

708 Heartland Trail Suite 3000 Madison, WI 53717

608-826-3600 PHONE 608-826-3941 FAX

www.TRCsolutions.com

December 1, 2017

Mr. David Neste Wisconsin Department of Natural Resources 625 E. County Road Y Oshkosh, WI 54901

Subject: Underground Storage Tank Abandonment Report

STH 116 – 105 E. Main Street

Winneconne, Winnebago County, Wisconsin

WisDOT ID #6190-15-72

Dear Mr. Neste:

Enclosed is the Underground Storage Tank (UST) Abandonment Report for the above-referenced property in Winneconne, Wisconsin. One UST was encountered along the south side of STH 116 at 105 E. Main Street. The WisDOT acquired highway easement for this location. The site is an open LUST site (WDNR BRRTS #03-71-562271). A total of 29.02 tons of petroleum-contaminated soil was overexcavated and treated/disposed at Waste Management Valley Trail Landfill in Berlin, Wisconsin. TRC's field observations and screening, as well as laboratory results of soil samples collected, indicate that low level petroleum contaminated soil remains surrounding the UST that has been removed. However, the site is currently being investigated by the responsible party. No additional investigation or remediation by the WisDOT is recommended. This report is being submitted to the WDNR in accordance with current site assessment guidance.

Feel free to contact me at (608) 826-3628, with any questions or comments.

Sincerely,

TRC Environmental Corporation

Daniel Haak, P.E. Project Manager

cc: WDNR UST Closure Assessments (hard copy and pdf on CD)
Kathie VanPrice – WisDOT (pdf via email)
Shar TeBeest – WisDOT (pdf via email)
Jason Powell – Metco (pdf via email)



## **Underground Storage Tank Abandonment Report**

STH 116 – 105 E. Main Street Winneconne, Winnebago County, Wisconsin

WisDOT ID #6190-15-72

December 2017



## **Underground Storage Tank Abandonment Report**

STH 116 – 105 E. Main Street Winneconne, Winnebago County, Wisconsin

WisDOT ID #6190-15-72

December 2017

Daniel Haak, P.E.

Project Engineer

Bryan Bergmann

TRC Quality Assurance

## **Table of Contents**

Com	monly	Used Abbreviations and Acronyms	. ii
1.	Intro	duction	. 1
	1.1	Background	. 1
		Purpose and Scope	
2.	Desc	ription of Site Activities	. 2
3.	Find	ings, Conclusions, and Recommendations	. 3

#### List of Tables

Table 1 Summary of Soil Analytical Results

#### List of Figures

Figure 1 Site Location Map

Figure 2 Site Map

#### **List of Appendices**

Appendix A	Photographs
Appendix B	Background Information
Appendix C	UST Disposal Documentation
Appendix D	UST Closure Checklist
Appendix E	UST Inventory Forms
Appendix F	Laboratory Analytical Results
Appendix G	Soil Disposal and Waste Inventory Records

## 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

TRC Environmental Corporation | Wisconsin Department

#### 1.1 Background

On October 11, 2017, during grading along 1<sup>st</sup> Avenue at to 105 E. Main Street, one UST was encountered. The UST was located in the STH 116 highway easement, in Winneconne, Winnebago County, Wisconsin. A site location map is presented as Figure 1. The WisDOT retained TRC Environmental Corporation (TRC) to remove the UST. On October 11, 2017, TRC was on site to observe the UST and its contents, which had evidence of petroleum odors in the tank. Photographs are shown in Appendix A. The UST was not listed in the DATCP Storage Tank Database. However, two 5,000 gallon unleaded gasoline USTs are listed as previously removed from the site. In addition, the site is an open LUST site (WDNR BRRTS #03-71-562271) (see Appendix B for background information). Previous investigations did identify petroleum contaminated soil and groundwater near the UST (Appendix B).

TRC's subcontractor and site personnel for the UST removal were as follows:

Jay Schlueter
SGS Environmental Contracting, LLC
N2570 Daytona Drive
Merrill, WI 54452
WI LUST Remover/Cleaner Cert. #401504

Dan Haak TRC Environmental Corporation 708 Heartland Trail, Suite 3000 Madison, Wisconsin 53717 (608) 826-3628 WI LUST Site Assessor Cert. #401260

### 1.2 Purpose and Scope

The purpose of this report is to document the abandonment of the UST by removal, located at 105 E. Main in Winneconne, Wisconsin. This report has been prepared in substantial conformance with Wisconsin Administrative Code, Chapter ATCP 93, "Flammable, Combustible and Hazardous Liquids."

1

# Section 2 Description of Site Activities

On October 18, 2017, TRC and its tank remover/cleaner subcontractor, SGS Environmental Contracting, LLC (SGS), mobilized to the site to abandon the UST by removal in accordance with ATCP 93. The UST was approximately 1,000 gallons in size and was lying east/west parallel to STH 116 (see Figure 2). The UST contained water and some sludge. The water was pumped into the nearby frac tank which contained contaminated groundwater from the site. Water from the frac tank was treated/disposed by Covanta Environmental Solutions. The sludge was containerized for offsite disposal by Veolia. The UST is believed to have previously contained fuel oil. The overburden soil above the UST, which had little or no evidence of contamination, was reused as backfill in the tank excavation. A total of 29.02 tons of petroleum-contaminated soil was overexcavated and treated/disposed at Waste Management Valley Trail Landfill in Berlin, Wisconsin.

The tank was constructed of single-walled steel and had some holes in it. No piping was discovered within the area of the tank excavation. The UST was taken to a recycling center to be recycled for scrap metal. UST disposal documentation is presented in Appendix C, and the UST closure checklist and UST inventory forms are presented in Appendices D and E, respectively.

During the abandonment of the UST, soil samples were collected from the UST excavation sidewalls and the base of the excavation, and field-screened (PID readings and odors) for petroleum contamination. No groundwater was encountered at this excavation, and is expected to be more than 9 feet bgs at this location based on previous investigations. All samples collected for field-screening analysis were laboratory analyzed for PVOCs and naphthalene. Following sample collection, the tank excavation was backfilled with granular fill and compacted.

Laboratory analytical results of the soil are presented in Appendix F, summarized and compared to NR 720 RCLs in Table 1. PID field screening results are also presented in Table 1. The laboratory analytical results indicate that low level petroleum contaminated soil exists around the UST, but is below NR 720 RCLs, except for MTBE (135  $\mu$ g/kg) in one sidewall sample (SWS) which exceeded the soil to groundwater pathway RCL.

2

## Section 3

## Findings, Conclusions, and Recommendations

TRC's field observations and screening, as well as laboratory analytical results, indicate the following:

- The UST located in the highway easement at 105 E. Main St. in Winneconne, Wisconsin, was abandoned by removal in accordance with the requirements of ATCP 93. A closure assessment was performed on the UST.
- One 55-gallon drum of sludge from the tank was containerized for off-site disposal by Veolia (Appendix G).
- A total of 29.02 tons of petroleum-contaminated soil was overexcavated and treated/disposed at Waste Management Valley Trail Landfill in Berlin, Wisconsin.
- The UST excavation was backfilled with overburden soil and granular fill and compacted.
- Low-level petroleum contaminated soil remains, but the site is an open LUST site and is being investigated by the responsible party.
- Groundwater was not encountered during the abandonment of the UST, and is expected to be more than 9 feet bgs. Therefore, groundwater quality was not evaluated.
- TRC recommends the WisDOT take no further action to investigate or remediate this site.

# Table 1 Summary of Soil Analytical Results STH 116 - 105 E. Main St., Winneconne, Winnebago County, Wisconsin WisDOT ID #6190-15-72

	NR 720 SOIL RCLs <sup>(3)</sup>								
	SOIL TO	DIRECT CONTACT PATHWAY		SWE	SWN	sws	SWW	BE	вw
	GROUNDWATER	NON-		5'	5'	5'	5'	9'	9'
ANALYTES	PATHWAY <sup>(1)</sup>	INDUSTRIAL <sup>(2)</sup>	INDUSTRIAL <sup>(2)</sup>						
PID (ppm)	-	-	-	<1	2	2	<1	5	<1
VOCs (μg/kg)									
Benzene	5.1	1,600	7,070	<25	<25	<25	<25	<25	<25
Ethylbenzene	1,570	8,020	35,400	<25	51.7 J	200	<25	110	<25
Methyl tert-butyl ether	27	63,800	282,000	<25	<25	135	<25	<25	<25
Naphthalene	658.2	5,520	24,100	<25	<25	<25	<25	155	<25
Toluene	1,107.2	818,000	818,000	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	1382.1 <sup>(4)</sup>	219,000	219,000	<25	968	243	<25	487	<25
1,3,5-Trimethylbenzene	1382.1\'	182,000	182,000	<25	135	46.7 J	<25	226	<25
Xylenes	3,960	260,000	260,000	<75	175.8 J	378	<75	292	<75

Notes:

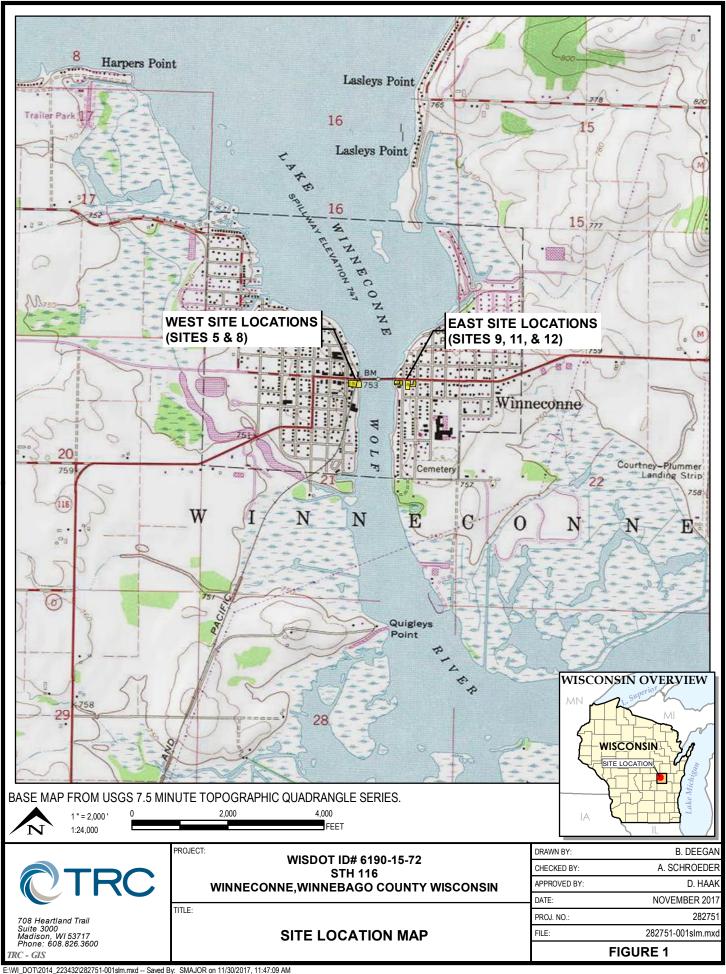
Created by: D. Haak 11/17/17

Checked By: A. Schroeder 11/17/17

- 1. PID = Photoionization Detector
- μg/kg = micrograms per kilogram (ppb)
- 3. VOCs = Volatile Organic Compounds analyzed using EPA Method 8260B
- 4. Samples were collected by TRC and analyzed by Pace Analytical (WDNR Cert. #405132750)
- RCLs = Residual Contaminant Levels.
- 6. J = Estimated concentration at or above the Limit of Detection and below the Limit of Quantitation.
- Italics = indicates that the analyte exceeds the groundwater pathway RCL.

#### 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.



#### **LEGEND**

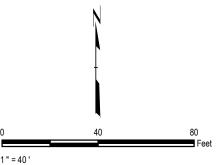
- HISTORIC TRC SOIL BORING / 2" NR 141MONITORING WELL
- HISTORIC TRC SOIL BORING / TEMPORARY WELL
- HISTORIC TRC SOIL BORING
- HISTORIC SOIL BORING / TEMPORARY WELL
- HISTORIC SOIL BORING
- PREVIOUS INVESTIGATION TEST PITS
- SOIL SAMPLE LOCATIONS



**UST EXCAVATION** 

#### **NOTES**

- BASE MAP IMAGERY FROM ESRI/MICROSOFT, "WORLD IMAGERY", WEB BASEMAP SERVICE LAYER, 2011.
- 2. CONSTRUCTION DESIGN WORK SUPPLIED BY WisDOT.
- HISTORIC BORING / WELL LOCATIONS AND PROPERTY BOUNDARIES DIGITIZED FROM HIMALAYAN CONSULTANTS, LLC PHASE 1 & 2 FIGURES, LOCATIONS ARE APPROXIMATE.



#### PROJECT: WISDOT ID# 6190-15-72 STH 116-105E. MAIN WINNECONNE, WINNEBAGO COUNTY WISCONSIN

SHEET TITLE:

#### SITE MAP

DRAWN BY:	S MAJOR	SCALE:	PROJ. NO.	282751
CHECKED BY:	A. SCHROEDER	1: 480	FILE NO.	282751-004.mxd
APPROVED BY:	D. HAAK	DATE PRINTED:		FIGURE 4
DATE:	NOVEMBER 2017			FIGURE 2



708 Heartland Trail, Suite 3000 Madison, WI 53717 Phone: 608.826.3600 www.trcsolutions.com

# Appendix A Photographs



Client Name: Wisconsin Department of Transportation Site Location: STH 116 – 105 E. Main Street Winneconne, Winnebago County, Wisconsin

**Project No.:** TRC #282751 WisDOT ID #6190-15-72

Photo No. Date
1 10/18/17

Description

UST located near frac tank



Photo No. Date
2 10/18/17

Description

Pump water from tank into frac tank





Client Name: Wisconsin Department of Transportation Site Location:

STH 116 – 105 E. Main Street
Winneconne, Winnebago County, Wisconsin

**Project No.:** TRC #282751 WisDOT ID #6190-15-72

 Photo No.
 Date

 3
 10/18/17

**Description**Water in tank



Photo No. Date
4 10/18/17

Description

Excavate to remove tank





Client Name: Wisconsin Department of Transportation

Date

10/18/17

Site Location: STH 116 – 105 E. Main Street Winneconne, Winnebago County, Wisconsin

**Project No.:** TRC #282751 WisDOT ID #6190-15-72

Photo No. 5

**Description** Remove tank



Photo No. Date
6 10/18/17

**Description** UST





Client Name: Wisconsin Department of Transportation

**Date** 10/18/17

Site Location:
STH 116 – 105 E. Main Street
Winneconne, Winnebago County, Wisconsin

**Project No.:** TRC #282751 WisDOT ID #6190-15-72

Description

Photo No.

South and west sidewalls



 Photo No.
 Date

 8
 10/18/17

Description

South and east side walls





Client Name: Wisconsin Department of Transportation Site Location: STH 116 – 105 E. Main Street Winneconne, Winnebago County, Wisconsin

**Project No.:** TRC #282751 WisDOT ID #6190-15-72

Photo No.

**Date** 10/18/17

Description

Backfill and compact excavation



Photo No.

10 10/18/17

Date

Description

Excavation backfilled



# Appendix B Background Information



### STATE OF WISCONSIN

## DEPARTMENT OF TRANSPORTATION TRANSPORTATION PROJECT PLAT TITLE SHEET

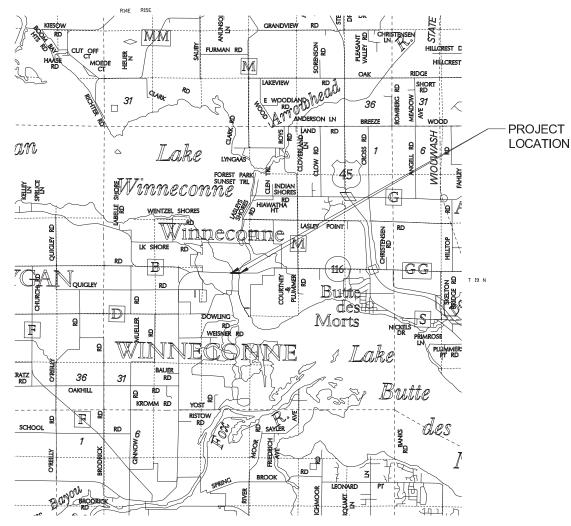
## PROJ NO. 6190-15-23

MAIN ST, VILLAGE OF WINNECONNE

WOLF RIVER BRIDGE AND APPROACHES

# STH 116

# **WINNEBAGO COUNTY**



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 6190-15-23

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREYTOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLES) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PUPPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

#### RESERVED FOR REGISTER OF DEEDS PROJECT NUMBER 6190-15-23 - 4, 01 SHEET 2 OF 2 AMENDMENT NO:

#### CONVENTIONAL SYMBOLS

SECTION LINE		NATIONAL GEODETIC SURVE SIXTEENTH CORNER MONUM	
SIXTEENTH LINE NEW REFERENCE LINE NEW R/W LINE EXISTING R/W LINE PROPERTY LINE LOT, TIE & OTHER MINOR LINES CORPORATE LIMITS UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	P.L.	NOTATION FOR COMBUSTABLE CAUTION FLUIDS  NOTATION FOR HIGH VOLTAGE TRANSMISSION CAUTION LINES	R/W MONUMENT  NON-MONUMENTED  R/W POINT  FOUND IRON PIN  VALVE (GAS, WATER, ETC.)  SIGN  OFF-PREMISE  SIGN  A SIGN  SIGN  A SIGN
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER) TEMPORARY LIMITED EASEMENT AREA EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR		ELECTRIC POLE TELEPHONE POLE PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	COMPENSABLE DON-COMPENSABLE  Ø Ø Ø  X
RESTRICTED DEVELOPMENT) TRANSMISSION STRUCTURES BUILDING		ACCESS RESTRICTED BY A NO ACCESS (BY STATUTOR ACCESS RESTRICTED (BY R PROJECT OR CONTROL)	RY AUTHORITY)
BUILDING RAZED		BRIDGE	PARCEL NUMBER 25

#### CONVENITIONAL ADDDEVIATIONS

	CONVEN	TIONAL	ABBREVIATIONS	
ACCESS RIGHTS		AR	POINT OF COMPOUND CURVE	PCC
ACRES		AC	POINT OF INTERSECTION	
AHEAD		AH	PROPERTY LINE	PL
ALUMINUM		ALUM	RECORDED AS	(100')
AND OTHERS		ET AL	REFERENCE LINE	R/L
BACK		ВК	REMAINING	REM
BLOCK		BLK	RIGHT	RT
CENTERLINE		C/L	RIGHT OF WAY	R/W
CERTIFIED SURVE	EY MAP	CSM	SECTION	SEC
CONCRETE		CONC	SEPTIC VENT	SEPV
COUNTY		CO	SQUARE FEET	SF
COUNTY TRUNK H	IGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE		DIST	STATION	STA
CORNER		COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	₹	DOC	TANGENT	TAN
EASEMENT		EASE	TELEPHONE PEDESTAL	TP
EXISTING		EX	TEMPORARY LIMITED	TLE
GAS VALVE		GV	EASEMENT	
GRID NORTH		GN	TRANSPORTATION PROJECT	TPP
HIGHWAY EASEMEN	1T	HE	PLAT	
IDENTIFICATION		ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT		LC	VOLUME	V
LEFT		LT		
MONUMENT		MON	CURVE DATA	
NATIONAL GEODE	FIC SURVEY		LONG CHORD	LC
NUMBER		NO	LONG CHORD BEARING	LCB
OUTLOT		0L	RADIUS	R
PAGE POINT OF TANGEN	10.7	P PT	DEGREE OF CURVE	D

