850	2050	110	122	62-135	10	20	
Methylene Chloride	ug/kg	<25.0	1680	1680	1590	1910	95	113	68-129	18	20	
o-Xylene	ug/kg	<25.0	1680	1680	1630	1680	97	100	69-130	3	20	
Styrene	ug/kg	<25.0	1680	1680	1770	1680	105	100	70-130	5	20	
Tetrachloroethene	ug/kg	<25.0	1680	1680	1560	1900	92	113	70-130	20	20	
Toluene	ug/kg	<25.0	1680	1680	1680	1870	100	111	80-123	11	20	
trans-1,2-Dichloroethene	ug/kg	<25.0	1680	1680	1710	1870	101	111	70-130	9	20	
trans-1,3-Dichloropropene	ug/kg	<25.0	1680	1680	1670	1650	99	98	67-130	1	20	
Trichloroethene	ug/kg	<25.0	1680	1680	1930	1950	115	116	70-130	1	20	
Trichlorofluoromethane	ug/kg	<25.0	1680	1680	1860	2130	111	127	41-134	14	26	
Vinyl chloride	ug/kg	<25.0	1680	1680	1130	1210	67	72	39-122	7	20	
4-Bromofluorobenzene (S)	%						97	103	48-130			
Dibromofluoromethane (S)	%						100	118	57-148			
Toluene-d8 (S)	%						97	103	58-142			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

QC Batch: 308856 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40180525001, 40180525002, 40180525003, 40180525004, 40180525005, 40180525006

SAMPLE DUPLICATE: 1804274

Parameter	Units	40180525002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	26.0	25.8	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
W	Non-detect results are reported on a wet weight basis.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 315266 SUPERIOR CITY ROW-BELKA
Pace Project No.: 40180525

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40180525001	**GP-1 (0-2.5' BGS)**	TPH GRO/PVOC WI ext.	308631	WI MOD GRO	308680
40180525002	**GP-1 (15-17.5' BGS)**	TPH GRO/PVOC WI ext.	308631	WI MOD GRO	308680
40180525003	**GP-3 (0-2.5' BGS)**	TPH GRO/PVOC WI ext.	308631	WI MOD GRO	308680
40180525005	**GP-2 (7.5-10' BGS)**	TPH GRO/PVOC WI ext.	308631	WI MOD GRO	308680
40180525006	**GP-2 (20-22.5 BGS)**	TPH GRO/PVOC WI ext.	308631	WI MOD GRO	308680
40180525004	**GP-3 (15-17.5' BGS)**	EPA 5035/5030B	308648	EPA 8260	308656
40180525001	**GP-1 (0-2.5' BGS)**	ASTM D2974-87	308856		
40180525002	**GP-1 (15-17.5' BGS)**	ASTM D2974-87	308856		
40180525003	**GP-3 (0-2.5' BGS)**	ASTM D2974-87	308856		
40180525004	**GP-3 (15-17.5' BGS)**	ASTM D2974-87	308856		
40180525005	**GP-2 (7.5-10' BGS)**	ASTM D2974-87	308856		
40180525006	**GP-2 (20-22.5 BGS)**	ASTM D2974-87	308856		

Pace Analytical® JK
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	TRC Environmental
Branch/Location:	Madison
Project Contact:	Steve Sellwood
Phone:	608-826-3608
Project Number:	315266
Project Name:	Superior City Revit- Bellamp / Lough
Project State:	WI
Sampled By (Print):	Tom M. Perkins
Sampled By (Sign):	
PO #:	
Regulatory Program:	

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☒ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PVOC (Naphthalene)	VOCs	Dry weight						CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	GP-1 (0-2.5' bgs)	12/3/18	1215	S			X		X								
002	GP-1 (15-17.5' bgs)	12/3/18	1220	S			X		X								
~~003~~	~~GP-2 (0-10' bgs)~~	~~12/3/18~~	~~1610~~	~~S~~			~~X~~							~~GP~~			
~~004~~	~~GP-2 (15-17.5 bgs)~~	~~12/3/18~~	~~1615~~	~~S~~			~~X~~							~~GP~~			
003	GP-3 (0-2.5' bgs)	12/3/18	1630	S			X		X								
004	GP-3 (15-17.5' bgs)	12/3/18	1635	S			X	X	X								
005	GP-2 (7.5-10' bgs)	12/3/18	1610	S			X		X								
006	GP-2 (20-22.5 bgs)	12/3/18	1615	S			X		X								

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	SSellwood@trcsolutions.com
Email #2:	tperkins@trcsolutions.com
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	12/5/18 1000		
Walter	12-6-18 0905	Susan Hoffman Pace	12/6/18 0905

PACE Project No. 401805 25
Receipt Temp: ROT °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / ~~Not Present~~
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: TRC Project # 40180525

All containers needing preservation have been checked and noted below: □Yes □No ☑N/A

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted): Initial when completed: Date/ Time:

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001																			1				1										2.5 / 5 / 10
002																			1				1										2.5 / 5 / 10
003																			1				1										2.5 / 5 / 10
004																			2				2										2.5 / 5 / 10
005																			1				1										2.5 / 5 / 10
006																			1				1										2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes □No ☑N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 25Apr2018
	Document No.: **F-GB-C-031-Rev.07**	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: TRC

Project #: (Initial)

WO# : 40180525

40180525

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ Waltco ☐ Client ☐ Pace Other:

Tracking #: 1917390

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - N/A **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROT /Corr:

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 12-6-18
Initials:

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. No filter, preservation, Mail, Invoice or pg#
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3. 12-6-18
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Review for TM **Date:** 12/6/18

Appendix D: MSA Results Tables

Table 1
Soil Sampling Analytical Results
902/904 Belknap
Superior, WI
17711000
BRRTS Site #02-16-560359

SAMPLE/BORING #	HA-1[1]	HA-2[1]	Basement Soil	GP-1[2]		GP-2[2]		GP-3[2]		GP-4[2]		GP-5[2]		
DEPTH to Water Table (ft BGS)				7.55	7.55					11.41	11.41	4.63	4.63	
Date Collected	6/18/2013	6/18/2013	3/14/2016	4/12/2016		4/12/2016		4/12/2016		4/12/2016		4/12/2016		
DEPTH (ft BGS)	2-3	1		7.5-10	12.5-15	7.5-10	12.5-15	7.5-10	12.5-15	5-7.5	7.5-10	5-7.5	7.5-10	Soil RCLs (mg/kg)
SATURATED OR UNSATURATED				sat	sat					unsat	unsat	sat	sat	
SOIL TYPE														July 2015 DNR Table / Background
	Soil Concentrations in mg/kg (or ppm)													Non-Industrial Direct Contact / Soil to GW / Surficial BTV
VOC ANALYTES														
Benzene	<0.0289	<0.135	<0.0932	***7.83***	*0.418*	*0.359*	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	1.49 / 0.0051
n-Butylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	108 / NS
sec-Butylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	145 / NS
1,2-Dichlorobenzene	<0.0723	<0.338	*0.788*	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	376 / 1.168
1,4-Dichlorobenzene	<0.0723	<0.338	*0.105*	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	3.48 / 0.144
1,1-Dichloroethene	<0.0723	<0.338	*0.168*	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	4.72 / 0.005
cis-1,2-Dichloroethene	*0.587*	*35.7*	***301***	<0.0654	<0.0693	<0.0616	*0.141*	<0.0655	<0.0748	*0.468*	*0.184*	<0.0767	<0.0666	156 / 0.0412
trans-1,2-Dichloroethene	<0.0723	*1.76*	*2.5*	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	1,560 / 0.0626
Ethylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	7.47 / 1.57
p-Isopropylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	NS / NS
Methyl tert butyl ether	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	59.4 / 0.027
Naphthalene	<0.289	<1.350	<0.466	<0.327	<0.347	<0.308	<0.530	<0.327	<0.374	<0.345	<0.331	<0.384	<0.333	0.854 / 0.6587
n-Propylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	264 / NS
Tetrachloroethene	*11.6*	*1.96*	***2620***	<0.0654	<0.0693	*2.01*	<0.106	*0.176*	<0.0748	*0.749*	*0.0803*	<0.0767	<0.0666	30.7 / 0.0045
Toluene	<0.0723	<0.338	<0.466	<0.327	<0.347	<0.308	<0.530	<0.327	<0.374	<0.345	<0.331	<0.384	<0.333	818 / 1.1072
1,2,3-Trichlorobenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	48.9 / NS
Trichloroethene	*0.832*	*0.845*	***259***	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	*0.292*	<0.0663	<0.0767	<0.0666	1.26 / 0.0036
1,2,4-Trimethylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	89.8 / 1.3793*
1,3,5-Trimethylbenzene	<0.0723	<0.338	<0.0932	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	182 / 1.3793*
Vinyl chloride	***0.123***	***7.36***	***2.65***	<0.0654	<0.0693	<0.0616	<0.106	<0.0655	<0.0748	<0.0690	<0.0663	<0.0767	<0.0666	0.067 / 0.0001
Xylene (Total)	<0.217	<1.01	<0.280	<0.196	<0.208	<0.185	<0.318	<0.196	<0.224	<0.207	<0.199	<0.230	<0.200	258* / 3.94*
No. of Individual Exceedances (DC)	1	1		0	0	0	0	0	0	0	0	0	0	
Cumulative Hazard Index (DC)	0.2435	0.4656		0	0	0	0	0	0	0	0	0	0	
Cumulative Cancer Risk (DC)	2.90E-06	1.10E-04		0	0	0	0	0	0.0	0	0	0	0	

Exceedance Highlights:

BOLD font indicates DC RCL exceedance, and BTV exceedance for metals.

Italic font indicates GW RCL Exceedance. Groundwater quality (> NR 140 ES) may be affected when GW RCLs are exceeded.

Blanks indicate parameter was not analyzed.

NS: No published standard.

Table Notes:

J: Indicates the analyte was detected between the Laboratory Limit of Detection and Laboratory Limit of Quantitation.

<: Indicates the analyte was not detected above the Laboratory Limit of Quantitation.

*: Indicates total xylenes (m-,o-,p- combined) and total trimethylbenzenes (1,2,4- and 1,3,5- combined).

1: Hand auger borings completed by Environmental Troubleshooters

2: Soil boring advanced by MSA Professional Services, Inc.