PLE

CONVENTIONAL UTILITY SYMBOLS

GAS TELEPHONE TRANSMISSION LINES FLECTRIC CABLE TELEVISION FIBER OPTIC SANITARY SEWER STORM SEWER

LAYOUT

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-040100-RP.DWG

LENGTH OF CURVE

DIRECTION AHEAD

DIRECTION BACK

TANGENT

CENTRAL ANGLE OR DELTA

PLOT DATE : 12/14/2012 7:46 PM

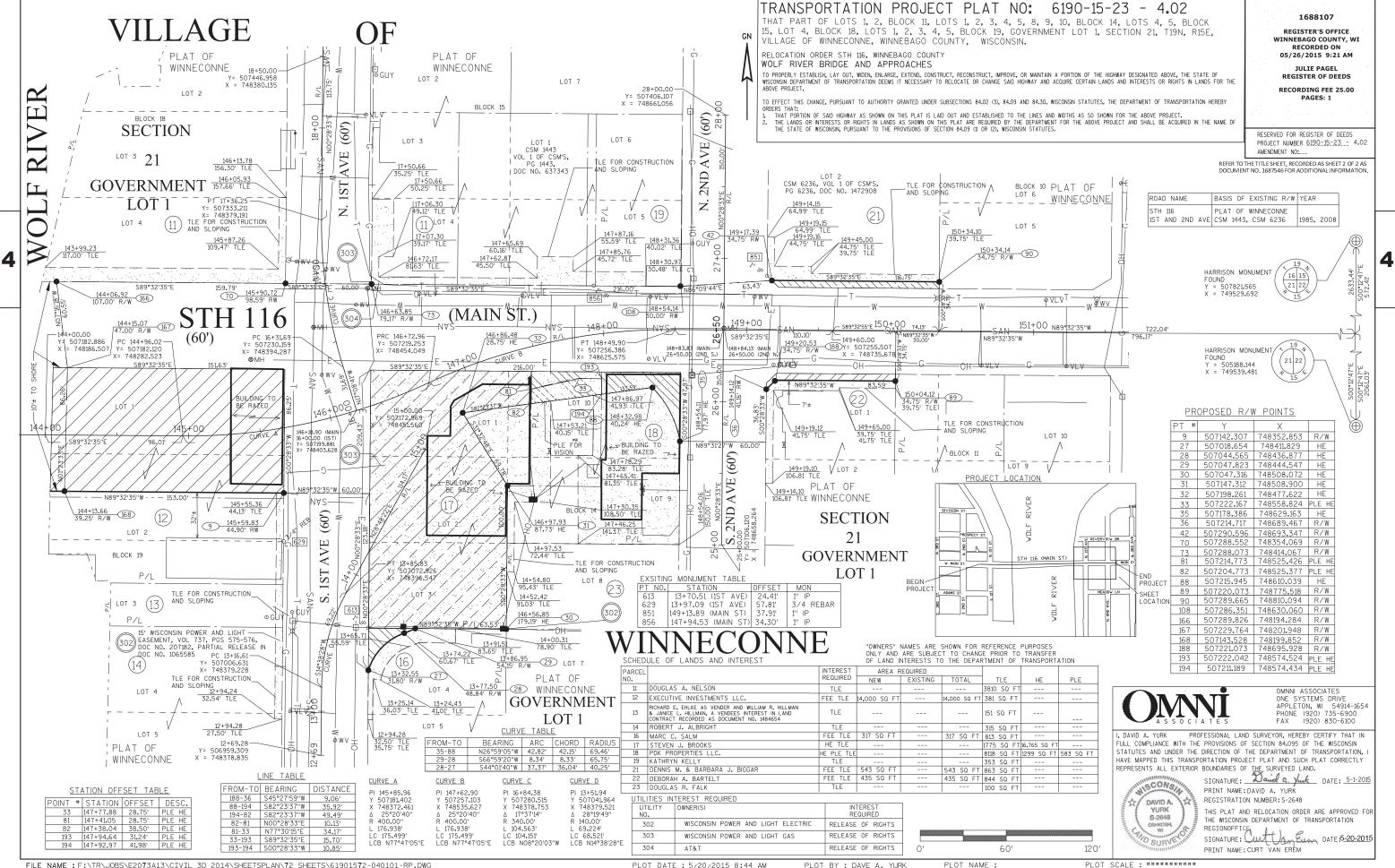
PLOT BY : KIMBERLY SELLIER PLOT NAME : \_\_\_\_\_

PERMANENT LIMITED

POINT OF BEGINNING

POINT OF CURVATURE

FASEMENT



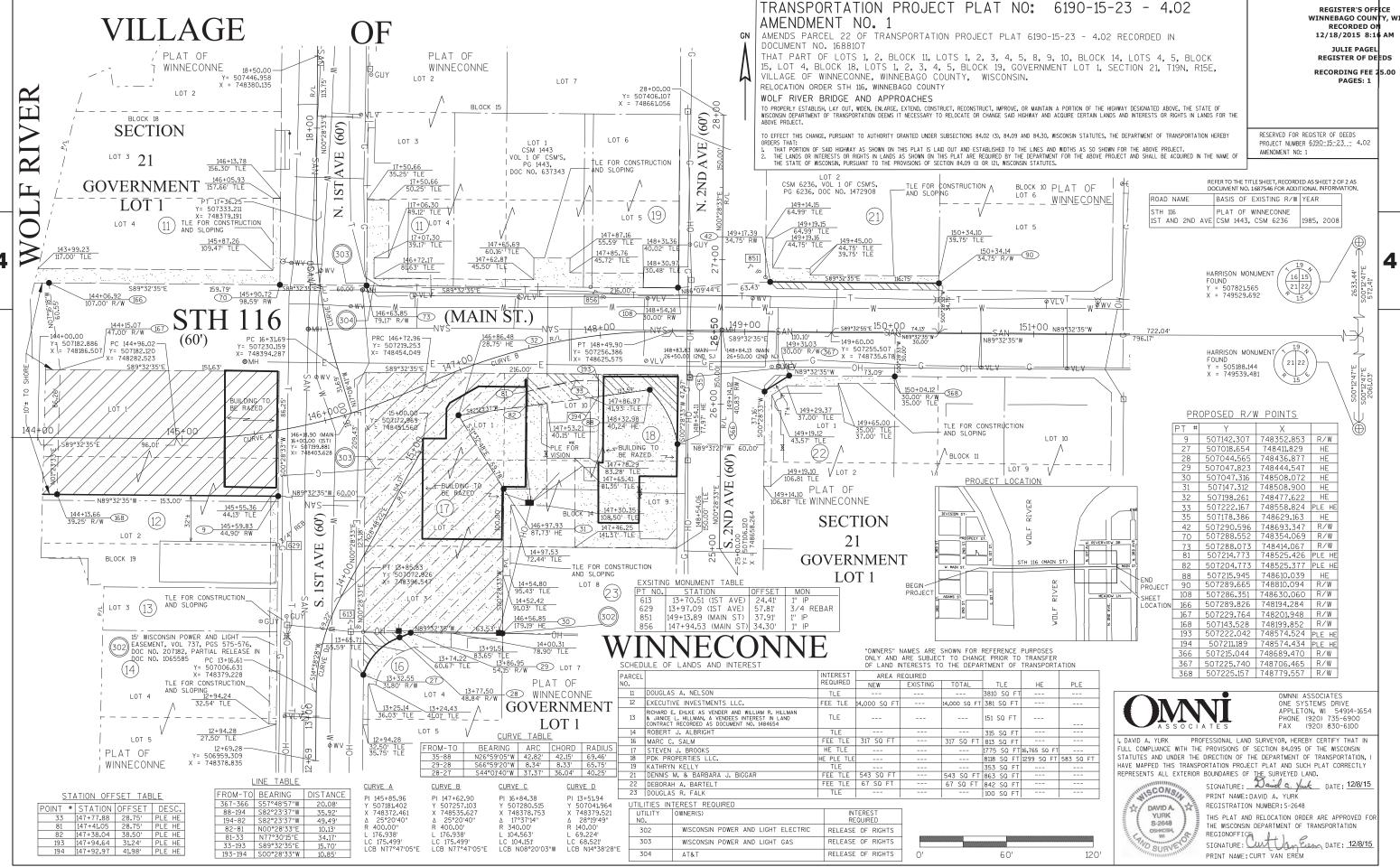
APPRAISAL PLAT DATE: \_\_\_\_\_

PLOT DATE: 5/20/2015 8:44 AM

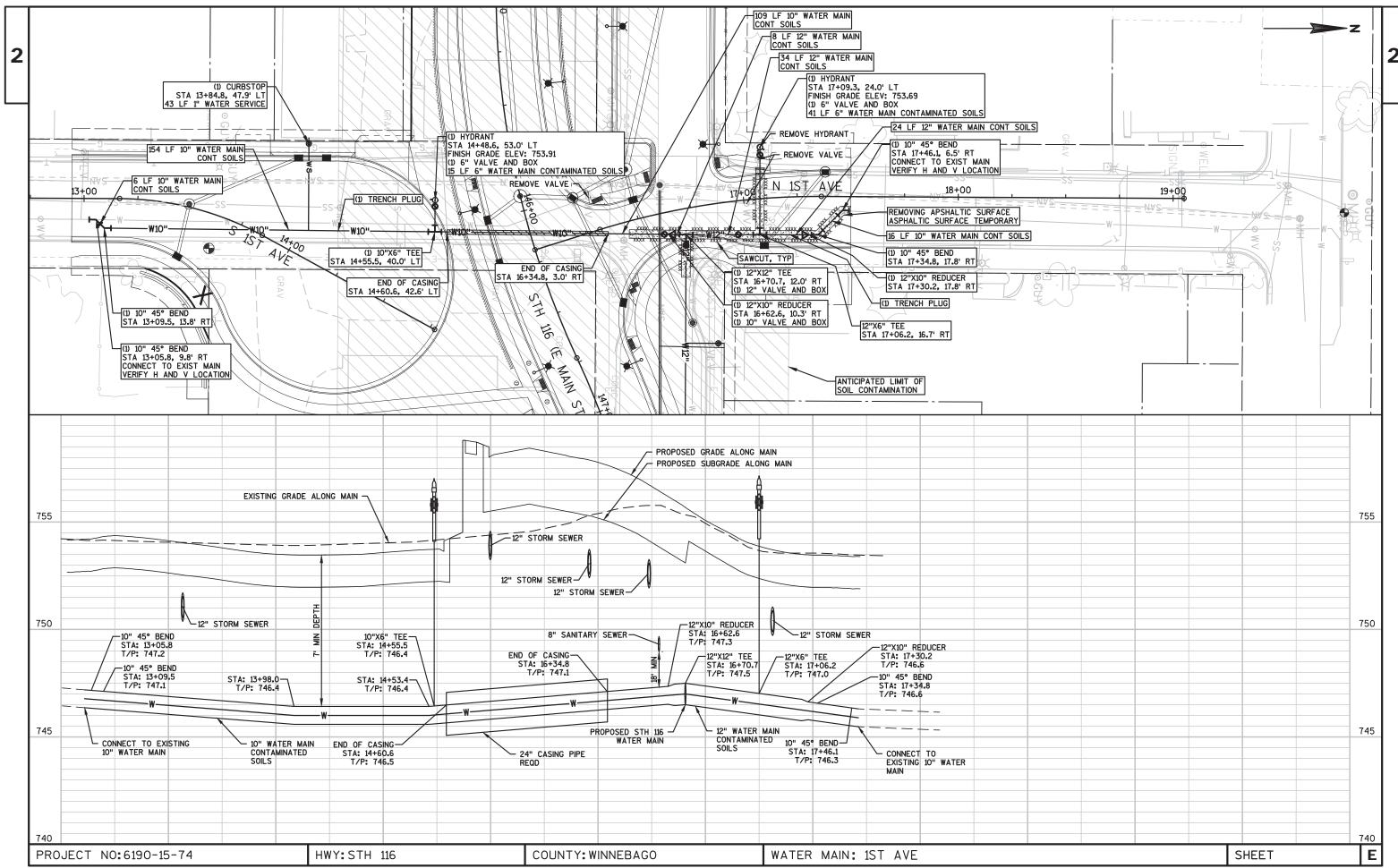
PLOT BY : DAVE A. YURK

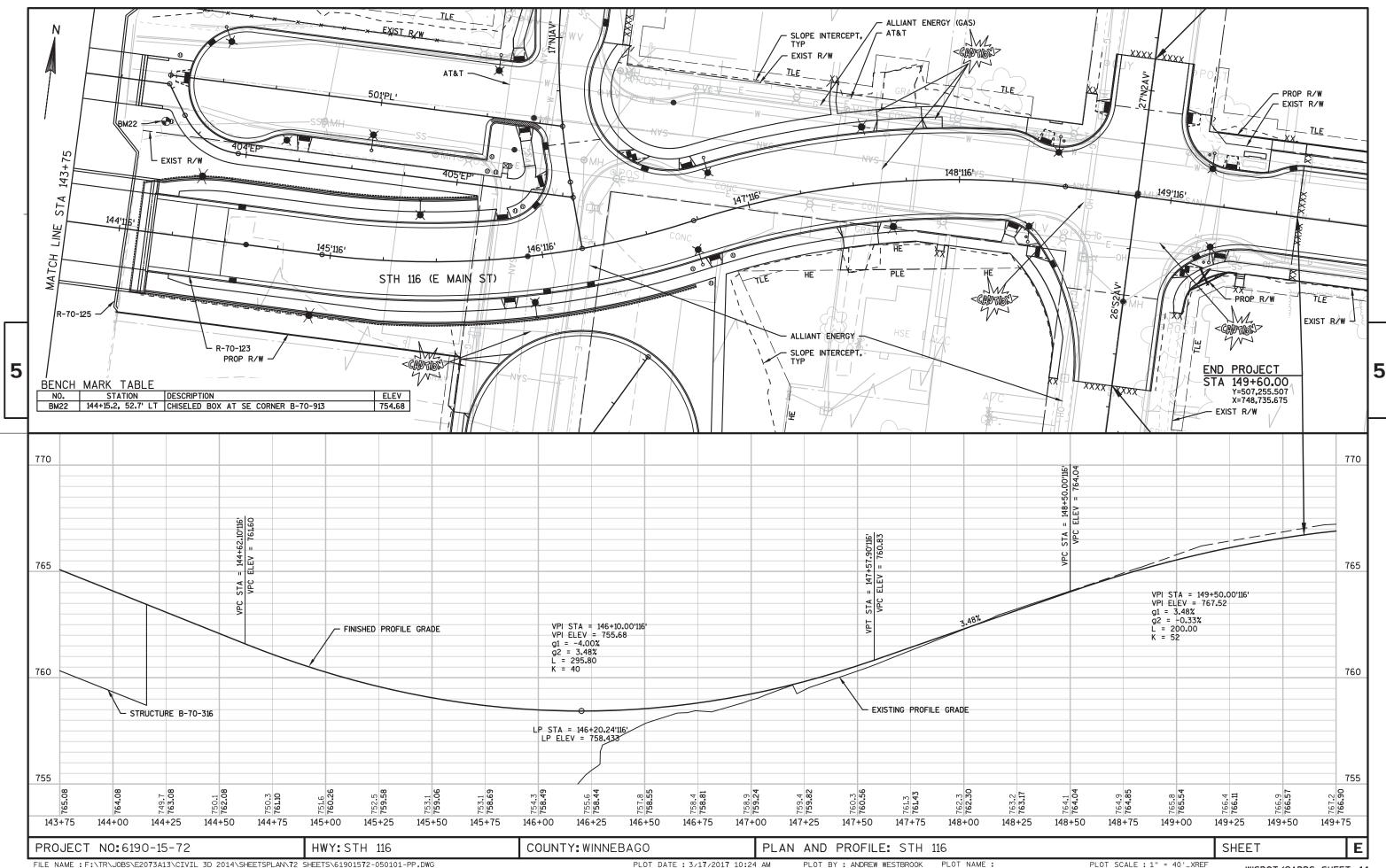
PLOT NAME :

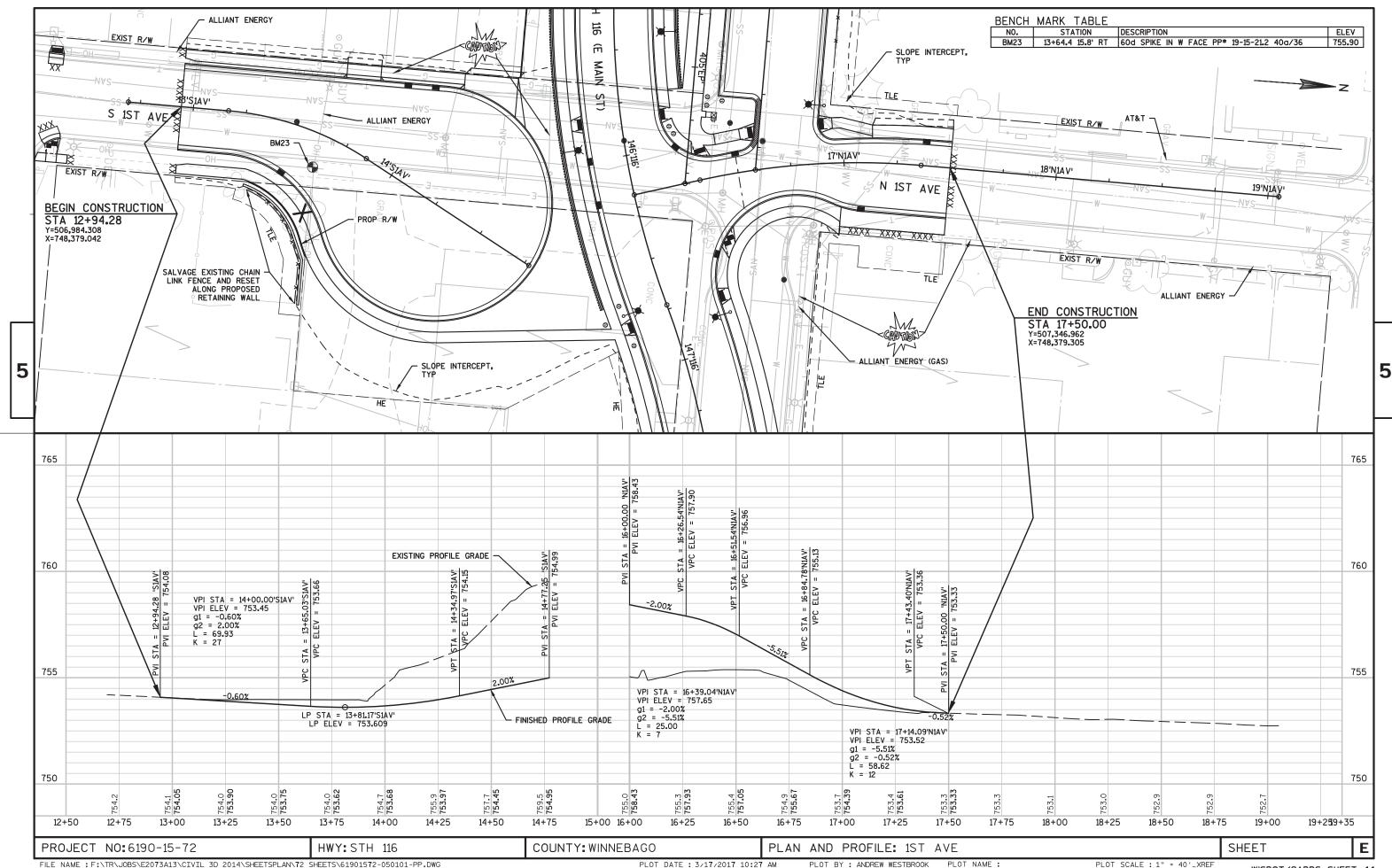
PLOT SCALE : \*\*\*\*\*\*\*\*\*\*



1703635







### **WisDOT Phase 1 Hazardous Materials Assessment Site Summary**

(rev. 10/7/2005)