Table 2
Groundwater Sampling Analytical Results
902/904 Belknap
Superior, WI
17711000
BRRTS Site #02-16-560359

	Acetone	Benzene	2-Butanone (MEK)	Chloroform	Chloromethane	Dichlorofluoromethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Naphthalene	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Groundwater Elevation (feet bgs)
NR 140 ES	9000	5	4000	6	30	1000	5	850	70	100	100	5	800	5	0.2	
NR 140 PAL	1800	0.5	800	0.6	3	200	0.5	85	7	20	10	0.5	160	0.5	0.02	
	Groundwater Concentrations in ug/l (or ppb)															
GP-1																
4/12/2016	<50.0	***986***	<10.0	<5.00	<2.50	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<5.00	<1.00	<1.00	7.55
GP-4																
4/12/2016	<50.0	<100	<10.0	<5.00	<2.50	<5.00	<1.00	26.3	***4330***	16.3	<5.00	***1600***	<5.00	***1730***	***874***	11.41
GP-5																
4/12/2016	<50.0	<1.00	<10.0	<5.00	<2.50	<5.00	<1.00	<1.00	5.62	<1.00	<5.00	<1.00	<5.00	<1.00	***15.6***	4.63
Basement Sump																
3/14/2016	<1250	<25.0	<250	<125	<62.5	<125	<25.0	61.8	***87300***	***288***	<125	***51600***	<125	***22600***	***11500***	

Exceedance Highlights:
BOLD font indicates NR 140 Enforcement Standard (ES) exceedance.
Italic font indicates NR 140 Preventative Action Limit (PAL) exceedance.
BTEX and other VOC compounds detected in at least one sample are included in table. See laboratory report for all results.
NS: No published standard.

Table Notes:
<: Indicates the analyte was not detected above the Laboratory Limit of Quantitation.
*: Indicates total xylenes (m-,o-,p- combined) and total trimethylbenzenes (1,2,4- and 1,3,5- combined).
NA: Indicates constituent was not analyzed.
J: Laboratory qualifer indicating the estimated concentration at or above the Limit of Detection and below the Limit of Quantitation.

Table 3
Indoor Air Sampling Analytical Results
902/904 Belknap
Superior, WI
17711000
BRRTS Site #02-16-560359

Compound/Parameter	CAS No.	Residential		Small Commercial		Sample Identifier and Date Collected													
						Building - Main Office Space				Upstairs Apartment			904 Belknap			Basement			
		Wisconsin Indoor Air VAL	Wisconsin Subslab Vapor VRSL	Wisconsin Indoor Air VAL	Wisconsin Subslab VRSL	IA-1 05/17/17	INDOOR AIR-9/7/17 09/07/17	IA-7 10/25/17	IA-11 07/25/18	IA-3 05/17/17	IA-5 10/25/17	IA-10 07/25/18	IA-4 05/17/17	IA-6 10/25/17	IA-9 07/25/18	IA-2 05/17/17	BASEMENT ROOM 06/08/17	IA-8 10/25/17	IA-12 07/25/18	IA-13 04/10/19
						Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Wisconsin Quick Look Up Compounds		Volatile Organic Compounds (VOCs) reported in ug/m3 -Detected Compounds Only																	
Benzene	71-43-2	**3.6**	**120**	**16**	**530**	**0.772**	**0.732**	<0.489	0.732	**0.708**	<0.489	<0.489	**2.32**	<0.489	**0.593**	**0.830**	<0.639	<0.489	**0.661**	**2.88**
Carbon tetrachloride	56-23-5	**4.7**	**160**	**20**	**670**	<1.26	<1.26	<1.23	<1.23	<1.26	<1.23	<1.23	<1.26	<1.23	<1.23	<1.26	<1.26	<1.23	<1.23	<1.23
Chloroform	67-66-3	**1.2**	**40**	**5.3**	**180**	<0.973	<0.973	<0.93	<0.930	<0.973	<0.93	<0.930	<0.973	<0.93	<0.930	<0.973	<0.973	**1.04**	**2.82**	<0.930
Chloromethane	74-87-3	**94**	**3,100**	**390**	**13,000**	**1.2**	**1.33**	**1.15**	**1.16**	**1.260**	**1.01**	**1.19**	**2.450**	**1.12**	**1.18**	**0.965**	**1.13**	**0.902**	**1.1**	**0.834**
Dichlorofluoromethane	75-71-8	**100**	**3,300**	**440**	**15,000**	**1.73**	**3.2**	**1.33**	**2.00**	**1.83**	**1.24**	**1.96**	**1.86**	**1.3**	**1.87**	**1.73**	**1.49**	**1.44**	**2.10**	<0.382
1,1-Dichloroethane (1,1 DCA)	75-34-3	**18**	**600**	**77**	**2,600**	<0.802	<0.802	<0.685	<0.685	<0.802	<0.685	<0.685	<0.802	<0.685	<0.685	<0.802	<0.802	<0.685	<0.685	<0.685
1,2-Dichloroethane (1,2 DCA)	107-06-2	**1.1**	**37.0**	**4.7**	**160.0**	<0.81	<0.81	<0.83	<0.830	<0.81	<0.83	<0.830	<0.81	<0.83	<0.830	<0.81	<0.81	<0.83	<0.830	<0.830
1,1-Dichloroethene (1,1 DCE)	75-35-4	**210**	**7,000**	**880**	**29,000**	<0.793	<0.793	<0.646	<0.646	<0.793	<0.646	<0.646	<0.793	<0.646	<0.646	<0.793	<0.793	<0.646	<0.646	<0.646
cis-1,2-Dichloroethene	156-59-2	**NA**	**NA**	**NA**	**NA**	**34.2**	**7.51**	**2.82**	<0.515	**21.5**	**1.97**	<0.515	**11.3**	**1.54**	<0.515	**130.0**	**76.1**	**66.9**	**72.7**	**52.9**
trans-1,2-Dichloroethene	156-60-5	**NA**	**NA**	**NA**	**NA**	<0.793	<0.793	<0.614	<0.614	<0.793	<0.614	<0.614	<0.793	<0.614	<0.614	0.835	<0.793	**0.68**	**0.75**	<0.614
Ethylbenzene	100-41-4	**11.0**	**370**	**49.0**	**1,600**	<0.867	**10.6**	<0.733	<0.733	**1.04**	<0.733	<0.733	**675**	<0.733	<0.733	**1.66**	**4.3**	**1.56**	**0.92**	**2.41**
Methylene chloride (Dichloromethane)	75-09-2	**630**	**21,000**	**2,600**	**87,000**	**4.15**	**3.04**	**0.582**	<0.538	**2.65**	<0.538	**2.36**	**1.98**	**0.952**	**0.625**	**17.6**	**19.9**	**6.97**	**11**	**117**
Methyl-tert-butyl ether (Isopropyl ether or MTBE)	1634-04-4	**110**	**3,700**	**470**	**16,000**	<0.721	<0.721	<0.605	<0.605	<0.721	<0.605	<0.605	<0.721	<0.605	<0.605	<0.721	<0.721	<0.605	<0.605	<0.605
Naphthalene	91-20-3	**0.83**	**28**	**3.6**	**120**	<3.3	<3.3	<2.69	<2.69	<3.3	<2.69	<2.69	**24.2**	<2.69	<2.69	<3.3	<3.3	<2.69	<2.69	<2.69
Tetrachloroethene (PCE)	127-18-4	**42**	**1,400**	**180**	**6,000**	**199**	**27.7**	**10.7**	**3.44**	**141**	**6.55**	**4.00**	**67.2**	**6.19**	**73**	**945**	**260**	**214**	**314**	**200**
Toluene	108-88-3	**5,200**	**170,000**	**22,000**	**730,000**	**12.9**	**15.7**	**5.15**	**2.88**	**13.4**	**4.38**	**2.55**	**325**	**7.44**	**2.70**	**15.3**	**51.7**	**16.4**	**11.1**	**37.9**
1,1,1-Trichloroethane (1,1,1 TCA)	71-55-6	**5,200**	**170,000**	**22,000**	**730,000**	<1.09	<1.09	<1.21	<1.21	<1.09	<1.21	<1.21	<1.09	<1.21	<1.21	<1.09	<1.09	<1.21	<1.21	<1.21
Trichloroethene (TCE)	79-01-6	**2.1**	**70**	**8.8**	**290**	**20**	**4.53**	**3.15**	<0.975	**13.2**	**1.08**	<0.975	**6.86**	<0.975	<0.975	**70.7**	**54.4**	**35.7**	**54.9**	**38.1**
Trichlorofluoromethane	75-69-4	**NA**	**NA**	**NA**	**NA**	**1.38**	**1.29**	<1.26	**1.31**	**1.23**	<1.26	**1.34**	**1.44**	<1.26	**1.36**	**1.36**	**1.28**	**1.57**	**1.91**	**1.3**