WisDOT Project ID: 1030-20-00 Highway/Street: STH 116 Termini/Limits: 2<sup>nd</sup> Street – 2<sup>nd</sup> Avenue

**County: Winnebago** 

Property Information: Site Name(s): A1 Auto Sales, Inc. / Steve's Marine Service (Site #11)
DOT parcel number (if known):
Property Address: 105 E. Main Street, Winneconne, WI
Owner's Name: Steven J Brooks
Owner's Address: PO Box 42, Winneconne, WI 54986
Owner's Phone: 920-582-7247
Current Land Use: auto sales, boat service, gift shop
Past Land Use: auto sales with gasoline pumps, auto repair, blacksmith, boat service, small engine
repair
·
Real Estate Requirements:
None ☐ Total take ☐ Strip acquisition of 60 feet
Temporary Limited Easement (TLE)
Permanent Limited Easement (PLE)
Construction Poquiroments:
Construction Requirements:  Excavation within current right of way to feet
Excavation within proposed right of way to 8 feet
Excavation within easement to feet
Public or private utility or sanitary or storm sewer installation or excavation to 8 feet
Information from database searches and interviews:
Department of Commerce (DCOMM)
☐ site has registered tanks ☐ASTs ☐USTs
tanks are currently in use
tanks are abandoned date:
Tank contents:
☐ Leaded gasoline ☐ Unleaded gasoline ☐ Fuel Oil ☐ Diesel
Kerosene Unknown Other (describe)
site is a DCOMM administered LUST site; DCOMM ID number:
site is a closed DCOMM LUST site; closure date:
Department of Natural Resources (DNR)
site is a DNR administered LÚST site; BRRTS number:
site is a DNR administered ERP site; BRRTS number:
site is a closed LUST ERP site; closure date:
site is a landfill
site is an abandoned waste disposal site
site is a hazardous waste generator
Other (please describe) Spills
Sanborn Maps: site is a blacksmith on map dated 1898 Comments:
WisDOT historic plan sets: site has on project dated . Comments:
Business directories: site is a in the directory dated . Comments:

A check in a checkbox indicates a positive or "yes" response.  Aerial photos: site is a on photo dated . Comments:  Contamination discovered at feet during utility or other excavation in the area. Indicate location on site map.  Interview Information or other comments: gas pumps and tanks were located on the northwest portion of the site
Visual Evidence of Potential Contamination: (include additional information in space provided)  ☐ No evidence of tanks ☐ USTs ☐ ASTs Location, number and condition of tanks, contents, comments:  Location in relationship to current right of way: 75' ☐ map attached  Location in relationship to proposed right of way: 65' ☐ map attached ☐ Drums ☐ Stained soils ☐ Odor ☐ Sheen on surface water ☐ Areas of excavation ☐ Areas of fill ☐ Stressed vegetation ☐ Pond(s) ☐ Basins/sumps ☐ Monitoring wells ☐ Soil borings Comments:
Potential for Contaminant Migration: (attach supporting documentation such as plume maps, summaries of site investigation or closure reports).  ☐ Property is a potential source of contamination ☐ Adjacent property is a potential source of contamination. Include site name or BRRTS number if known, describe location, include contaminant type and any additional information. ☐ Contaminated soil known to be within proposed right of way from feet to feet below ground surface ☐ Contaminated groundwater known to be within proposed right of way at feet below ground surface. ☐ Contaminated soil or groundwater within existing right of way. Attach copy of most recent investigation and plume maps.
Attachments – required  ☐ Site photographs and a site map showing areas of concern ☐ Plat map showing parcel and any proposed areas of acquisition or easement ☐ Historic aerial photos of site - clearly outline site ☐ Historic WisDOT or other as-builts and plat maps - clearly outline site ☐ Plume maps for known contamination. Indicate existing or proposed right of way where applicable.
Recommendations  No additional hazardous materials investigation is required.  If construction or real estate requirements change, evaluation of need for further investigation will be necessary.  Information is sufficient to use Standard Special Provisions. Copy of completed Standard Special Provision is attached.  Conduct additional investigation  Phase 2 (determine if contamination is present)  Phase 2.5 (determine extent of contamination within existing R/W only)  Phase 3 (determine full extent of contamination prior to acquisition)  Phase 4 (remediate site)  Other (describe)  Prepared by: Michelle Peed on 08/14/12  Recommendations accepted by (name and title): on  Signature:

#### **Site #11**

### A1 Auto Sales, Inc. / Steve's Marine Service / Former Blacksmith 105 E. Main Street

Main Street: STA 32+25 to 33+45 RT First Avenue: STA 6'FA'+50 to 8'FA'+30 RT

The site was not identified on any of the databases searched for this report. According to the WDSPS Storage Tank Database, no tanks are registered to the site. The site is currently utilized as A1 Auto Sales, Inc., Steve's Marine Service, and Brooks Bargains (gift shop). The site has been owned by Steven Brooks since at least 2005 [Ref. 1].

According to Sanborn maps reviewed, the site was used as a residence, saloon, and warehouse in 1893, as a residence and blacksmith in 1898, and as a residence in 1904, 1913, and 1929.

Based on Himalayan's interview with Dan Moriearty (phone: 920-582-0224), who leases a portion of the site and owns A1 Auto Sales, Inc., no tanks are located on the site to the best of his knowledge. He indicated that the site was previously used as a Chevrolet dealer until 1979 and is currently used for used cars sales and car repairs. According to Mr. Moriearty, his shop utilizes a waste oil burner located on the building interior.

Himalayan also interviewed Steve Brooks (phone: 920-582-7972), who indicated that he has owned the site for approximately 10 years. Mr. Brooks indicated that, prior to his ownership; the site was occupied by an auto repair facility, a skid-loader rental facility, a boat repair facility, a small engine repair facility, and was a Chevrolet dealership from the 1950s to the 1970s. He indicated that gas pumps and tanks associated with the Chevrolet garage were removed approximately 25 years ago and they were formerly located on the northwest portion of the site.

#### Soil / Groundwater Impacts

Based on Himalayan's record search, it appears that no soil or groundwater analytical data is available for the site.

It appears that the former tanks located at this site would be within and underneath the areas of R/W acquisition and construction proposed for Main Street (see Figure 14).

#### Construction/Real Estate Requirements

Based on the proposed design plans, the maximum depths of excavation adjacent to the site are anticipated to be about 2 feet bgs for roadway construction, 8 feet bgs for water / sewer, and about 5 feet bgs for lighting / signal bases (see Table 2 in the main report).

Up to 60 feet of R/W (strip) acquisition is anticipated at this site, which includes relocation of the existing building.

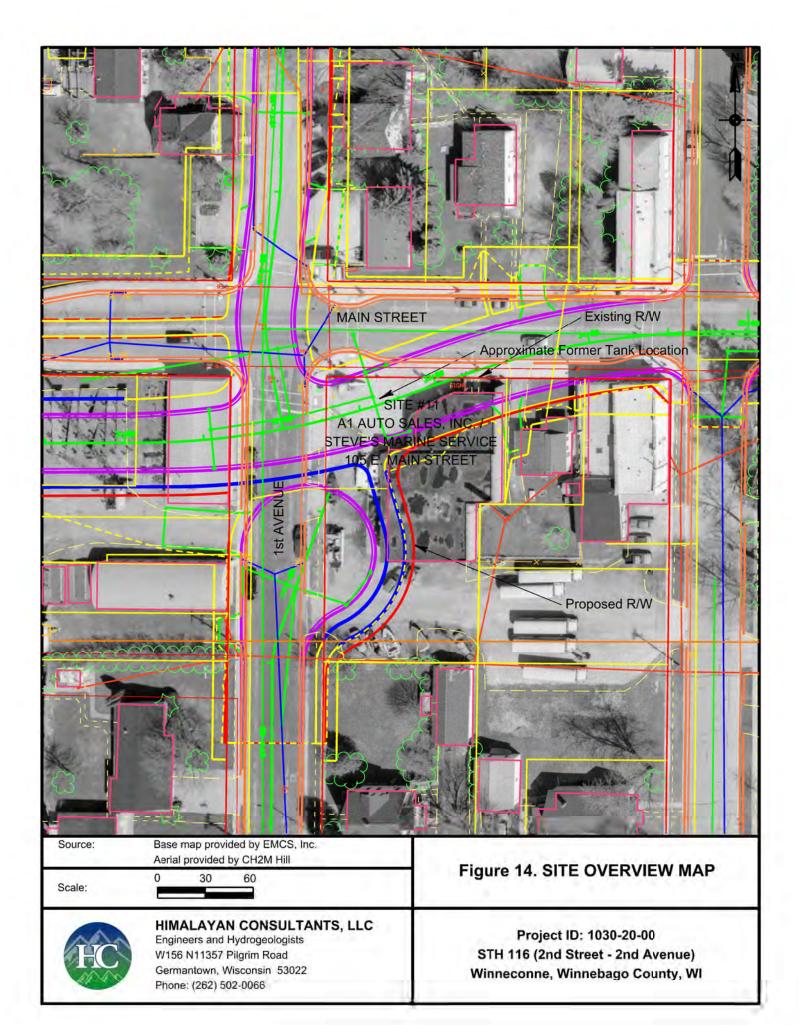
#### Recommendations

Considering the location of former tanks and pumps potentially within the areas of R/W acquisition or construction proposed and lack of analytical testing conducted during the removal of the former tanks at the site it is likely that the site could pose a hazardous materials threat to the proposed improvements. Therefore, further investigation is recommended for the site.

Refer to the attached Hazardous Materials Assessment Site Summary, and site-specific figure (Figure 14) for more detailed information on the site including the former or current buildings, existing and proposed R/Ws, and proposed construction.

#### References

 Winnebago County Wings website: http://wcgis.co.winnebago.wi.us/cgi-bin/wings/wingsndx.cgi





Site #11: A1 Auto Sales, Inc. / Steve's Marine Service, 105 E. Main Street View southeast from north side of Main Street

#### 1.0 SITE DESCRIPTION

A1 Auto Sales, Inc. / Steve's Marine Service (105 E. Main Street) is located near the southeast quadrant of the intersection of E. Main Street (STH 116) and 1<sup>st</sup> Avenue [hereafter referred to as the site] (see Figure 3.1, Attachment A). The site is part of the northeast ¼ of the northwest ¼ of Section 21, Township 19 North, Range 15 East, in the Village of Winneconne, Winnebago County, Wisconsin. According to the Winnebago County GIS Parcel Profiler Site, the site is currently owned by Steven Brooks.

Based on Himalayan's inspection of the site on July 30, 2013, the site is utilized as an auto and boat repair facility (see Photographs, Attachment E).

The predominant land surface at the site is a concrete covered parking lot on the northwest side of the property, with a gravel driveway on the southern side of the building. The eastern portion of the site contains the repair building.

The land use surrounding the site is generally commercial properties.

#### 2.0 SITE HISTORY

In August 2012, Himalayan performed a Phase 1 Hazardous Materials Assessment (HMA) of the project corridor and identified the site at 105 E. Main Street as one of the sites with hazardous material concerns [Ref. 2]. Based on the information obtained from the Phase 1 HMA, the site was previously utilized as an auto repair facility, a former re-sale facility, a boat repair facility, a small engine repair facility, and an auto dealership.

According to Himalayan's personal interviews with the former and current site owners, gas pumps and tanks associated with the former auto dealership on site from the 1950s to the 1970s, were removed from the northwest portion of the site approximately 25 years ago. Inspection of historical aerial photographs from the 1960's and 1970's also indicate the presence of a pump island in this same area. According to the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) storage tank records, no tanks are registered to the site [Ref. 3].

Based on the age of the building (at least 1950s), potential asbestos containing materials (ACM) and lead based paint (LBP) may be present in the building on site.

#### 3.0 PURPOSE AND PROPOSED ACQUISITION/CONSTRUCTION

The purpose of this Phase 2 HMI was to identify the potential presence and nature of contamination at the site. The Phase 2 HMI was performed in general accordance with FDM Procedure 21-35-10

(revised, December 2011), and the Wisconsin Department of Natural Resources (WDNR) rules and regulations [Ref. 4].

Based on the proposed design plans, the maximum depths of excavation adjacent to the site are anticipated to be about 2 feet bgs for roadway construction, 8 feet bgs for water / sewer, and approximately 5 feet bgs for lighting / signal bases. Up to 60 feet of R/W (strip) acquisition is anticipated at this site, which includes relocation of the existing building.

#### 4.0 SOILS AND GROUNDWATER CHARACTERIZATION

On July 30, 2013, Horizon Construction and Exploration (Horizon), under a contract with Himalayan, advanced three soil borings (B-11-1 to B-11-3) at the site (see Figure 3.2, Attachment A). The general boring locations were in the areas considered to have the highest potential for encountering contamination based on the information obtained during the Phase 1 HMA, and/or proposed improvements at the site. Borings were advanced to a depth of 20 feet bgs. Boring B-11-1 and B-11-2 were located in the area of a former pump island and UST area, and B-11-3 was located near the overhead door on the north portion of the former auto / boat repair building.

Each of the borings were converted to temporary groundwater monitoring wells (W-11-1, W-11-2, and W-11-3) to facilitate groundwater sampling. The wells were constructed in general compliance with WDNR guidelines for temporary monitoring wells [Ref. 4]. The wells consisted of a 10-foot section of slotted 1-inch polyvinyl chloride (PVC) pipe attached to unslotted PVC riser pipe extending to the surface. Refer to Well Construction Forms in Attachment C for additional details on temporary well construction.

After completion of sampling, all boreholes/wells were abandoned by filling them with granular bentonite, in accordance with Wis. Adm. Code NR 141. The Borehole Abandonment Forms for each borehole/well are presented in Attachment B.

#### 4.1 Soil Sampling

Based on field observations, two soil samples from each boring were collected and submitted for laboratory analysis. The soil samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), volatile organic compounds (VOCs), and the eight Resource Conservation and Recovery Act (RCRA) metals [arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury].

#### 4.2 Groundwater Sampling

Himalayan performed groundwater collection at the site on the day following the boring activities. Groundwater samples were obtained from each temporary monitoring well (MW-11-1, MW-11-2,

MW-11-3) and submitted for laboratory analysis. The water samples were analyzed for VOCs and RCRA metals.

#### 5.0 SUBSURFACE CONDITIONS

#### 5.1 Soil Conditions

Based on field observations, the shallow subsurface soils at the site consisted of fill materials from the ground surface to a depth of approximately 6 feet bgs. The fill materials consisted mainly of red sandy clay, with trace wood and brick fragments, medium to fine sand with gravel, cinders, and glass fragments.

Native brown to red clay tills with trace amounts of fine gravel were encountered below the fill materials to the terminal depths of 20 feet bgs. Refer to soil boring logs in Attachment B for more detailed descriptions of the soils encountered at each boring location.

Continuous soil samples were obtained from the borings and field-screened for the presence of volatile organic vapors using a photoionization detector (PID). The field screening results for the collected 30 soil samples were all zero and are summarized in Table 1. No staining or odors were noted in the boring logs (see Attachment B). Note that asphalt was being overlain on STH 116 at the time of Himalayan's field work; therefore, it is possible that background calibration may have been elevated on the PID.

A1	TABLE 1 FIELD SCREENING RESULTS Phase 2 Hazardous Materials Investigation A1 Auto Sales, Inc. / Steve's Marine Service (105 E. Main Street) Winneconne, Winnebago County Project ID: 6190-17-00								
В	oring ID	B-11-1	B-11-2	B-11-3					
	Date	7/30/13	7/30/13	7/30/13					
	0-2	0.0	0.0	0.0					
	2-4	0.0	0.0	0.0					
	4-6	0.0	0.0	0.0					
t)	6-8	0.0	0.0	0.0					
Depth (feet)	8-10	0.0	0.0	0.0					
pth	10-12	0.0	0.0	0.0					
Ď	12-14	0.0	0.0	0.0					
	14-16	0.0	0.0	0.0					
	16-18	0.0	0.0	0.0					
18-20 0.0 0.0 0.0									
Note Resu		in instrument units	s (IU).						

#### **5.2** Groundwater Conditions

Groundwater was encountered in each temporary well, at depths ranging from 7.2 to 14.2 feet bgs. It should be noted that groundwater depths can vary throughout the year, depending on several factors that include seasonal variations in precipitation, infiltration, and surface water runoff.

Refer to the soil boring logs in Attachment B for additional groundwater information encountered at each boring location.

#### 6.0 ANALYTICAL RESULTS

#### 6.1 Soil Samples

Laboratory analyses was performed on two soil samples selected from each borehole, at various depths ranging from 2 to 12 feet bgs.

No GRO was detected in any of the samples collected. DRO was detected in B-11-1 2-4' (2.9 mg/kg) below the NR 720 RCL [Ref. 6].

Two VOCs were detected in two of the soil samples. Tetrachloroethene (74.7 to 169  $\mu$ g/kg) and trichloroethene (162 to 195  $\mu$ g/kg) were both detected in B-11-1 8-10' and B-11-2 10-12'. No NR 720 RCL has been established for either of these VOCs.

Six of the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, and mercury) were detected in the soil samples. Arsenic (1.2 to 4.9 mg/kg) was detected above the NR 720 RCL in each of the six samples. Chromium (6.6 to 22.1 mg/kg) was detected in each of the soil samples. Concentrations in five samples (B-11-1 8-10' at 22.1 mg/kg, B-11-2 10-12' at 18.5 mg/kg, and B-11-3 8-10' at 19.7 mg/kg) were detected above the NR 720 RCL, hexavalent chromium only.

Lead (1.9 to 5.4 mg/kg) was detected in each of the soil samples, below the NR 720 RCL.

Barium (16.8 to 85.8 mg/kg), cadmium (0.13 J to 0.28 J mg/kg), and mercury (0.010 to 0.11 mg/kg) were also detected in several of the samples, below their respective NR 720 RCLs or no standard has been established. A "J" denotes a concentration flagged by the laboratory as an estimated concentration. Additionally, selenium and silver were not detected in any of the samples analyzed.

#### TABLE 2

#### SOIL QUALITY RESULTS - DETECTED COMPOUNDS

#### Phase 2 Hazardous Materials Investigation

A1 Auto Sales, Inc. / Steve's Marine Service (105-113 E. Main Street), Winneconne, Winnebago County Project ID: 6190-17-00

Sample I.D.	B-	11-1	B-	11-2	B-	11-3	C : ND	
Depth (feet)	2-4	8-10	2-4	10-12	2-4	8-10	Generic NR 720 RCL	
Collection Date	7/30	)/2013	7/30	/2013	7/30	/2013	720 KCL	
GRO (mg/kg)	<2.7	<3.1	<2.7	<3.1	<2.8	<3.2	100/250*	
DRO (mg/kg)	2.9	< 0.77	< 0.72	< 0.82	< 0.74	< 0.77	100/250*	
VOCs (µg/kg)	VOCs (µg/kg)							
Tetrachloroethene	<27.5	169	<26.9	74.7	<25.8	<25.0	NSE	
Trichloroethene	<27.5	195	<26.9	162	<25.8	<25.0	NSE	
RCRA Metals (mg/kg)								
Arsenic	4.4	4.9	4.2	4.3	1.2 J	3.9	0.039 (b)	
Barium	25.9	85.8	51.2	68.8	16.8	73.3	NSE	
Cadmium	0.13 J	0.28 J	0.20 J	0.26 J	< 0.047	<0.23 J	8 (b)	
Chromium	13.0	22.1	12.6	18.5	6.6	19.7	14 (a) (b)	
Lead	4.1	5.4	4.3	7.7	1.9	4.9	50 (b)	
Mercury	0.017	0.010	0.11	0.016	< 0.0032	< 0.0076	NSE	

Notes:

Analytes detected above the method detection limit (MDL) in at least one sample are included in the Table

Table 2 presents the summary of soil quality results. Also, refer to Figure 3.2, Attachment A for sample locations and analytical results.

Refer to Attachment D for complete laboratory report for each sample.

#### **6.2** Groundwater Samples

Based on the laboratory analytical results of groundwater samples collected from temporary wells MW-11-1, MW-11-2, and MW-11-3, no petroleum constituents were detected in any of the water samples. However, chlorinated solvents were detected in each of the samples. Trichloroethene (18.9 to 383  $\mu$ g/L) was detected above the NR 140 ES in each of the three samples. Tetrachloroethene was detected above the NR 140 ES in MW-11-1 (7.4  $\mu$ g/L) and MW-11-2 (21.8  $\mu$ g/L) and above the NR 140 PAL in MW-11-3 (0.50 J  $\mu$ g/L). Vinyl chloride was detected above the NR 140 ES in MW-11-1 (4.6  $\mu$ g/L) and MW-11-2 (1.5 J  $\mu$ g/L).

Cis-1,2-dichloroethene was detected in MW-11-1 (11.0  $\mu$ g/L) and MW-11-2 (19.4  $\mu$ g/L) above the NR 140 PAL.

Trans-1,2-dichloroethene (0.66  $\mu$ g/L) and 2-butanone (MEK) (4.4 J  $\mu$ g/) were also detected in MW-11-1, but are below their respective NR 140 PALs.

GRO= Gasoline Range Organics; DRO= Diesel Range Organics; VOC= Volatile Organic Compounds; TCLP= Toxicity characteristic leaching procedure RCRA = Resource Conservation and Recovery Act; **Bold** results indicate concentrations exceeding NR 720 or Interim RCLs

mg/kg=milligrams per kilogram and mg/L milligrams per liter=parts per million (ppm); µg/kg=micrograms per kilogram=parts per billion (ppb)

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit; NSE = No Standard Established; RCL= Residual

<sup>\* =</sup> RCLs (mg/kg) based on permeability of soils per NR 720 for groundwater protection

Four of the eight RCRA metals were detected in the samples. Arsenic (8.3 J  $\mu$ g/L) was identified in MW-11-2, chromium (3.7 J  $\mu$ g/L) was identified in MW-11-3, and lead (3.2 J  $\mu$ g/L) was identified in MW-11-1, and are all above their respective NR 140 PAL. Barium (89.6 to 161  $\mu$ g/L) was detected below the NR 140 PAL in all samples.

Also refer to Figure 3.3 in Attachment B for the well locations and Attachment D for the laboratory results.

## TABLE 3 GROUNDWATER RESULTS - DETECTED COMPOUNDS

**Phase 2 Hazardous Materials Investigation** 

A1 Auto Sales, Inc. / Steve's Marine Service (105 E. Main Street), Winneconne, Winnebago County Project ID: 6190-17-00

110,000 121 015 0 11 00									
Sample I.D.	MW-11-1	MW-11-2	MW-11-3	NR 140 ES	NR 140 PAL				
Collection Date	7/31/13	7/31/13 7/31/13 7/31/		(μg/L)	(µg/L)				
VOCs (µg/L)									
2-Butanone (MEK)	4.4 J	<13.5	<2.7	460	90				
cis-1,2-Dichloroethene	11.0	19.4	< 0.42	70	7				
trans-1,2-Dichloroethene	0.66 J	<1.9	< 0.37	100	20				
Tetrachloroethene	7.4	21.8	0.50 J	5	0.5				
Trichloroethene	289	383	18.9	5	0.5				
Vinyl chloride	4.6	1.5 J	< 0.18	0.2	0.02				
RCRA Metals (μg/L)	<u>'</u>	•							
Arsenic	<4.2	8.3 J	<4.2	10	1				
Barium	161	125	89.6	2,000	400				
Chromium	<1.4	<1.4	3.7 J	5	0.5				
Lead	3.2 J	<2.7	<2.7	15	1.5				

Notes:

Analytes detected above the method detection limit (MDL) in at least one sample are included in the Table

VOCs = Volatile Organic Compounds

RCRA = Resource Conservation and Recovery Act

 $\mu g/L = micrograms per liter = parts per billion (ppb)$ 

J = Concentration reported is between the Method Detection Limit and the Limit of Quantitation

Italics results indicate concentrations exceeding NR 140 PAL

Bold results indicate concentrations exceeding NR 140 ES

ES = Enforcement Standard per NR 140; PAL = Preventative Action Limit

#### **6.3** Waste Characterization Sample

A composite soil sample (Proto B-11) was collected from the site for landfill acceptance criteria (Protocol B) to provide waste characterization for potential off-site disposal and/or treatment of contaminated soils at a landfill.

Based on the laboratory analytical results, no cyanide, PCBs, TCLP VOCs, and TCLP Semi-volatiles were detected in the sample. The general chemistry results for the sample included:

flashpoint >210 deg. F, pH 8.4, specific gravity 1.6, sulfide 10.4 J mg/kg. No free liquids were encountered in the sample.

Table 4 presents the summary of soil quality results for the composite sample. See Attachment D for complete laboratory report.

# TABLE 4

# LABORATORY ANALYTICAL RESULTS - Protocol B

# **Phase 2 Hazardous Materials Investigation**

Creative Tile and Marble (29-31 W. Main Street), Winneconne, Winnebago County Project ID: 6190-17-00

Pro	ject ID: 6190-17-00	
Sample I.D. : Proto B-8	Sample Results	Units
Sample I.D. : Proto B-8		
General Chemistry		
% of Solids	87.2	%
Cyanide (total)	0.0070 J	mg/kg
Flashpoint	>210	°F
pН	8.4	pH Units
Specific Gravity	1.6	N/A
Free liquids	Pass	N/A
Sulfide	10.4 J	mg/kg
TCLP Metals		
Arsenic	<0.12	mg/L
Barium	<1.2	mg/L
Cadmium	< 0.0025	mg/L
Chromium	<0.12	mg/L
Copper	<0.12	mg/L
Lead	< 0.015	mg/L
Mercury	<0.10	mg/L
Nickel	<0.12	mg/L
Selenium	<0.12	mg/L
Silver	<0.12	mg/L
Zinc	<0.12	mg/L
PCBs		
PCB-1016	< 0.0287	mg/kg
PCB-1221	< 0.0287	mg/kg
PCB-1232	< 0.0287	mg/kg
PCB-1242	< 0.0287	mg/kg
PCB-1248	< 0.0287	mg/kg
PCB-1254	< 0.0287	mg/kg
PCB-1260	< 0.0287	mg/kg
TCLP VOCs		
Benzene	< 0.005	mg/L
Methyl Ethyl Ketone	< 0.027	mg/L
Carbon Tetrachloride	< 0.0037	mg/L
Chlorobenzene	< 0.0036	mg/L
Chloroform	< 0.0069	mg/L
1,2-Dichloroethane	< 0.0048	mg/L
1,1-Dichloroethene	< 0.0043	mg/L
Tetrachloroethene	< 0.0047	mg/L
Trichloroethene	< 0.0043	mg/L
Vinyl Chloride	< 0.0018	mg/L

# **TABLE 4 (Continued)**

# LABORATORY ANALYTICAL RESULTS - Protocol B

# **Phase 2 Hazardous Materials Investigation**

Creative Tile and Marble (29-31 W. Main Street), Winneconne, Winnebago County Project ID: 6190-17-00

Sample I.D. Proto B-8	Sample Results	Units
TCLP Semi-VOCs		
1,4-Dichlorobenzene	< 0.0086	mg/L
2,4-Dinitrotoluene	< 0.0080	mg/L
Hexachloro-1,3-butadiene	< 0.0066	mg/L
Hexachlorobenzene	< 0.0111	mg/L
Hexachloroethane	< 0.0058	mg/L
2-Methylphenol (o-Cresol)	< 0.0097	
3&4-Methylphenol (m&p Cresol)	< 0.0077	mg/L
Nitrobenzene	< 0.0137	mg/L
Pentachlorophenol	< 0.0108	mg/L
Pyridine	< 0.0143	mg/L
2,4,5-Trichlorophenol	< 0.010	mg/L
2,4,6-Trichlorophenol	< 0.0107	mg/L

Notes:

VOCs = Volatile Organic Compounds

mg/kg = milligrams per kilogram = parts per million (ppm)

mg/L = milligrams per liter = parts per million (ppm)

TCLP = Toxicity Characteristic Leaching Procedure

# 7.0 FINDINGS

- Based on field observations, the shallow subsurface soils at the site consisted of fill materials from the ground surface to a depth of approximately 6 feet bgs. The fill materials consisted mainly of red sandy clay, with trace wood and brick fragments, medium to fine sand with gravel, cinders, and glass fragments. Native brown to red clay tills with trace amounts of fine gravel were encountered below the fill materials to the terminal depths of 20 feet bgs. Groundwater was encountered in each temporary well, at depths ranging from 7.2 to 14.2 feet bgs.
- No GRO was detected in any of the samples collected. DRO was detected in B-11-1 2-4' below the NR 720 RCL.
- Two VOCs were detected in two of the soil samples. Tetrachloroethene and trichloroethene were both detected in B-11-1 8-10' and B-11-2 10-12'. No NR 720 RCL has been established for either of these VOCs.

- Six of the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, and mercury) were detected in the soil samples. Arsenic was detected above the NR 720 RCL in each of the six samples. Chromium was detected in each of the soil samples. Concentrations in five samples were detected above the NR 720 RCL, hexavalent chromium only. Lead was detected in each of the samples analyzed at concentrations which are below the NR 720 RCL. No standards exist for barium and mercury detected in the samples
- No petroleum constituents were detected in any of the water samples.
- Trichloroethene was detected above the NR 140 ES in each of the three samples. Tetrachloroethene was detected above the NR 140 ES in MW-11-1 and MW-11-2 and above the NR 140 PAL in MW-11-3. Vinyl chloride was detected above the NR 140 ES in MW-11-1 and MW-11-2. Cis-1,2-dichloroethene was detected in MW-11-1 and MW-11-2 above the NR 140 PAL. Trans-1,2-dichloroethene and 2-butanone (MEK) were also detected in MW-11-1, but are below their respective NR 140 PALs.
- Arsenic was identified in MW-11-2, chromium was identified in MW-11-3, and lead was identified in MW-11-1, and are all above their respective NR 140 PAL. Barium was detected below the NR 140 PAL in all samples.
- Based on the laboratory analytical results, no cyanide, PCBs, TCLP VOCs, and TCLP Semi-volatiles were detected in the waste characterization sample. The general chemistry results for the sample included: flashpoint >210 deg. F, pH 8.4, specific gravity 1.6, sulfide 10.4 J mg/kg. No free liquids were encountered in the sample.
- Based on the age of the building (at least 1893), potential asbestos containing materials (ACM) and lead based paint (LBP) may be present in the building on site.

# 8.0 CONCLUSIONS AND RECOMMENDATIONS

- Based on the results of Himalayan's Phase 2 HMI, evidence of hazardous substance release (chlorinated solvent impacts) was documented at the site. Therefore, Himalayan recommends that a Phase 3 hazardous materials investigation (FDM Procedure: 21-35-15) be considered for the site to fully characterize and define the lateral and vertical extent of soil and groundwater contamination and assist in determining the value of the parcel for acquisition purposes, prior to the total take of the site.
- The impacts discovered at the site should be reported to the WDNR in order to satisfy the notification requirements per hazardous substance spills law, Section 292.11(2).

 Pre-demolition asbestos and lead surveys should be performed to evaluate whether ACMs or LBP are present in the structure. All demolition activities should be performed in accordance with local, state, and federal regulations.

# 9.0 REFERENCES

- 1. Winnebago County GIS Website. WINGS Property Profiler. http://wcgis.co.winnebago.wi.us/cgi-bin/wings/doc/gis\_menu.cgi
- 2. Himalayan Consultants, LLC, (August 2012). Phase I Hazardous Material Assessment, WisDOT Project ID 1030-20-00, STH 116 Corridor Study (2nd Street 2nd Avenue), Winneconne, Winnebago County, Wisconsin.
- 3. Wisconsin Department of Agriculture, Trade and Consumer Protection Storage Tank Database –http://apps.commerce.state.wi.us/ER\_Tanks/ER-EN-TankSearch.htm
- 4. Wisconsin Department of Transportation (December 2011). Facilities Development Manual, Procedures 21-35-10 and 21-35-30.
- 5. Wisconsin Department Natural Resources (March 2011). Wisconsin Administrative Code NR 141, Groundwater Monitoring Well Requirements.
- 6. Wisconsin Department Natural Resources (September 2007). Wisconsin Administrative Code NR 720, Soil Cleanup Standards.
- 7. Wisconsin Department Natural Resources (January 2012). Wisconsin Administrative Code NR 140, Groundwater Quality.

# **ATTACHMENTS**

Attachment A. Figures

Figure 3.1. Site Overview Map Figure 3.2. Soil Quality Map

Figure 3.3. Groundwater Quality Map

Attachment B. Soil Boring Logs and Borehole Abandonment Forms

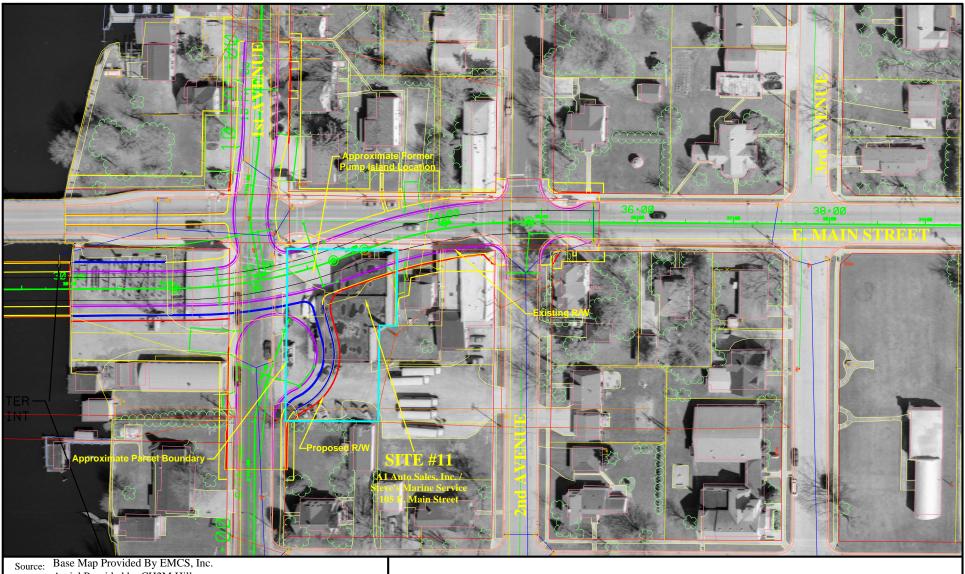
Attachment C. Well Construction Forms

Attachment D. Laboratory Analytical Reports - Soil, Groundwater, and Waste

Characterization

Attachment E. Site Photographs

# ATTACHMENT A FIGURES



Source: Base Map Provided By EMCS, Inc.
Aerial Provided by CH2M Hill

0 50 100 200

# FIGURE 3.1: SITE OVERVIEW MAP

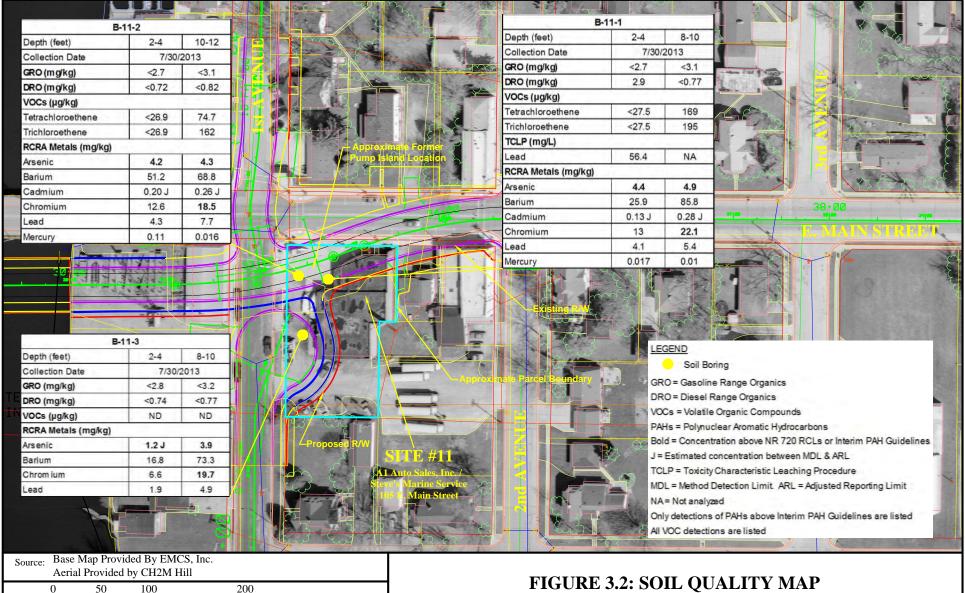


# HIMALAYAN CONSULTANTS, LLC

Engineers and Hydrogeologists W156 N11357 Pilgrim Road Germantown, Wisconsin 53022 Phone: (262) 502-0066

Phone: (262) 502-0066 Fax: (262) 502-0077 Project ID: 6190-17-00 STH 116 2nd Street - 2nd Avenue Winneconne, Winnebago County, Wisconsin







Scale:

# HIMALAYAN CONSULTANTS, LLC

Engineers and Hydrogeologists W156 N11357 Pilgrim Road Germantown, Wisconsin 53022 Phone: (262) 502-0066