1,2,4-Trimethylbenzene	95-63-6	**63**	**2,100**	**260**	**8,700**	**1.42**	**1.42**	<0.79	**1.27**	<0.982	<0.79	**1.31**	**3,340**	<0.79	**1.5**	**2.98**	**2.56**	**5.06**	**2.88**	**5.5**
1,3,5-Trimethylbenzene	108-67-8	**63**	**2,100**	**260**	**8,700**	<0.982	<0.982	<1.03	<1.03	<0.982	<1.03	<1.03	**1,210**	<1.03	<1.03	<0.982	<0.982	<1.03	<1.03	**1.55**
Vinyl chloride	75-01-4	**1.7**	**57**	**28**	**930**	**3.29**	**0.519**	**0.759**	<0.389	**1.27**	<0.389	<0.389	**0.96**	<0.389	<0.389	**8.07**	**4.49**	**7.49**	**2.83**	**1.68**
Total Xylenes	179601-23-1	**100**	**3,300**	**440**	**15,000**	**4.26**	**49.6**	**1.85**	**3.414**	**3.88**	**1.69**	<2.285	**8,050**	<2.285	**1.88**	**9.27**	**21.97**	**10.58**	**5.32**	**12.57**
Detected Compounds		Volatile Organic Compounds (VOCs) reported in ug/m3 -Detected Compounds Only																		
1,1-Difluroethane	75-36-7	**42,000**		**180,000**		**79.7**	**--**	**13.8**	**8.07**	**66.1**	**8.58**	**2.18**	**47.6**	**10.1**	**7.1**	**265**	**136**	**332**	**232**	**95.7**
1,2,3-Trimethylbenzene	526-73-8	**63**		**260**		<0.982	**--**	<0.531	<0.531	<0.982	<0.531	<0.531	**491**[a]	<0.531	<0.531	**1.1**	<0.982	<0.531	**0.903**	**1.2**
2,2,4-Trimethylpentane	540-84-1	**NE**		**NE**		**2.09**	**10.8**	**1.25**	**1.41**	<0.934	**1.62**	**0.72**	**498**	**1.02**	**0.98**	<0.934	**6.73**	**4.87**	**1.68**	**1.4**
2-Butanone (MEK)	78-93-3	**5,200**		**22,000**		<3.69	**4.68**	**3.16**	**4.16**	<3.69	**1.01**	**2.07**	**55.4**	<0.484	**1.85**	**6.35**	**6.26**	<0.484	<0.484	<0.484
2-Propanol	67-63-0	**NE**		**NE**		**4.92**	**33.8**	**3.00**	**9.85**	**9.37**	**2.38**	**5.42**	**30.5**	**2.64**	**58.5**	**<3.07**	**41**	**1.54**	**10.3**	**2.79**
4-Ethyltoluene	622-96-8	**NE**		**NE**		**1**	<0.982	<1.09	<1.09	<0.982	<1.09	<1.09	**3,750**	<1.09	1.16	**2.21**	**2.05**	**4.36**	**1.93**	**4.14**
Acetone	67-64-1	**32,000**		**140,000**		**30.3**	**61**	**28.1**	**112**	**38.3**	**19.3**	**40.9**	**209**	**16.7**	**418**	**28**	**54.2**	**35.8**	**154**	**50**
Carbon Disulfide	75-15-0	**730**		**3,100**		<0.622	<0.622	<0.563	<0.563	**0.771**	<0.563	<0.563	<0.622	<0.563	<0.563	**0.746**	<0.622	<0.563	<0.563	<0.563
Chlorodifluoromethane	75-45-6	**52,000**		**220,000**		**5.16**	**--**	**2.01**	**3.38**	**5.66**	**<0.382**	**3.6**	**10.8**	**1.5**	**3.1**	**6.93**	**16.5**	**5.35**	**4.99**	<0.382
Chloroethane	75-00-3	**NE**		**NE**		<0.528	<0.528	<0.43	<0.430	<0.528	<0.43	<0.430	**1.06**	<0.43	<0.430	<0.528	<0.528	<0.43	<0.430	<0.430
Cyclohexane	110-82-7	**6,300**		**26,000**		**9.36**	**1.06**	0.769	<0.613	**2.83**	<0.613	<0.613	**9.19**	<0.613	<0.613	<0.689	**1.11**	<0.613	<0.613	**0.831**
Dichlorodifluoromethane	75-71-8	**100**		**440**		**1.73**	**3.2**	**1.33**	**1.87**	**1.83**	**1.24**	**1.96**	**1.86**	**1.3**	**2.00**	**1.73**	**1.49**	**1.44**	**2.1**	**1.35**
Ethanol	64-17-5	**NE**		**NE**		**294**	**289**	**137**	**76.7**	**654**	**197**	**686**	**1,060**	**611**	**234**	**12**	**48**	**11.7**	**47.7**	**29.1**
Ethyl Acetate	141-78-6	**73**		**310**		<0.72	**--**	<0.389	<0.389	**1.15**	<0.389	<0.389	<0.72	<0.389	**5.17**	<0.72	**4.8**	<0.389	<0.389	<0.367
Heptane	142-82-5	**420**		**1,800**		**2.43**	**1.46**	**1.31**	**0.857**	**0.926**	**1.07**	<0.855	**66.2**	<0.855	**1.02**	<0.818	**1.73**	**4.44**	**0.875**	**2.37**
Isopropylbenzene (Cumene)	98-82-8	**420**		**1,800**		<0.983	<0.983	<0.924	<0.924	<0.983	<0.924	<0.924	**168**	<0.924	<0.924	<0.983	<0.983	<0.924	<0.924	<0.924
Methyl Cyclohexane (Methyl Methacrylate)	80-62-6	**730**		**3,100**		**1.4**	**--**	<0.434	<0.434	<0.803	<0.434	<0.434	**48.6**	<0.434	<0.434	<0.803	**4**	<0.434	<0.434	**1.48**
N-Hexane	110-54-3	**730**		**3,100**		**4.69**	**1.78**	**0.627**	**1.57**	<0.705	<0.536	**1.08**	**12.7**	<0.536	**1.09**	<0.705	**2.07**	**0.544**	**1.16**	**6.04**
Styrene	100-42-5	**1000**		**4,400**		<0.851	**2.09**	<0.659	0.73	<0.851	<0.659	<0.659	<0.851	<0.659	<0.659	<0.851	**3.79**	<0.659	**0.92**	**0.907**
Tetrahydrofuran	109-99-9	**NE**		**NE**		<0.59	**1.02**	<0.498	<0.498	**1.33**	<0.498	<0.498	**107**	<0.498	<0.498	**2.98**	**2.84**	**2.74**	**1.64**	**5.46**
GRO (TPH (GC/MS) Low Fraction)		**NE**		**NE**		**486**	**--**	**191**	**143**	**350**	**306**	**133**	**31,500**	**279**	**197**	**1,070**	**887**	**943**	**491**	**622**