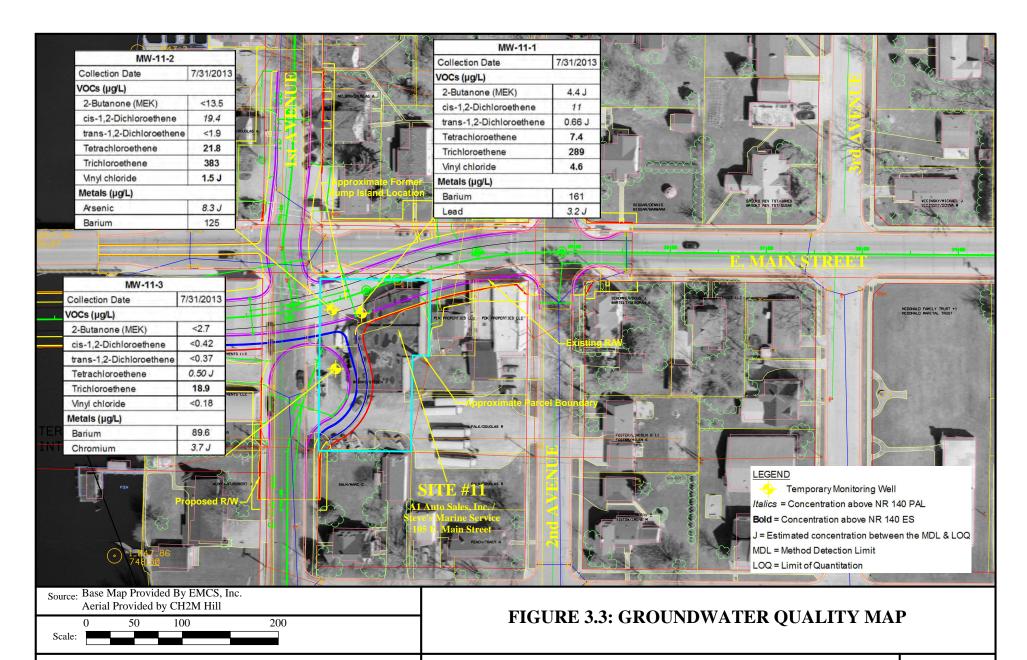
Fax: (262) 502-0077

# FIGURE 3.2: SOIL QUALITY MAP

**Project ID: 6190-17-00 STH 116** 2nd Street - 2nd Avenue

Winneconne, Winnebago County, Wisconsin







# HIMALAYAN CONSULTANTS, LLC

Engineers and Hydrogeologists W156 N11357 Pilgrim Road Germantown, Wisconsin 53022 Phone: (262) 502-0066

Phone: (262) 502-0066 Fax: (262) 502-0077 Project ID: 6190-17-00 STH 116

2nd Street - 2nd Avenue Winneconne, Winnebago County, Wisconsin

# Table 1 Summary of Soil Analytical Results Phase 3, STH 116 (Wolf River Bridge) Winneconne, WI WISDOT ID #6190-17-00

	SAMPLE ID/ SAMPLE DEPTH (FT BGS)																																
														SAMPL	E ID/ SAMPLE	DEPTH (FT E	BGS)																
		Si	te 5			Si	ite 8						s	ite 9						Site	11					Site	12				NR 720 RCLs F	OR SOIL <sup>(4)</sup>	
		GP5-1	GP5-1	GP8-1	GP8-1	GP8-2	GP8-2	GP8-3	GP8-3	GP9-1	GP9-1	GP9-2	GP9-2	GP9-3	GP9-3	GP9-4	GP9-4	GP11-1	GP11-1	GP11-2	GP11-2	GP11-3	GP11-3	GP12-1	GP12-1	GP12-2	GP12-2	GP12-3	GP12-3				
ANALYTE		2.5-5	10-12.5	5-7.5	12.5-15	2.5-5	7.5-10	5-7.5	12.5-15	2.5-5	7.5-10	5-7.5	7.5-10	2.5-5	7.5-10	5-7.5	10-12.5	2.5-5	7.5-10	2.5-5	12.5-15	5-7.5	12.5-15	2.5-5	12.5-15	5-7.5	12.5-15	10-12.5	17.5-20		(3)	(3)	BACKGROUND
DATE		9/17/2014	9/17/2014	9/14/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/14/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/17/2018	9/17/2018	9/18/2014	9/18/2014	9/18/2014	9/18/2014	9/18/2014	9/18/2014	9/18/2014	9/18/2014	9/18/2014	9/18/2014	GW	NON-INDUSTRIAL <sup>(3)</sup> DIRECT	INDUSTRIAL <sup>(3)</sup> DIRECT	SURFICIAL
PID	PPM	1.3	0.1	126.7	0.5	1.2	10.8	0.8	1.1	28.1	0.8	0.7	0.3	1.0	0.8	0.9	1.1	1.1	1.7	2.6	10.7	4.3	6.1	1.8	6.2	1.6	2.7	64.2	689.2	PATH <sup>(2)</sup>	CONTACT	CONTACT	BTV <sup>(5)</sup>
					•				•																			•	•	•			•
DRO	mg/kg			448	1.6J	38.4	9.8	31.1	6.3															<0.77	0.79J	0.80J	1.0J	0.83J	1.1J	-	-	-	-
GRO	mg/kg									<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5							<2.5	<2.5	<2.5	<2.5	4.0J	20.5	-	-		-
VOCs					•				•																								
ETHYLBENZENE	μg/kg	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	474	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	1.570	7.470	37.000	-
ISOPROPYLBENZENE (CUMENE)	μg/kg	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	162	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	-	268.000	268.000	-
TRICHLOROETHYLENE	μg/kg	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	86.5	579	<25	49.7J	<25	<25	<25	430	<25	522	<25	191	<25	<25	8360	61300	3.6	1,260	8,810	-
NAPHTHALENE	μg/kg	<40	<40	<80	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	236J	<40	<40	<40	<40	<40	<40	<40	<40	<160	<801	659	5,150	26,000	-
TOLUENE	μg/kg	<25	<25	85.7J	<25	35.6J	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	1,107	818,000	818,000	-
1,2,4-TRIMETHYLBENZENE	μg/kg	<25	<25	<50	<25	39.9J	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	46.6J	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	1,382 <sup>(6)</sup>	89,800	219,000	-
1.3.5-TRIMETHYLBENZENE	μg/kg	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	730	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	1.382 <sup>(6)</sup>	182.000	182.000	-
METHYLENE CHLORIDE	μg/kg	35.1J	<25	54.2J			31.0J	25.2J	30.9J	<25	<25	<25	<25	<25	<25	<25	<25		<25	<25	27.4J		<25	<25	<25	<25	<25	<100	<500	2.6	60,700	1,070,000	1
M&P-XYLENE	µg/kg	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	59.5J	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<200	<1000	3.940 <sup>(7)</sup>	258.000 <sup>(7)</sup>	258.000 <sup>(7)</sup>	-
O-XYLENE	μg/kg	<25	<25	<50	<25	33.0J	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	3.940 <sup>(7)</sup>	258.000 <sup>(7)</sup>	258.000 <sup>(7)</sup>	_
N-PROPYLBENZENE	μg/kg	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	772	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	3,340	264.000	264.000	<del>                                     </del>
P-ISOPROPYLTOLUENE	μg/kg	<25	<25	572	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	52.1J	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	-	162.000	162,000	-
SEC-BUTYLBENZENE	µg/kg	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	123	<25	<25	<25	<25	<25	<25	<25	<25	<100	<500	-	145.000	145,000	-
PAHs	F3**3																														,		1
ACENAPHTHENE	μg/kg	<8.3	<8.3	<16.7	<8.3	<8.3	<8.3	9.8J	18.5																					-	3,440,000	33,000,000	-
ACENAPHTHYLENE	μg/kg	10.2J	<7.5	30.8J	<7.5	64.1	<7.5	14.9J	51.8																					-	-	-	-
ANTHRACENE	μg/kg	30.1	<8.6	65.4	<8.6	148	<8.6	82.2	141																					197,727	17,200,000	100,000,000	-
BENZO(A)ANTHRACENE	μg/kg	90.4	15.1J	156	<5.8	120	<5.8	173	265																					-	148	2,110	-
BENZO(A)PYRENE	μg/kg	93.7	15.5J			169	<6.0	157	241																					470	15	211	-
BENZO(B)FLUORANTHENE	μg/kg	71.3	12.4J	136	<8.3	233	<8.3	112	183																					479	148	1,280	-
BENZO(G,H,I)PERYLENE	μg/kg	50.8	10.4J	93.2	<6.3	84.5	<6.3	92.9	142																					-	-	-	-
BENZO(K)FLUORANTHENE	μg/kg	79.3	16.6J	140	<9.2	136	<9.2	146	200																						1,480	21,100	-
CHRYSENE	μg/kg	103	23.8	226	<7.7	192	<7.7	188	277																					144.6	14,800	211,000	-
DIBENZ(A,H)ANTHRACENE	μg/kg	14.9J	<6.1	36.1	<6.1	34.4	<6.1	23	35.8																					- 00.077.0	15	211	-
FLUORANTHENE FLUORENE	µg/kg	172 <8.3	42.9 <8.3	332 <16.7	<8.3 <8.3	165 22.2	9.5J <8.3	417 17.6	677 66.4																					88,877.8 14.802.7	2,290,000 2,290,000	22,000,000	-
INDENO(1,2,3-CD)PYRENE	μg/kg	43.4	<8.3 8.0J	76.8			<6.3	79.6	126																					14,802.7	2,290,000	22,000,000	-
1-METHYLNAPHTHALENE	μg/kg μg/kg	<8.3	<8.3	175		139	<8.3	<8.3	<8.3																					-	15.600	53.100	<del>                                     </del>
2-METHYLNAPHTHALENE	μg/kg μg/kg	<8.3	<8.3	220	<8.3	174	<8.3	<8.3	<8.3																					-	229.000	2,200,000	+
PHENANTHRENE	μg/kg μg/kg	82.8	24.5	252	<8.3	201	8.4J	210	451																						-	-,200,000	<del>-</del>
PYRENE	μg/kg μg/kg	161	35.5	301	<8.3	158	<8.3	365	567												<del>  </del>					<del>   </del>				54.132	1.720.000	-	<u> </u>
METALS	руглу	101	00.0	001	NO.0	100	~0.0	. 000																						04,102	1,120,000		•
ARSENIC	mg/kg	3.5	4.4	3.5	2.1	6.6	3	2.5	3.9									2.2	3.2	3.7	2.9	2.6	5.8	3	4.8	3.1	2.7	3.8	3.3	0.58	0.613	2.39	8.0
BARIUM	mg/kg	58.2	67.8	94.9	21.8	79.5	65.2	43	71.2									37.2	55.2	100	56	38.1	55	50.6	63.5	53.2	52	54	44.9	164.80	15.300	100.000	364
CADMIUM	mg/kg	0.26J	<0.063	1.1		0.34J	<0.058	0.26J	<0.061									<0.057	<0.063	<0.057	<0.066	<0.065	<0.060	<0.066		<0.063	<0.060		<0.064	0.75	70	799	1.0
CHROMIUM	mg/kg	9.9	18.3	12		8.8	20.2	8.7	19.1									14.4	18.6	28.8	18.1	16	16.9	18.9	16.2	14.6	17.6	14.3	12.2	360,000	100,000	100,000	44
LEAD	mg/kg	67.8	7.4	167	3.6	37.4	4.3	70.1	9.6									4	4.3	14.1	4.4	5.5	3.7	4.7	4.4	3.9	4.2	4.6	3.6	27	400	800	52
MERCURY	mg/kg	0.41	0.007	14.7	0.0032J	0.023	0.0050J	0.12	0.0059J									0.016	0.0072	0.045	0.0055J		0.0054J	0.0079	0.0065	0.0061	0.0049J	0.0039J	0.0045J	0.208	3.13	3.13	-

HAZARD INDEX (CUMULATIVE) (8)

NON-INDUSTRIAL	1								
INDUSTRIAL									
CANCER RISK (CUMULATIVE)(8)									
NON-INDUSTRIAL									

- RCLs = Residual Contaminant Levels.
  BTV = Background Threshold Value
  J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- =Suggested standard has not been established for this analyte.

-- = Sample was not analyzed for given analyte.

Bold = indicates that the analyte and/or sample exceeds the NR 720 RCL for direct contact (non-industrial or industrial), or standards for hazard index or cancer risk. italics = indicates that the analyte exceeds the groundwater pathway RCL

- Footnotes:

  Only analytes that were detected in at least one sample are shown in the table.

  Value is the generic RCL for the groundwater pathway.

  Value is the generic RCL for exposure by direct contact.

  Calculated from USEPA Regional Screening Levels Web Calculator found at http://epa-prgs.oml.gow/cgi-bin/chemicals/csl\_search using default exposure assumptions listed in NR 720.12(3)

  Background threshold value taken from the Wisconsin DNR's NR 720 RCL Spreadsheet

  GW Pathway RCL is for combined 1,2,4 and 1,3,5 Trimethylbenzene

  GW Pathway and Direct Contact RCL is for combined M,0&P Xylenes

  Calculated using WDNR RCL Spreadsheet Calculator (June-14 Update)

1.38 10.13 0.294 2.158 **6.60E-06 4.90E-05** 9.50E-07 7.00E-06 1.0E-05 1.0E-05

> Created By: B. Lipp 10/14/2014 Checked By: D. Haak 10/15/2014

# Table 2 Summary of Groundwater Analytical Results Phase 3, STH 116 (Wolf River Bridge) Winneconne, WI WISDOT ID #6190-17-00

				WELL ID/DTB (FT BGS)													
		WDNR	ND 140	Site 5		Sit	e 8			Site 9			Site 11			Site 12	
		GROUNE		TW5-1	TW8-1	TW8-2	TW8-3	TRC-8-1	TW9-1	TW9-2	TW9-3	TRC-11-1	TRC-11-2	TRC-11-3	TRC-12-1	TRC-12-2	TRC-12-3
		STAND	ARDS	15'	15'	15'	15'	15'	10'	10'	10'	15'	15'	15'	15'	15'	25'
ANALYTE <sup>(1)</sup>		ES	PAL	9/17/2014	9/17/2014	9/17/2014	9/17/2014	9/22/2014	9/17/2014	9/17/2014	9/14/2014	9/22/2014	9/22/2014	9/22/2014	9/22/2014	9/22/2014	9/22/2014
VOCs						<u> </u>			Į.	Į.	Į.		Į.			!	
BENZENE	μg/L	5	0.5	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	35.8	<5.0	< 0.50	< 0.50	< 0.50	<50.0
N-BUTYLBENZENE	μg/L	-	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.5	<5.0	< 0.50	< 0.50	< 0.50	<50.0
1,1-DICHLOROETHENE	ug/L	7	0.7	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	1.0 J	<4.1	< 0.41	<0.41	< 0.41	<41.0
CIS-1,2-DICHLOROETHENE	ug/L	70	7	<0.26	<0.26	<0.26	<0.26	<0.26	0.33 J	<0.26	9.1	137	<2.6	< 0.26	1.1	<0.26	27.0 J
TRANS-1,2-DICHLOROETHENE	ug/L	100	20	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	0.32 J	1.3 J	<2.6	< 0.26	2.5	<0.26	<25.7
ETHYLBENZENE	ug/L	700	140	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	97.9	<5.0	< 0.50	< 0.50	< 0.50	<50.0
ISOPROPYLBENZENE (CUMENE)	μg/L	-	-	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	11.8	<1.4	<0.14	<0.14	<0.14	<14.3
P-ISOPROPYLTOLUENE	ug/L	-	-	0.58 J	3.8	< 0.50	< 0.50	146	< 0.50	< 0.50	< 0.50	1.5 J	< 5.0	< 0.50	< 0.50	< 0.50	<50.0
METHYL-TERT-BUTYL ETHER	ug/L	60	12	<0.17	<0.17	0.27 J	<0.17	<0.17	<0.17	0.42 J	<0.17	<0.44	<1.7	< 0.17	<0.17	< 0.17	<17.4
NAPHTHALENE	μg/L	100	10	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	23.3	<25.0	<2.5	<2.5	<2.5	<250
N-PROPYLBENZNE	ug/L	-	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22.4	<5.0	< 0.50	< 0.50	< 0.50	<50.0
TETRACHLOROETHENE	ug/L	5	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	<5.0	< 0.50	< 0.50	< 0.50	<50.0
TOLUENE	μg/L	800	160	< 0.50	0.94 J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13.7	< 5.0	< 0.50	< 0.50	< 0.50	<50.0
TRICHLOROETHENE	ug/L	5	0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	53.5	130	1,030	64.8	127	< 0.33	19,600
1,2,4-TRIMETHYLBENZENE	ug/L	480 <sup>(3)</sup>	96 <sup>(3)</sup>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.1	< 5.0	< 0.50	< 0.50	< 0.50	<50.0
1,3,5-TRIMETHYLBENZNE	ug/L	480(3)	96 <sup>(3)</sup>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23.0	< 5.0	< 0.50	< 0.50	< 0.50	<50.0
VINYL CHLORIDE	ug/L	0.2	0.02	<0.18	<0.18	<0.18	<0.18	<0.18	17.1	<0.18	8.7	< 0.44	<1.8	<0.18	<0.18	<0.18	<17.6
M&P-XYLENE	ug/L	2000(4)	400(4)	<1.0	<1.0	<1.0	1.3 J	<1.0	<1.0	<1.0	<1.0	19.2	<10.0	<1.0	<1.0	<1.0	<100
O-XYLENE	μg/L	2000(4)	400(4)	< 0.50	< 0.50	< 0.50	0.69 J	< 0.50	< 0.50	< 0.50	< 0.50	<1.2	< 5.0	< 0.50	< 0.50	< 0.50	<50.0
DISSOLVED METALS																	
ARSENIC, DISSOLVED	μg/L	10	1	<7.2	<7.2	<6.8	<7.2	<7.2	9.0 J	11.7 J	<7.2	8.3 J	<7.2	<7.2	<7.2	<7.2	<7.2
BARIUM, DISSOLVED	μg/L	2000	400	32.6	574	122	176	228	287	266	118	108	52.1	116	82.2	123	41.1
CADMIUM, DISSOLVED	μg/L	5	0.5	< 0.60	< 0.60	<1.0	< 0.60	< 0.60	1.8 J	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	0.63 J	< 0.60	<0.60
CHROMIUM, DISSOLVED	μg/L	100	10	<2.1	<2.1	2.0J	<2.1	<2.1	39	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1
LEAD, DISSOLVED	μg/L	15	1.5	6.5J	<3.0	5.7J	<3.0	3.6 J	198	5.5 J	<3.0	<3.0	<3.0	<3.0	<3.0	3.4 J	3.1 J
MERCURY, DISSOLVED	μg/L	2	0.2	<0.10	<0.10	<0.10	<0.10	<0.10	0.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
SELENIUM, DISSOLVED	μg/L	50	10	<6.7	<6.7	<6.8	<6.7	<6.7	<6.8	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7
SILVER, DISSOLVED	μg/L	50	10	<2.7	<2.7	<3.2	<2.7	<2.7	<3.2	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7

Notes:

ES = NR140 Enforcement Standard

PAL = NR140 Preventative Action Limit

BGS = Below ground surface

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

B = Analyte was detected in the associated method blank.

- =Suggested standard has not been established for this analyte.