Notes:
Wisconsin Quick Look UP and Detected Compounds Only
Based on May 2018 US EPA Regional Screening Levels
Bold = Detected Concentration
Exceedance
EPA = Environmental Protection Agency
VAL = Vapor Action Level
VRSL = Vapor Risk Screening Level
NE = Vapor Action Level determined by 2017 EPA Vapor Risk Calculator Spreadsheet
<0.02 = Not Detected above laboratory reporting limits
-- = Not Analyzed
[a] = Exceedence calculated using 2017 EPA Vapor Risk Calculator Spreadsheet

Appendix E: Laboratory Reports for Groundwater Samples

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 17, 2019

Steve Sellwood
TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717

RE: Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Dear Steve Sellwood:
Enclosed are the analytical results for sample(s) received by the laboratory on May 15, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Tom Perkins, TRC Madison
Peggy Popp, TRC - Madison

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40187645001	**MW-1**	Water	05/09/19 16:05	05/15/19 09:21
40187645002	**MW-2**	Water	05/09/19 16:42	05/15/19 09:21
40187645003	**MW-3**	Water	05/09/19 15:11	05/15/19 09:21
40187645004	**TRIP BLANK**	Water	05/09/19 00:00	05/15/19 09:21

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SAMPLE ANALYTE COUNT

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40187645001	**MW-1**	EPA 8260	LAP	12
40187645002	**MW-2**	EPA 8260	LAP	12
40187645003	**MW-3**	EPA 8260	LAP	12
40187645004	**TRIP BLANK**	EPA 8260	LAP	12

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Sample: MW-1 **Lab ID: 40187645001** Collected: 05/09/19 16:05 Received: 05/15/19 09:21 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/16/19 12:09	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		05/16/19 12:09	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		05/16/19 12:09	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		05/16/19 12:09	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		05/16/19 12:09	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		05/16/19 12:09	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		05/16/19 12:09	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		05/16/19 12:09	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		05/16/19 12:09	95-47-6	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		1		05/16/19 12:09	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		05/16/19 12:09	2037-26-5	
4-Bromofluorobenzene (S)	85	%	70-130		1		05/16/19 12:09	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Sample: MW-2 **Lab ID: 40187645002** Collected: 05/09/19 16:42 Received: 05/15/19 09:21 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**32.4**	ug/L	1.0	0.25	1		05/16/19 11:03	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		05/16/19 11:03	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		05/16/19 11:03	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		05/16/19 11:03	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		05/16/19 11:03	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		05/16/19 11:03	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		05/16/19 11:03	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		05/16/19 11:03	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		05/16/19 11:03	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		1		05/16/19 11:03	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		05/16/19 11:03	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		05/16/19 11:03	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Sample: MW-3 **Lab ID: 40187645003** Collected: 05/09/19 15:11 Received: 05/15/19 09:21 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/16/19 12:31	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		05/16/19 12:31	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		05/16/19 12:31	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		05/16/19 12:31	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		05/16/19 12:31	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		05/16/19 12:31	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		05/16/19 12:31	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		05/16/19 12:31	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		05/16/19 12:31	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%	70-130		1		05/16/19 12:31	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		05/16/19 12:31	2037-26-5	
4-Bromofluorobenzene (S)	85	%	70-130		1		05/16/19 12:31	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Sample: TRIP BLANK **Lab ID: 40187645004** Collected: 05/09/19 00:00 Received: 05/15/19 09:21 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		05/16/19 12:53	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		05/16/19 12:53	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		05/16/19 12:53	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		05/16/19 12:53	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		05/16/19 12:53	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		05/16/19 12:53	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		05/16/19 12:53	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		05/16/19 12:53	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		05/16/19 12:53	95-47-6	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		1		05/16/19 12:53	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		05/16/19 12:53	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		05/16/19 12:53	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

QC Batch: 321478 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 40187645001, 40187645002, 40187645003, 40187645004

METHOD BLANK: 1867016 Matrix: Water
Associated Lab Samples: 40187645001, 40187645002, 40187645003, 40187645004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	05/16/19 08:50	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	05/16/19 08:50	
Benzene	ug/L	<0.25	1.0	05/16/19 08:50	
Ethylbenzene	ug/L	<0.22	1.0	05/16/19 08:50	
m&p-Xylene	ug/L	<0.47	2.0	05/16/19 08:50	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	05/16/19 08:50	
Naphthalene	ug/L	<1.2	5.0	05/16/19 08:50	
o-Xylene	ug/L	<0.26	1.0	05/16/19 08:50	
Toluene	ug/L	<0.17	5.0	05/16/19 08:50	
4-Bromofluorobenzene (S)	%	94	70-130	05/16/19 08:50	
Dibromofluoromethane (S)	%	104	70-130	05/16/19 08:50	
Toluene-d8 (S)	%	104	70-130	05/16/19 08:50	

LABORATORY CONTROL SAMPLE: 1867017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	55.1	110	70-130	
Ethylbenzene	ug/L	50	55.6	111	80-124	
m&p-Xylene	ug/L	100	110	110	70-130	
Methyl-tert-butyl ether	ug/L	50	52.3	105	54-137	
o-Xylene	ug/L	50	56.2	112	70-130	
Toluene	ug/L	50	53.5	107	80-126	
4-Bromofluorobenzene (S)	%			96	70-130	
Dibromofluoromethane (S)	%			106	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1867359 1867360

Parameter	Units	40187645002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	32.4	50	50	87.9	87.6	111	110	70-130	0	20	
Ethylbenzene	ug/L	<0.22	50	50	53.6	54.3	107	109	80-125	1	20	
m&p-Xylene	ug/L	<0.47	100	100	106	112	106	112	70-130	6	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	51.2	52.3	102	105	51-145	2	20	
o-Xylene	ug/L	<0.26	50	50	53.7	54.0	107	108	70-130	1	20	
Toluene	ug/L	<0.17	50	50	52.7	52.3	105	105	80-131	1	20	
4-Bromofluorobenzene (S)	%						95	96	70-130			
Dibromofluoromethane (S)	%						108	106	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1867359 1867360

Parameter	Units	40187645002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						98	97	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 315266 902-904 BELKNAP SUPERIO
Pace Project No.: 40187645