ITALIC = indicates that the analyte exceeds the WDNR NR140 PAL

f BOLD = indicates that the analyte exceeds the WDNR NR140 ES

### Footnotes:

(1) Only analytes with hits are shown in the graph

(2) Heavy oil free product seen while purging well prior to groundwater sample being taken

(3) NR 140 Groundwater ES and PAL Standard is for combined 1,2,4- and 1,3,5- Trimethylbenzene

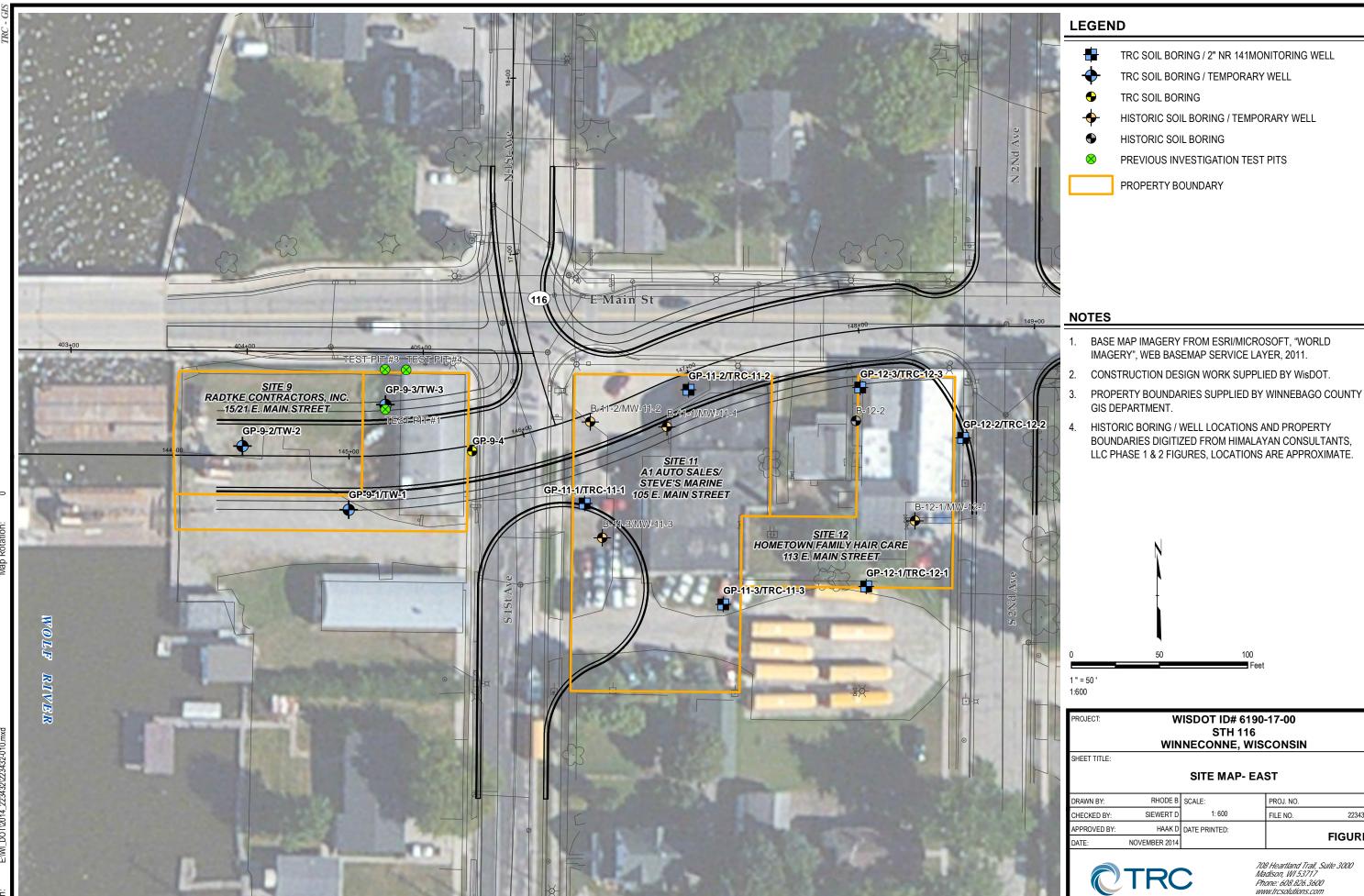
(4) Groundwater ES and PAL is for combined M,O&P Xylenes

Created By: T.Krause 10/14/14 Checked By: D. Haak 10/15/2014

SITE LOCATION MAP

NOVEMBER 2014

DATE:



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

223432

223432-010.mxd

FIGURE 2



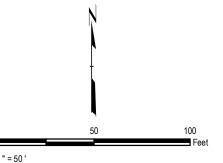
# **LEGEND**

- TRC SOIL BORING / 2" NR 141MONITORING WELL
- TRC SOIL BORING / TEMPORARY WELL
- HISTORIC SOIL BORING / TEMPORARY WELL
- HISTORIC SOIL BORING

PROPERTY BOUNDARY

# **NOTES**

- BASE MAP IMAGERY FROM ESRI/MICROSOFT, "WORLD IMAGERY", WEB BASEMAP SERVICE LAYER, 2011.
- 2. CONSTRUCTION DESIGN WORK SUPPLIED BY WisDOT.
- PROPERTY BOUNDARIES SUPPLIED BY WINNEBAGO COUNTY GIS DEPARTMENT.
- 4. HISTORIC BORING / WELL LOCATIONS AND PROPERTY BOUNDARIES DIGITIZED FROM HIMALAYAN CONSULTANTS, LLC PHASE 1 & 2 FIGURES, LOCATIONS ARE APPROXIMATE.



# WISDOT ID# 6190-17-00 STH 116 WINNECONNE, WISCONSIN

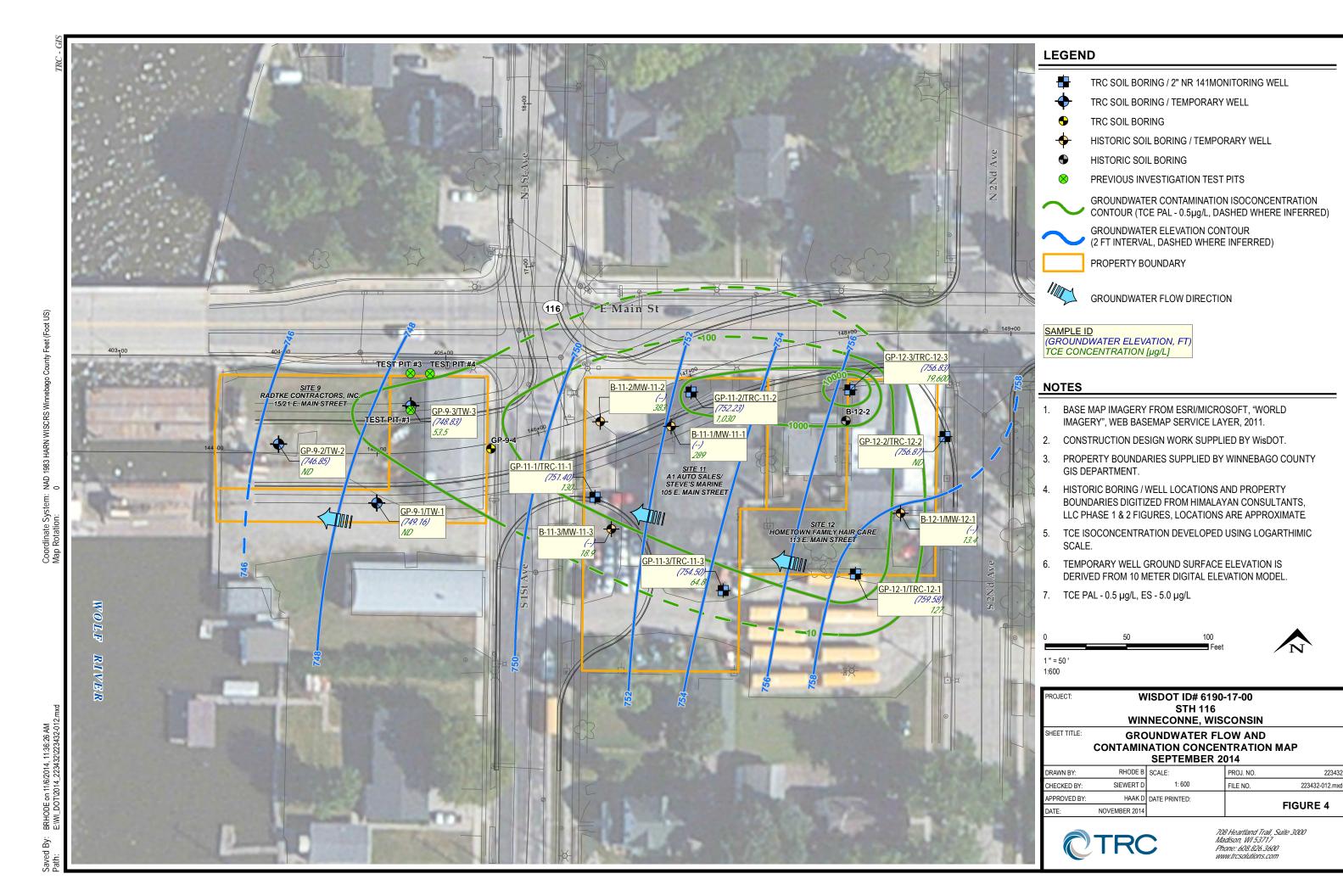
SHEET TITLE:

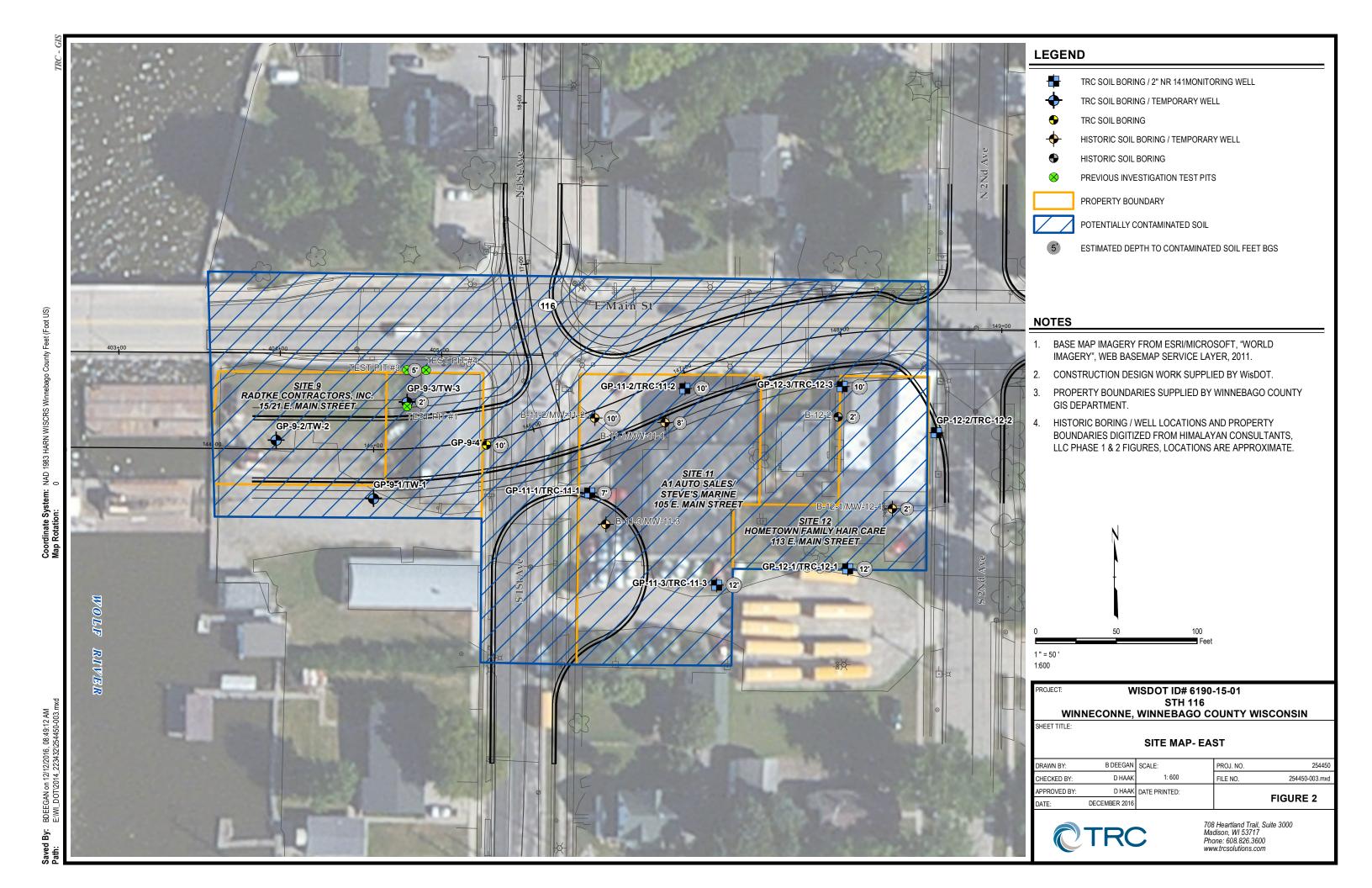
# SITE MAP- WEST

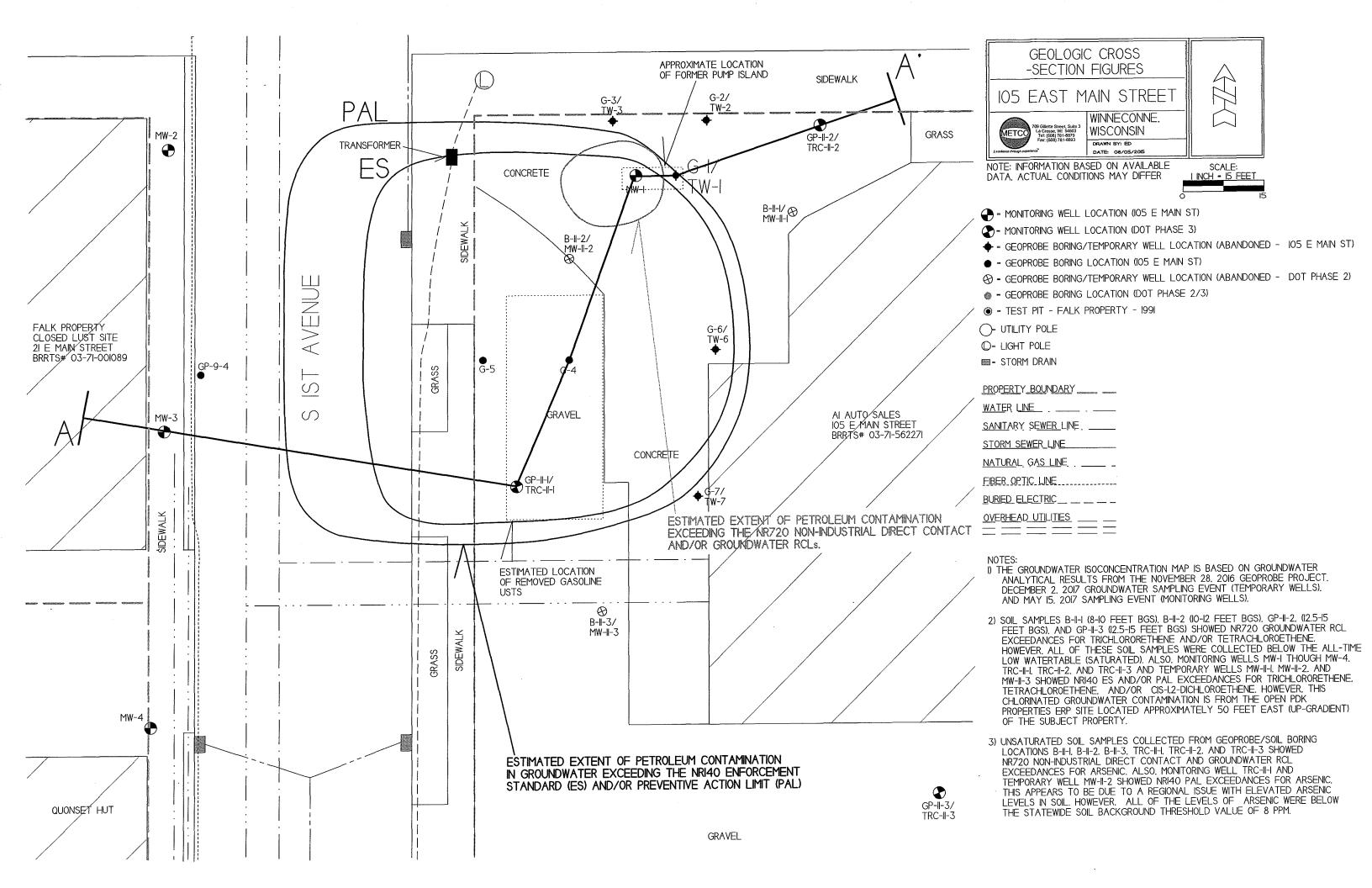
DRAWN BY:	RHODE B	SCALE:	PROJ. NO.	223432
CHECKED BY:	SIEWERT D	1: 600	FILE NO.	223432-011.mxd
APPROVED BY:	HAAK D	DATE PRINTED:		FIGURE 6
DATE:	NOVEMBER 2014			FIGURE 3

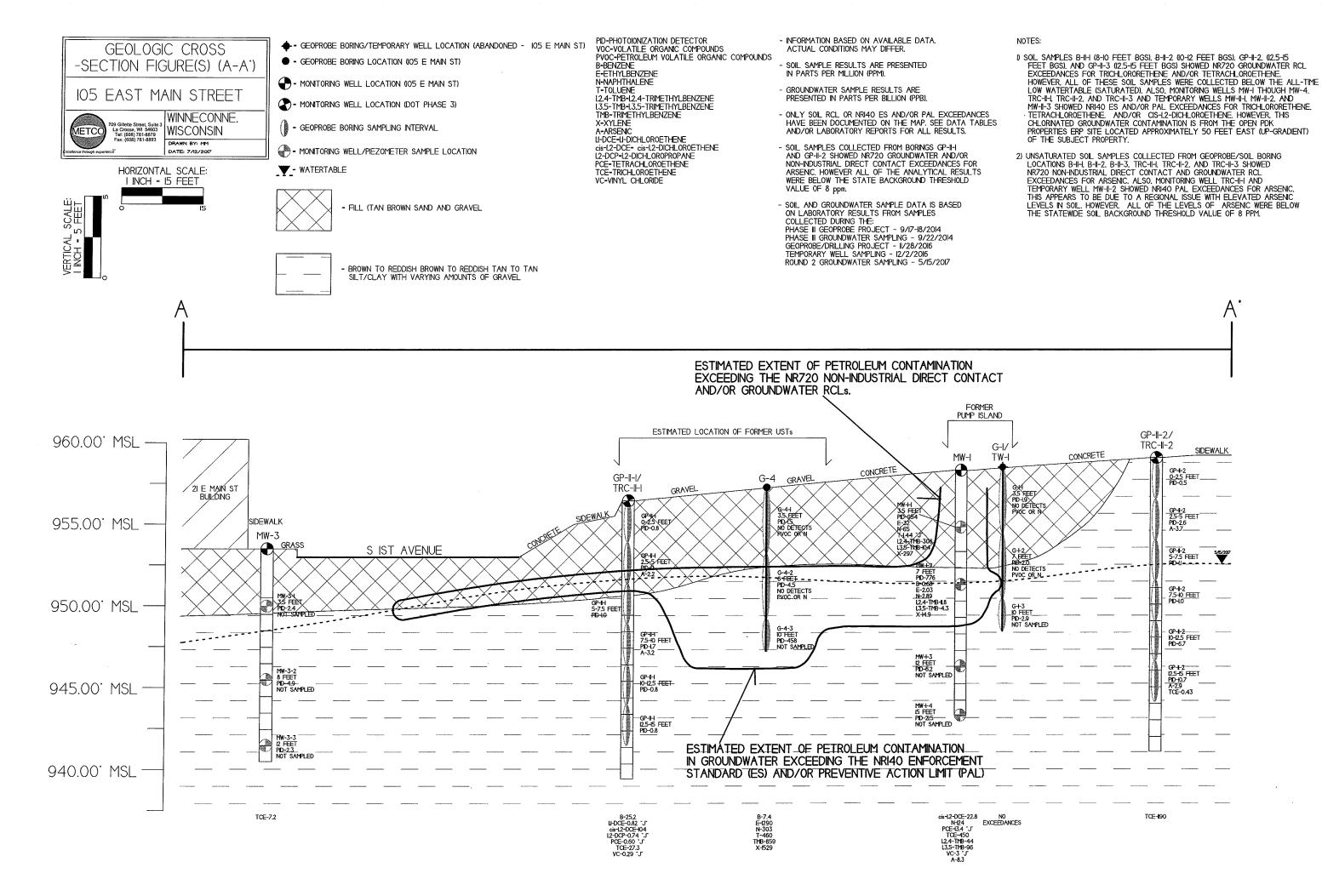


708 Heartland Trail, Suite 3000 Madison, WI 53717 Phone: 608.826.3600 www.trcsolutions.com









A.2 Soil Analytical Results Table 105 E. Main St. Property – WI DOT BRRTS 03-71-562271

																		NTACT PVOC/ ETALS COMBIN	
Sample	Depth	Saturation	Date	PID	Lead	DRO	GRO	1	Ethyl	T	Naph-		1,2,4-Trime-	1,3,5-Trime-	Xylene	Other VOC's		I COMBIN	Cumulative
ID	(feet)	U/S			(ppm)	(ppm)	(ppm)	Benzene	Benzene	MTBE	thalene	Toluene	thylbenzene	thylbenzene	(Total)	(ppb)	Exeedance	Hazard	Cancer
					<u> </u>			(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)		Count	Index	Risk
B-11-1	2-4	U	07/30/13	0.0	4.1	2.9	<2.7				i	NO DETE	CTS			VOC's & RCRA Metals	1	1.08E-03	0
	-			+	1	<del> </del>		<del> </del>							***************************************	VOC's &			
B-11-1	8-10	S	07/30/13	0.0	5.4	<0.77	<3.1	ļ				NO DETE	CTS			RCRA Metals			
B-11-2	2-4	U	07/30/13	0.0	4.3	<0.72	<2.7					NO DETE	CTS			VOC's &	1	7.01E-03	0
		<u> </u>	01700710	+	<del> </del>			ļ								RCRA Metals VOC's &	`	,,,,,,	
B-11-2	10-12	S	07/30/13	0.0	7.7	<0.82	<3.1				1	NO DETE	CTS			RCRA Metals			
B-11-3	2-4	U	07/30/13	0.0	1.9	<0.74	<2.8					NO DETE	TC.			VOC's &	1	0	0
D-11-3	2-4		07/30/13	0.0	1.9	V0.74	\2.0				·····	NO DETE				RCRA Metals	1	, ,	ļ ,
B-11-3	8-10	S	07/30/13	0.0	4.9	<0.77	<3.2					NO DETE	CTS			VOC's & RCRA Metals			
00.44.4	055		00/47/44	1	1.0	110			1	.0.005	T	1	0.005		.0.075	VOC's &		4.005.00	4.005.00
GP-11-1	2.5-5	U	09/17/14	1.1	4.0	NS	NS	<0.025	<0.025	<0.025	<0.040	<0.025	<0.025	<0.025	<0.075	RCRA Metals	1	1.62E-03	4.28E-08
GP-11-1	7.5-10	s	09/17/14	1.7	4.3	NS	NS	<0.025	0.474	<0.025	0.236 "J"	<0.025	0.0466 "J"	0.73	<0.075	VOC's &			
ļ									<u> </u>			<del> </del>				RCRA Metals VOC's &			<b>ļ</b>
GP-11-2	2.5-5	U	09/18/14	2.6	14.1	NS	NS	<0.025	<0.025	<0.025	<0.040	<0.025	<0.025	<0.025	<0.075	RCRA Metals	1	2.87E-03	0
GP-11-2	12.5-15	S	09/18/14	10.7	4.4	NS	NS	<0.025	<0.025	<0.025	<0.040	<0.025	<0.025	<0.025	<0.075	VOC's &			
G1 -11-2	12.5-15		09/10/14	10.7	4.4	INO	IVO	<0.025	<0.025	\0.025	~0.040	V0.025	<b>\0.023</b>	V0.025	V0.075	RCRA Metals			
GP-11-3	5-7.5	U	09/18/14	4.3	5.5	NS	NS	<0.025	<0.025	<0.025	<0.040	<0.025	<0.025	<0.025	<0.075	VOC's & RCRA Metals			
05.44.0	10.5.15		20110111	1					<b></b>							VOC's &			<u> </u>
GP-11-3	12.5-15	S	09/18/14	6.1	3.7	NS	NS	<0.025	<0.025	<0.025	<0.040	<0.025	<0.025	<0.025	<0.075	RCRA Metals			
G-1-1	3.5	U	11/28/16	1.9	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0		
G-1-2	7.0	S	11/28/16	2.0	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-1-3 G-2-1	10.0 3.5	S	11/28/16 11/28/16	2.9 NM	NS NS	NS NS	NS NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS NS	0		
G-2-1	7.0	S	11/28/16	2.0	NS NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS NS	0		
G-2-3	10.0	S	11/28/16	3.4	110	110	110	40.020	10.020		SAMPLED		10.020	-0.020	-0.070	NS			
G-3-1	4.0	U	11/28/16	2.5	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0		
G-3-2	7.0	U	11/28/16	2.3	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-3-3	10.0	S	11/28/16	2.6							SAMPLED					NS			
G-4-1	3.5	U	11/28/16	1.5	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0		
G-4-2 G-4-3	6.0 10.0	S S	11/28/16 11/28/16	4.5 458.0	NS	NS	NS	<0.025	<0.025	<0.025	<0.025 SAMPLED	<0.025	<0.025	<0.025	<0.075	NS NS			
G-4-3 G-5-1	3.5	<del>-</del> 0	11/28/16	0.8	NS T	NS	NS	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS NS	0		
G-5-2	5.0	Ū	11/28/16	0.9	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	Ü		
G-5-3	10.0	S	11/28/16	95.0	110_1			0.020	0.020		SAMPLED		0.0_0			NS			
G-6-1	3.5	U	11/28/16	2.5	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0		
G-6-2	6.0	U	11/28/16	3.7	NS	NS	NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-6-3	10.0	S	11/28/16	208.0	T						SAMPLED					NS	0		<b> </b>
G-7-1 G-7-2	3.5 7.0	U S	11/28/16 11/28/16	1.5	NS NS	NS NS	NS NS	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025 <0.025	<0.025 <0.025	<0.075	NS NS			<b> </b>
G-7-2 G-7-3	10.0	S	11/28/16	3.7	142 T	143	INO	<0.025	<0.025	<0.025	<0.025 SAMPLED	<0.025	<0.025	<0.025	<0.075	NS NS			
MW-1-1	3.5	Ü	11/28/16	954.0	NS	NS	NS	<0.32	32	<0.5	65	1.44	306	104	297*	NS	4	1.87E+00	1.58E-05
MW-1-2	7.0	S	11/28/16	776.0	NS	NS	NS	0.68	2.03	<0.25	2.89	<0.25	11.8	4.3	14.9	NS			
MW-1-3	12.0	S	11/28/16	6.2	<u> </u>	<u> </u>				NOT S	SAMPLED			•		NS			
MW-1-4	15.0	S	11/28/16	21.5					***************************************		SAMPLED					NS			
MW-2-1	3.5	U	11/28/16	33.6	NS	NS	NS	<0.025	<0.025		0.149		0.30	0.12	0.231	NS			
MW-2-2 MW-2-3	5.0	U	11/28/16	4.7							SAMPLED SAMPLED					NS NS			
MW-3-1	12.0 3.5	S U	11/28/16 11/28/16	3.9							SAMPLED					NS NS			
MW-3-2	8.0	s	11/28/16	4.9							SAMPLED					NS NS			
MW-3-3	12.0	s	11/28/16	2.3							SAMPLED					NS NS			
MW-4-1	3.5	U	11/28/16	1.5							SAMPLED					NS			
MW-4-2	8.0	S	11/28/16	1.2							SAMPLED					NS			
MW-4-3	12.0	S	11/28/16	1.5						NOT S	SAMPLED					NS			
Grounders (	T DC				37			0.00540	1 5 7	0.007	0.6500	4 4 2			2.00				<del> </del>
Groundwate		Contact RC	·f		27 400	-	-	0.00512 1.6	1.57 8.02	0.027 63.8	0.6582 5.52	1.11 818	1.3 219	182	3.96 260	<u> </u>		1.00E+00	1.00E-05
ndustrial Di	WWW.		<u>'</u>		(800)	-	-	(7.07)	(35.4)	(282)	(24.1)	(818)	(219)	(182)	(258)	-		(1.00E+00)	(1.00E-05)
		entration (C	-sat)*		-	-	-	1820*	480*	8870*	- (24.1)	818*	219*	182*	258*	-		(1.002 - 00)	-
Bold = Grou							<u></u>					· · · · · ·			_				

Bold = Groundwater RCL Exceedance
Bold & Underline = Non Industrial Direct Contact RCL Exceedance
(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance
Bold & Asteric \* = C-sat Exceedance

NS = Not Sampled NM = Not Measured

(ppm) = parts per million DRO = Diesel Range Organics GRO = Gasoline Range Organics

PID = Photoionization Detector

PVOC's = Petroleum Volatile Organic Compounds VOC's = Volatile Organic Compounds

Note: Non-Industrial RCLs apply to this site.

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

DIRECT CONTACT PVOC/VOC & RCRA

A.2 Soil Analytical Results Table 105 E. Main St. Property - WI DOT BRRTS 03-71-562271

Sampling Conducted on November 28, 2016

Sampling Conducted on November 28,	2016																
														Bold =	Bold = Non- Industrial	(Parenthesis & Bold) = Industrial	Asteric * & Bold =Soil
VOC's														Groundwater RCL		Direct Contact RCL	Saturation (C- sat) RCL
Sample ID# Sample Depth/ft.	B-11-1 0-2	B-11-1 8-10	B-11-2 2-4	B-11-2 10-12	B-11-3 2-4	8-10	GP-11-1 2.5-5	GP-11-1 7.5-10	GP-11-2 2.5-5	GP-11-2 12.5-15	GP-11-3 5-7.5	12.5-15	MW-1-1 3.5				
Date	7/30/13	7/30/13	7/30/13	7/30/13	7/30/13	7/30/13	9/17/14	9/17/14	9/18/14	9/18/14	9/18/14	9/18/14	11/28/16				
Solids Percent													82.2				
Benzene/ppm	ND		ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	< 0.32	0.00512 = =	<u>1.6</u> 342	(7.07) (679)	1820* = =
Bromobenzene/ppm	ND		ND	ND	ND	ND	<0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	< 0.78 < 0.3	0.000326	0.418	(1.83)	==
Bromodichloromethane/ppm	ND		ND	ND ND	ND ND	ND ND	<0.025 <0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.46	0.00233	25.4	(113)	==
Bromoform/ppm	ND ND		ND ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.7	==	183	(183)	183*
tert-Butylbenzene/ppm	ND ND		ND	ND	ND	ND	<0.025	0.123	< 0.025	<0.025	<0.025	<0.025	5.7	==	145	(145)	145*
sec-Butylbenzene/ppm	ND		ND	ND	ND	ND	<0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.025	35	==	<u>108</u>	(108)	108*
n-Butylbenzene/ppm Carbon Tetrachloride/ppm	ND		ND	ND	ND	ND	<0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.42	0.00388	<u>0.916</u>	(4.03)	==
Chlorobenzene/ppm	ND		ND	ND	ND	ND	< 0.025	< 0.025	< 0.025	< 0.025	<0.025	<0.025	< 0.78	==	<u>370</u>	(761)	761*
Chloroethane/ppm	ND		ND	ND	ND	ND	< 0.067	< 0.067	< 0.067	< 0.067	< 0.067	< 0.067	< 0.9	0.227	==	==	= =
Chloroform/ppm	ND		ND	ND	ND	ND	< 0.0464	<0.0464	<0.0464	< 0.0464	<0.0464	<0.0464	< 0.52	0.0033	0.454	(1.98)	==
Chloromethane/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 5	0.0155	<u>159</u>	(669)	= =
2-Chlorotoluene/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.58	==	==	==	==
4-Chlorotoluene/ppm	NĐ	ND	ND	ND	ND	ND	< 0.025	< 0.025	<0.025	< 0.025	< 0.025	<0.025	< 0.64	= = 0.000173	= = 0.008	(0.092)	==
1,2-Dibromo-3-chloropropane/ppm	ND		ND	ND	ND	ND	<0.0912	<0.0912	<0.0912	<0.0912	<0.0912	<0.0912	< 1.56 < 0.62	0.000173	8.28	(38.9)	
Dibromochloromethane/ppm	ND		ND	ND	ND	ND	< 0.025	< 0.025	<0.025	< 0.025	<0.025	<0.025 <0.025	< 0.62	0.144	3.74	(16.4)	==
1,4-Dichlorobenzene/ppm	ND		ND	ND	ND	ND	< 0.025	<0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025	< 0.6	1.1528	297	(193)	297*
1,3-Dichlorobenzene/ppm	ND		ND	ND	ND	ND	<0.025 <0.025	<0.025 <0.025	<0.025	<0.025	<0.025	<0.025	< 0.78	1.168	376	(376)	376*
1,2-Dichlorobenzene/ppm	ND		ND	ND ND	ND ND	ND ND	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.86	3.0863	126	(530)	==
Dichlorodifluoromethane/ppm	ND ND		ND ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	< 0.6	0.00284	0.652	(2.87)	540*
1,2-Dichloroethane/ppm	ND		ND	ND	ND	ND	<0.025	<0.025	< 0.025	<0.025	< 0.025	< 0.025	< 0.5	0.4834	5.06	(22.2)	= =
1,1-Dichloroethane/ppm 1,1-Dichloroethene/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.58	0.00502	<u>320</u>	(1190)	1190*
cis-1,2-Dichloroethene/ppm	ND	ND	ND	ND	ND	ND	< 0.025	<0.025	< 0.025	< 0.025	<0.025	< 0.025	< 0.42	0.0412	<u>156</u>	(2340)	==
trans-1,2-Dichloroethene/ppm	ND	ND	ND	ND	ND	ND	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.48	0.626	<u>1560</u>	(1850)	= =
1,2-Dichloropropane/ppm	ND	ND	ND	ND	ND	ND	< 0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	< 0.5	0.00332	0.406	(1.78)	==
2,2-Dichloropropane/ppm	ND	ND	ND	ND	ND	ND	< 0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	< 2	==	<u>191</u>	(191)	191*
1,3-Dichloropropane/ppm	ND	ND	ND	ND	ND	ND	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.62	==	1490 2260	(1490)	1490* 2260*
Di-isopropyl ether/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.24	= =	2260 0.05	(2260) (0.221)	==
EDB (1,2-Dibromoethane)/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.7	0.0000282	<u>0.05</u> 8.02	(35.4)	480*
Ethylbenzene/ppm	ND	ND	ND	ND	ND	ND	< 0.025	0.474	< 0.025	<0.025	<0.025	<0.025 <0.025	<b>32</b> < 2.2	1.57 = =	1.63	(33.4) (7.19)	==
Hexachlorobutadiene/ppm	ND	ND	ND	ND	ND	ND	<0.025	< 0.025	<0.025	<0.025 <0.025	<0.025 <0.025	<0.025	5.8	==	==	==	==
Isopropylbenzene/ppm	ND	ND	ND	ND	ND	ND ND	<0.025 <0.025	0.162 0.0521 "J"	<0.025 <0.025	<0.025	<0.025	<0.025	3.5 "J"	==	162	(162)	162*
p-isopropyltoluene/ppm	ND	ND	ND	ND ND	ND ND	ND	<0.025	<0.025	<0.025		<0.025	<0.025	< 4.4	0.00256	61.8	(1150)	==
Methylene chloride/ppm	ND ND	ND ND	ND ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.0274 0	<0.025	<0.025	< 0.5	0.027	63.8	(282)	8870*
Methyl tert-butyl ether (MTBE)/ppm Naphthalene/ppm	ND		ND	ND	ND	ND	< 0.040	0.236 "J"	< 0.040	< 0.040	< 0.040	< 0.040	<u>65</u>	0.6582	5.52	(24.1)	= =
n-Propylbenzene/ppm	ND	ND	ND	ND	ND	ND	< 0.025	0.772	<0.025	< 0.025	< 0.025	< 0.025	28.4	= =	==	==	==
1,1,2,2-Tetrachloroethane/ppm	ND	ND	ND	ND	ND	ND	< 0.025	< 0.025	< 0.025	< 0.025	<0.025	<0.025	< 0.26	0.000156	<u>0.81</u>	(3.6)	= =
1,1,1,2-Tetrachloroethane/ppm	ND		ND	ND	ND	ND	< 0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.58	0.0534	<u>2.78</u>	(12.3)	==
Tetrachioroethene (PCE)/ppm	< 0.0275		< 0.0269	0.0747	<0.0258	<0.0250	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 1.08	0.00454	<u>33</u>	(145)	==
Toluene/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.025	1.44 "J"	1.11	<u>818</u>	(818) (413)	818* = =
1,2,4-Trichlorobenzene/ppm	ND	ND	ND	ND	ND	ND	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	< 0.0476	< 1.7	0.408 = =	<u>24</u> 62.6	(113) (934)	==
1,2,3-Trichlorobenzene/ppm	ND	ND	ND	ND	ND	ND	< 0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	< 2.4 < 0.8	= = 0.1402	<u>62.6</u> = =	(934) ==	==
1,1,1-Trichloroethane/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025 <0.025	< 0.8 < 0.66	0.00324	1.59	(7.01)	= =
1,1,2-Trichloroethane/ppm	ND		ND	ND	ND	ND 10 0050	<0.025	<0.025	<0.025	<0.025 <b>0.43</b>	<0.025 <0.025	<0.025 <b>0.522</b>	< 0.84	0.00324	1.33 1.3	(8.41)	==
Trichloroethene (TCE)/ppm	<0.0275			0.162	<0.0258	<0.0250	<0.025	<0.025 <0.025	<0.025 <0.025	<0.025	<0.025	<0.025	< 1.2	2.2387	<u>1230</u>	(1230)	1230*
Trichlorofluoromethane/ppm	ND	ND	ND	ND	ND	ND ND	<0.025 <0.025		<0.025	<0.025	<0.025	<0.025	306		<u>219</u>	(219)	219*
1,2,4-Trimethylbenzene/ppm	ND	ND	ND	ND ND	ND ND	ND	<0.025	0.0400 3	<0.025	<0.025	<0.025	<0.025	104	1.38	182	(182)	182*
1,3,5-Trimethylbenzene/ppm	ND ND	ND ND	ND ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	< 0.2	0.000138	0.07	(2.08)	==
Vinyl Chloride/ppm	ND	ND	ND	ND	ND	ND	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<u>206</u>	2.06	260	(260)	258*
m&p-Xylene/ppm	ND	ND	ND	ND	ND	ND	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	91	3.96	200	(200)	250
o-Xylene/ppm	140	.,0	.,,,														

NS = Not Sampled, NM = Not Measured

(ppm) = parts per million

= = No Exceedences

ND = Not Detected

Note: Non-Industrial RCLs apply to this site.