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40187645001	**MW-1**	EPA 8260	321478		
40187645002	**MW-2**	EPA 8260	321478		
40187645003	**MW-3**	EPA 8260	321478		
40187645004	**TRIP BLANK**	EPA 8260	321478		

40187645

Pace Analytical - ECCS Division
2525 Advance Road
Madison, WI 53718
608-221-8700 (phone)
608-221-4889 (fax)

CHAIN OF CUSTODY

No. 10501 Page: of:

Lab Work Order #:

Report To: Steve Sellwood
Company: TRC
Address 1: 708 Heartland Tr.
Address 2: Suite 3000
E-mail Address: SSellwood@trccompanies.com

Project Number: 315266 PO Number:
Project Name: 902-904 Belknap St. / City of Superior
Project Location (City, State): Superior, WI
Turn Around (check one): ☒ Normal ☐ Rush
If Rush, Report Due Date:
Sampled By (Print): Tom W. Perkins

Preservation Codes
Analyses Requested

Invoice To:
Company:
Address 1:
Address 2:

Sample Description	Collection Date	Collection Time	Matrix	Total # of Containers	B						Comments	Lab ID	Lab Receipt Time
					VOC + Naphthalene								
MW-1	5/9/19	1605	GW	3	X							001	
MW-2	5/9/19	1642	GW	3	X							002	
MW-3	5/9/19	1511	GW	3	X							003	
① Trip Blank												004	
① Trip blank added sample receiving 05/15/19 ar													

Preservation Codes
A=None B=HCL C=H_2SO_4
D=HNO_3 E=EnCore F=Methanol
G=NaOH O=Other (Indicate)

Matrix Codes
A=Air S=Soil W=Water O=Other

Other Comments:

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
	5/14/19	0800			
Walton	05/15/19	0920		05/15/19	0921

Custody Seal: ☐ NA ☒ Intact ☐ Not Intact
Shipped Via:
Receipt Temp: R01
Thermometer #/ Exp. Date:
Temp Blank: ☐ Y ☒ N

Rev. 12/15

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Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Pace - Madison Project # 40187695

All containers needing preservation have been checked and noted below: □Yes □No □N/A

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted): Initial when completed: Date/ Time:

	Glass							Plastic							Vials						Jars			General							
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																		3															2.5 / 5 / 10
002																		3															2.5 / 5 / 10
003																		3															2.5 / 5 / 10
004																		1															2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes □No □N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40187645

40187645

Client Name: Pace - Madison

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ Waltco ☐ Client ☐ Pace Other:

Tracking #: 20558241

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - N/A **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: /Corr: R01

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Person examining contents:
Date: 05/15/19
Initials: av

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. No pg #, invoice 05/15/19 av
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	4. IRWO 05/15/19 av
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD:	☒Yes ☒No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used: 05/15/19 av	☐Yes ☒No ☐N/A	
-Pace IR Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12. Received 1 unlabeled vial HCL, sample unneeded per PM + client. OK to dispose of 05/15/19 av
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☒Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 381		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: [signature] **Date:** 05/15/19

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

August 16, 2019

Steve Sellwood
TRC
708 Heartland Trail
Suite 3000
Madison, WI 53717

RE: Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Dear Steve Sellwood:
Enclosed are the analytical results for sample(s) received by the laboratory on August 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Peggy Popp, TRC - Madison

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40192895001	**MW1**	Water	08/10/19 09:30	08/13/19 09:15
40192895002	**MW3**	Water	08/10/19 09:45	08/13/19 09:15
40192895003	**MW2**	Water	08/10/19 10:00	08/13/19 09:15
40192895004	**TRIP BLANK**	Water	08/10/19 10:10	08/13/19 09:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40192895001	**MW1**	EPA 8260	HNW	12
40192895002	**MW3**	EPA 8260	HNW	12
40192895003	**MW2**	EPA 8260	HNW	12
40192895004	**TRIP BLANK**	EPA 8260	HNW	12

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SUMMARY OF DETECTION

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40192895003	**MW2**					
EPA 8260	Benzene	180	ug/L	1.0	08/15/19 14:07	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Method: **EPA 8260**
Description: 8260 MSV UST
Client: TRC - MADISON
Date: August 16, 2019

General Information:
4 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Sample: MW1 **Lab ID: 40192895001** Collected: 08/10/19 09:30 Received: 08/13/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/15/19 13:24	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/15/19 13:24	108-67-8	
Benzene	**<0.25**	ug/L	1.0	0.25	1		08/15/19 13:24	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/15/19 13:24	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/15/19 13:24	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/15/19 13:24	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/15/19 13:24	108-88-3	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		08/15/19 13:24	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		08/15/19 13:24	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%	70-130		1		08/15/19 13:24	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		08/15/19 13:24	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		08/15/19 13:24	460-00-4	

Sample: MW3 **Lab ID: 40192895002** Collected: 08/10/19 09:45 Received: 08/13/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/15/19 13:45	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/15/19 13:45	108-67-8	
Benzene	**<0.25**	ug/L	1.0	0.25	1		08/15/19 13:45	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/15/19 13:45	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/15/19 13:45	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/15/19 13:45	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/15/19 13:45	108-88-3	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		08/15/19 13:45	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		08/15/19 13:45	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105	%	70-130		1		08/15/19 13:45	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		08/15/19 13:45	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		1		08/15/19 13:45	460-00-4	

Sample: MW2 **Lab ID: 40192895003** Collected: 08/10/19 10:00 Received: 08/13/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/15/19 14:07	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/15/19 14:07	108-67-8	
Benzene	**180**	ug/L	1.0	0.25	1		08/15/19 14:07	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/15/19 14:07	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/15/19 14:07	1634-04-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Sample: MW2 **Lab ID: 40192895003** Collected: 08/10/19 10:00 Received: 08/13/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/15/19 14:07	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/15/19 14:07	108-88-3	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		08/15/19 14:07	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		08/15/19 14:07	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		1		08/15/19 14:07	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		08/15/19 14:07	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		08/15/19 14:07	460-00-4	

Sample: TRIP BLANK **Lab ID: 40192895004** Collected: 08/10/19 10:10 Received: 08/13/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/15/19 11:15	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/15/19 11:15	108-67-8	
Benzene	**<0.25**	ug/L	1.0	0.25	1		08/15/19 11:15	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/15/19 11:15	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/15/19 11:15	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/15/19 11:15	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/15/19 11:15	108-88-3	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		08/15/19 11:15	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		08/15/19 11:15	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105	%	70-130		1		08/15/19 11:15	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		08/15/19 11:15	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		1		08/15/19 11:15	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

QC Batch: 330665 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 40192895001, 40192895002, 40192895003, 40192895004

METHOD BLANK: 1918511 Matrix: Water
Associated Lab Samples: 40192895001, 40192895002, 40192895003, 40192895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	08/15/19 08:44	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	08/15/19 08:44	
Benzene	ug/L	<0.25	1.0	08/15/19 08:44	
Ethylbenzene	ug/L	<0.22	1.0	08/15/19 08:44	
m&p-Xylene	ug/L	<0.47	2.0	08/15/19 08:44	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	08/15/19 08:44	
Naphthalene	ug/L	<1.2	5.0	08/15/19 08:44	
o-Xylene	ug/L	<0.26	1.0	08/15/19 08:44	
Toluene	ug/L	<0.17	5.0	08/15/19 08:44	
4-Bromofluorobenzene (S)	%	98	70-130	08/15/19 08:44	
Dibromofluoromethane (S)	%	103	70-130	08/15/19 08:44	
Toluene-d8 (S)	%	96	70-130	08/15/19 08:44	

LABORATORY CONTROL SAMPLE: 1918512

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	48.4	97	70-130	
Ethylbenzene	ug/L	50	47.3	95	80-124	
m&p-Xylene	ug/L	100	94.4	94	70-130	
Methyl-tert-butyl ether	ug/L	50	35.6	71	54-137	
o-Xylene	ug/L	50	46.3	93	70-130	
Toluene	ug/L	50	47.0	94	80-126	
4-Bromofluorobenzene (S)	%			96	70-130	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1918655 1918656

Parameter	Units	40192887016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.25	50	50	51.0	50.4	102	101	70-130	1	20	
Ethylbenzene	ug/L	<0.22	50	50	50.1	48.8	100	98	80-125	3	20	
m&p-Xylene	ug/L	<0.47	100	100	99.8	99.0	100	99	70-130	1	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	38.0	37.2	76	74	51-145	2	20	
o-Xylene	ug/L	<0.26	50	50	48.5	48.3	97	97	70-130	0	20	
Toluene	ug/L	1.0J	50	50	50.9	49.7	100	97	80-131	2	20	
4-Bromofluorobenzene (S)	%						96	96	70-130			
Dibromofluoromethane (S)	%						105	103	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1918655 1918656

Parameter	Units	40192887016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						98	97	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 315266 902-904 BELKNAP ST.
Pace Project No.: 40192895

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40192895001	**MW1**	EPA 8260	330665		
40192895002	**MW3**	EPA 8260	330665		
40192895003	**MW2**	EPA 8260	330665		
40192895004	**TRIP BLANK**	EPA 8260	330665		

Pace Analytical
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 1 of 1

40192895

CHAIN OF CUSTODY

MSC

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	TRC
Branch/Location:	Madison
Project Contact:	Steve Sellwood
Phone:	608-826-3608
Project Number:	315266
Project Name:	902-904 Belknap St.
Project State:	WI
Sampled By (Print):	Stephen Sellwood
Sampled By (Sign):	Steph Sellwood
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Steve Sellwood
Mail To Company:	TRC
Mail To Address:	708 Heartland Trail Madison WI
Invoice To Contact:	TRC Accounts Payable
Invoice To Company:	TRC
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☒ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	B	PVOC+Naph.			
001	MW1	8-10-19	9:30	GW			X			
002	MW3	8-10-19	9:45	GW			X			
003	MW2	8-10-19	10:00	GW			X			
004	Trip Blank	8-10-19	10:10	W			X			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Steph Sellwood	8-12-19 8:30	Sample Cooler	8-12-19 8:30
Walter	8/13/19 0915	[illegible]	8/13/19 0915

PACE Project No.: 40192895

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal: Present / Not Present; Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: TRC Project # Y0192895

All containers needing preservation have been checked and noted below: □Yes □No ☑N/A

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted): Initial when completed: Date/ Time:

	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *						
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN		H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																		3															2.5 / 5 / 10
002																		3															2.5 / 5 / 10
003																		3															2.5 / 5 / 10
004																		2															2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																			8/13/19														2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes ☑No □N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40192895

40192895

Client Name: TRC

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☑ Waltco ☐ Client ☐ Pace Other:

Tracking #: 214166-2

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used 8/13/19 SR - 45 NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: R01 /Corr: ~

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 8/13/19 Initials: PG

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☑Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 427		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: AL AR TN **Date:** 8/13/19