<sup>&</sup>quot;J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

# A.2 Soil Analytical Results Table

(8 - RCRA Metals)

105 E. Main St. Property - WI DOT BRRTS 03-71-562271

												RCRA M	IETALS COM	BINED
Sample	Depth	Saturation	Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver			Cumulative
ID	(feet)	U/S		Total	Total	Total	Total	Total	Total	Total	Total	Exeedance	Hazard	Cancer
				(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	Count	Index	Risk
B-11-1	2-4	U	07/30/13	4.4	25.9	0.13 "J"	13.0	4.1	0.017	ND	ND	1	1.08E-03	0
B-11-1	8-10	S	07/30/13	4.9	85.8	0.28 "J"	22.1	5.4	0.010	ND	ND			
B-11-2	2-4	U	07/30/13	4.2	51.2	0.20 "J"	12.6	4.3	0.11	ND	ND	1	7.01E-03	0
B-11-2	10-12	S	07/30/13	4.3	68.8	0.26 "J"	18.5	7.7	0.016	ND	ND			
B-11-3	2-4	U	07/30/13	1.2 "J"	16.8	<0.047	6.6	1.9	<0.0032	ND	ND	1	0	0
B-11-3	8-10	S	07/30/13	3.9	73.3	<0.23 "J"	19.7	4.9	<0.0076	ND	ND			
GP-11-1	2.5-5	U	09/17/14	2.2	37.2	<0.057	14.4	4.0	0.016	<0.67	<0.24	1	1.62E-03	4.28E-08
GP-11-1	7.5-10	S	09/17/14	3.2	55.2	<0.063	18.6	4.3	0.0072	<0.74	<0.27			
GP-11-2	2.5-5	U	09/18/14	3.7	100	<0.057	28.8	14.1	0.045	<0.66	<0.24	1	2.87E-03	0
GP-11-2	12.5-15	S	09/18/14	2.9	56	<0.066	18.1	4.4	0.0055 "J"	<0.77	<0.28			
GP-11-3	5-7.5	U	09/18/14	2.6	38.1	<0.065	16.0	5.5	0.0096	<0.75	<0.27			
GP-11-3	12.5-15	S	09/18/14	5.8	55	<0.060	16.9	3.7	0.0054 "J"	<0.70	<0.25			
<b>Groundwa</b>				0.584	164.8	.752	360000	27	.208	.520	0.8491		_	-
Non-Indus	<u>trial Dire</u>	<u>ct Contact F</u>	RCL	0.677	<u>15300</u>	<u>71.1</u>	-	<u>400</u>	<u>3.13</u>	<u>391</u>	<u>391</u>		1.00E+00	1.00E-05
Industrial [	Direct Co	ntact RCL		(3)	(100000)	(985)	-	(800)	(3.13)	(8540)	<u>(5840)</u>		(1.00E+00)	(1.00E-05)
Soil Satura	tion Cor	ncentration (	C-sat)*				_	-		-			-	-
State Back	ground	Threshold V	alue	8^	-	-	-	-		-	•		-	-

DIRECT CONTACT PVOC/VOC &

**Bold = Groundwater RCL Exceedance** 

Bold & Underline = Non Industrial Direct Contact RCL Exceedance

(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance

Bold & Asteric \* = C-sat Exceedance

NS = Not Sampled

NM = Not Measured

(ppm) = parts per million

PID = Photoionization Detector

- No Exceedences

ND = Not Detected

A.1 Groundwater Analytical Table (Geoprobe) 105 E. Main St. Property – WI DOT BRRTS 03-71-562271

Sample		T		Ethyl		Naph-	1	Trimethyl-	Xylene
ID	Date	GRO	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)
		(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-11-1	07/31/13	NS	ND	ND	ND	ND	ND	ND	ND
MW-11-2	07/31/13	NS	ND	ND	ND	ND	ND '	ND	ND
MW-11-3	07/31/13	NS	ND	ND	ND	ND	ND	ND	ND
G-4-W	11/28/16	NS	7.4	1290	<2.45	303	460	859	1529
G-5-W	11/28/16	NS	380	222	<4.9	102	112	151	176.9
TW-1	12/02/16	NS	<0.46	<0.73	<0.49	<2.6	< 0.39	1.04-1.87	<2.06
TW-2	12/02/16	NS	<0.46	<0.73	<0.49	<2.6	< 0.39	<1.51	<2.06
TW-3	12/02/16	NS _	<0.46	<0.73	<0.49	<2.6	<0.39	<1.51	<2.06
TW-6	12/02/16	NS	9.4	3.9	<0.49	<2.6	1.65	5.93	1.51-2.91
TW-7	12/02/16	NS	<0.46	<0.73	<0.49	<2.6	<0.39	<1.51	<2.06
ENFORCE MENT STANDA	DD ES Bold		5	700	60	100	800	480	2000
PREVENTIVE ACTION LIM			0.5	140	12	100	160	96	400

NS = Not Sampled

(ppb) = parts per billion GRO = Gasoline Range Organics

# (Geoprobe - Other VOC's)

Sample		2-	cis-1,2 Dich-	trans-1,2 Dich-	Vinyl	Tetrachlo-	Trichloro-
ID	Date	Butanone	loroethene	loroethene	Chloride	roethene	ethene
		(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-11-1	07/31/13	4.41	11	0.66	4.6	7.4	289
MW-11-2	07/31/13	<13.5	19.4	<1.9	1.5	21.8	383
MW-11-3	07/31/13	<13.5	19.4	<1.9	1.5	21.8	383
ENFORCE MENT STANDAR	RD ES = Bold	460	70	100	0.20	5	5
PREVENTIVE ACTION LIMI	EVENTIVE ACTION LIMIT PAL = Italics			20	0.02	0.5	0.5

NS = Not Sampled

(ppb) = parts per billion

# (Geoprobe - Metals)

Sample ID	Date	Arsenic (ppb)	Barium (ppb)	Chromium (ppb)	Lead (ppb)
MW-11-1	07/31/13	<4.2	161	<1.4	3.2 "J"
MW-11-2	07/31/13	8.3 "J"	125	<1.4	<2.7
MW-11-3	07/31/13	<4.2	89.6	3.7 "J"	<2.7
ENFORCE MENT STANDA	RD ES = Bold	10	2000.00	100	15
PREVENTIVE ACTION LIMI	T PAL = Italics	1	400.00	10	1.5

NS = Not Sampled

(ppb) = parts per billion

<sup>&</sup>quot;J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

<sup>&</sup>quot;J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

### A.1 Groundwater Analytical Table

105 E. Main St. Property - WI DOT BRRTS 03-71-562271

Well MW-1

PVC Elevation =

957.84

(feet) (MSL)

	Water	Depth to water			Ethyl		Naph-	1	Trimethyl-	Xylene	n-Butly-	1,1 Dich-	cis-1,2 Dich-	trans-1,2 Dich-	Isopropyl-	p-Isopropyl-	n-Propyl-	Tetrachlo-	Trichloro-
	Elevation	from top of PVC	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)	benzene	loroethene	loroethene	Ioroethene	benzene	toluene	benzene	roethene	ethene
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
02/15/17	951.32	6.52	2.0	<0.17	33	<0.82	159	23.4	239	310	12.90	<0.46	37	< 0.35	9.3	2.06	18	17.3	470
05/15/17	951.40	6.44	<4.5	<1.7	52	<8.2	124	7.4	101	86.8	10.4	<4.6	22.8	<3.5	7.3	<2.8	17.9	13.4	450
ENFORCE M	ENT STANDA	ARD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
PREVENTIVE	E ACTION LIN	/IIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20				0.5	0.5

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well MW-2

PVC Elevation =

953.18 (feet) (MSL)

	Water	Depth to water			Ethyl		Naph-		Trimethyl-	Xylene	n-Butly-	1,1 Dich-	cis-1,2 Dich-	trans-1,2 Dich-	Isopropyl-	p-Isopropyl-	n-Propyl-	Tetrachlo-	Trichloro-
	Elevation	from top of PVC	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)	benzene	loroethene	loroethene	loroethene	benzene	toluene	benzene	roethene	ethene
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
02/15/17	948.10	5.08	<0.8	<0.17	<0.2	<0.82	<2.17	< 0.67	<2.05	<1.95	< 0.34	< 0.46	1.41	< 0.35	<0.29	<0.28	<0.19	<0.48	33
05/15/17	948.40	4.78	<4.5	<0.17	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95	<0.34	<0.46	2.83	<0.35	<0.29	<0.28	<0.19	<0.48	24.4
ENFORCE M	L ENT STAND/	ARD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
		AIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20				0.5	0.5

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well MW-3

PVC Elevation =

953.03

(MSL)

(feet)

	Water	Depth to water			Ethyl		Naph-		Trimethyl-	Xylene	n-Butly-	1,1 Dich-	cis-1,2 Dich-	trans-1,2 Dich-	Isopropyl-	p-Isopropyl-	n-Propyl-	Tetrachlo-	Trichloro-
	Elevation	from top of PVC	Lead	Benzene	Benzene	MTBE	thalene	Taluene	benzenes	(Total)	benzene	loroethene	loroethene	loroethene	benzene	toluene	benzene	roethene	ethene
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
02/15/17	948.01	5.02	<0.8	<0.17	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95	<0.34	<0.46	0.76	<0.35	<0.29	<0.28	<0.19	<0.48	10.1
05/15/17	948.35	4.68	<4.5	<0.17	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95	<0.34	<0.46	0.59	<0.35	<0.29	<0.28	<0.19	<0.48	7.2
																			<u> </u>
		ARD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
PREVENTIV	E ACTION LIN	MIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20				0.5	0.5

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well MW-4

PVC Elevation ≃

952.72 (feet)

(MSL)

	Water	Depth to water			Ethyl		Naph-		Trimethyl-	Xylene	n-Butly-		cis-1,2 Dich-	trans-1,2 Dich-	Isopropyl-	p-Isopropyl-	n-Propyl-	Tetrachlo-	Trichloro-
	Elevation	from top of PVC	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)	benzene	loroethene	loroethene	loroethene	benzene	toluene	benzene	roethene	ethene
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(dqq)	(ppb)
02/15/17	947.90	4.82	<0.8	<0.17	<0.2	6.5	<2.17	< 0.67	<2.05	<1.95	<0.34	<0.46	<0.41	<0.35	<0.29	<0.28	<0.19	<0.48	10.5
05/15/17	948.30	4.42	<4.5	<0.17	<0.2	6.1	<2.17	<0.67	<2.05	<1.95	<0.34	<0.46	<0.41	<0.35	<0.29	<0.28	<0.19	<0.48	11.6
ENFORCE ME	NT STANDA	ARD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
PREVENTIVE	ACTION LIN	AIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20				0.5	0.5

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

# A.1 Groundwater Analytical Table

105 E. Main St. Property - WI DOT BRRTS 03-71-562271

Well TRC-11-1

PVC Elevation =

955.86

(MSL) (feet)

	Water Elevation	Depth to water from top of PVC	Lead	Benzene	Ethyl Benzene	MTBE	Naph- thalene	Toluene	Trimethyl- benzenes	Xylene (Total)	n-Butly- benzene	1,1 Dich- loroethene	cis-1,2 Dich- loroethene	trans-1,2 Dich- loroethene	Isopropyl- benzene	p-Isopropyl- toluene	n-Propyl- benzene	Tetrachlo- roethene	Trichloro- ethene
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/22/14	NM	NM	<3.0	35.8	97.9	<0.44	23.3	13.7	26.1	19.2-20.4	6.50	1.00	137	1.3	11.8	1.5	22.4	4	130
02/15/17	950.82	5.04	<0.8	13.4	35	<0.82	<2.17	4.4	3.9-4.81	2.51	4.5	<0.46	91	18.1	7.1	0.78	15.2	<0.48	15.6
05/15/17	951.55	4.31	<4.5	25.2	104	<0.82	4.6	20.3	21.9	8.83	5.3	0.82	104	15.4	11.8	0.36	30	0.6	27.3
ENFORCE M	I ENT STANDA	ARD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
PREVENTIV	ACTION LIN	IIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20				0.5	0.5

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well TRC-11-2

PVC Elevation =

958.63

(feet)

(MSL)

Date	Water Elevation (in feet msl)	Depth to water from top of PVC (in feet)	Lead (ppb)	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naph- thalene (ppb)	Toluene (ppb)	Trimethyl- benzenes (ppb)	Xylene (Total) (ppb)	,	1,1 Dich- loroethene (ppb)		trans-1,2 Dich- loroethene (ppb)	Isopropyl- benzene (ppb)	p-Isopropyi- toluene (ppb)	n-Propyl- benzene (ppb)	Tetrachio- roethene (ppb)	Trichloro- ethene (ppb)
09/22/14	NM	NM NM	<3.0	<5.0	<5.0	<1.7	<25.0	<5.0	<10.0	<15.0	<5.0	<4.1	<2.6	<2.6	<1.4	<5.0	<5.0	<5.0	1030
02/15/17	952.52	6.11	<0.8	<0.17	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95	< 0.34	<0.46	<0.41	< 0.35	<0.29	<0.28	<0.19	2.68	1070
05/15/17	952.42	6.21	<4.5	<3.4	<4	<16.4	<43.4	<13.4	<41	<39	<6.8	<9.2	<8.2	<7	<5.8	<5.6	<3.8	<9.6	1190
ENFORCE M	ENT STANDA	RD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
PREVENTIVE	ACTION LIN	AIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20				0.5	0.5

(ppb) = parts per billion (ppm) = parts per million ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well TRC-11-3

PVC Elevation =

961.69

(feet) (MSL)

	Water	Depth to water			Ethyl		Naph-		Trimethyl-	Xylene	n-Butly-	1,1 Dich-	cis-1,2 Dich-	trans-1,2 Dich-	Isopropyl-	p-Isopropyl-	n-Propyl-	Tetrachlo-	Trichloro-
	Elevation	from top of PVC	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)	benzene	loroethene	loroethene	loroethene	benzene	toluene	benzene	roethene	ethene
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/22/14	NM	NM	<3.0	<0.50	<0.50	<0.17	<2.5	<0.50	<1.00	<1.50	<0.050	<0.41	<0.26	<0.26	<0.14	<0.50	<0.50	<0.50	64.8
02/15/17	954.62	7.07	<0.8	<0.17	<0.2	<0.82	<2.17	< 0.67	<2.05	<1.95	<0.34	<0.46	0.63	<0.35	<0.29	<0.28	<0.19	<0.48	8.8
05/15/17	956.04	5.65	<4.5	<0.17	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95	<0.34	<0.46	<0.41	<0.35	<0.29	<0.28	<0.19	<0.48	8.0
ENFORCE M	ENT STANDA	ARD ES = Bold	15	5	700	60	100	800	480	2000		7	70	100				5	5
PREVENTIVE	<b>ACTION LIN</b>	AIT PAL = Italics	1.5	0.5	140	12	10	160	96	400		0.70	7	20		* * * *		0.5	0.5
(ppb) = parts	per billion	(ppm) = parts per r	nillion																

ns = not sampled nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well Sampling Conducted on:

VOC's

02/15/17 02/15/17 02/15/17 02/15/17 02/15/17 02/15/17

ENFORCE MENT STANDARD = ES - Bold	PREVENTIVE ACTIOI LIMIT = PAL - Italics
15	1.5

VOCS								Boid	LIMIT = PAL - ITALICS
Well Name	MW-1	MW-2	MW-3	MW-4	TRC-11-1	TRC-11-2	TRC-11-3		
Lead/ppb	2.0	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	15	1.5
Benzene/ppb	< 0.17	< 0.17	< 0.17	< 0.17	13.4	< 0.17	< 0.17	5	0.5
Bromobenzene/ppb	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	==	77
Bromodichloromethane/ppb	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	0.6	0.06
Bromoform/ppb	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	4.4	0.44
tert-Butylbenzene/ppb	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	==	==
sec-Butylbenzene/ppb	3.3	< 0.24	< 0.24	< 0.24	2.54	< 0.24	< 0.24	==	==
n-Butylbenzene/ppb	12.9	< 0.34	< 0.34	< 0.34	4.5	< 0.34	< 0.34	==	22
Carbon Tetrachloride/ppb	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	5	0.5
Chlorobenzene/ppb	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	< 0.27	==	
Chloroethane/ppb	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	400	80
Chloroform/ppb	< 0.96	< 0.96	< 0.96	< 0.96	1.56 "J"	< 0.96	< 0.96	6	0.6
Chloromethane/ppb	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	30	3
2-Chlorotoluene/ppb	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	< 0.36	==	==
4-Chlorotoluene/ppb	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	==	==
1,2-Dibromo-3-chloropropane/ppb	< 1.88	< 1.88	< 1.88	< 1.88	< 1.88	< 1.88	< 1.88	0.2	0.02
Dibromochloromethane/ppb	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	60	6
1,4-Dichlorobenzene/ppb	< 0.42 < 0.45	< 0.42 < 0.45	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	75	15
1,3-Dichlorobenzene/ppb	< 0.45	< 0.45	< 0.45 < 0.34	< 0.45 < 0.34	< 0.45	< 0.45 < 0.34	< 0.45 < 0.34	600 600	120 60
1,2-Dichlorobenzene/ppb Dichlorodifluoromethane/ppb	< 0.38	< 0.34	< 0.34	< 0.34	< 0.34 < 0.38	< 0.34	< 0.34	1000	200
1,2-Dichloroethane/ppb	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	5	0.5
1,1-Dichloroethane/ppb	< 0.42	< 0.42	< 0.42	< 0.43	< 0.42	< 0.42	< 0.42	850	85
1,1-Dichloroethene/ppb	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.42	< 0.46	7	0.7
cis-1,2-Dichloroethene/ppb	37	1.41	0.76 "J"	< 0.41	91	< 0.41	0.63 "J"	70	7
trans-1,2-Dichloroethene/ppb	< 0.35	< 0.35	< 0.35	< 0.35	18.1	< 0.35	< 0.35	100	20
1,2-Dichloropropane/ppb	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	< 0.39	5	0.5
2,2-Dichloropropane/ppb	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	==	
1,3-Dichloropropane/ppb	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	==	==
Di-isopropyl ether/ppb	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	==	==
EDB (1,2-Dibromoethane)/ppb	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	0.05	0.005
Ethylbenzene/ppb	33	< 0.2	< 0.2	< 0.2	35	< 0.2	< 0.2	700	140
Hexachlorobutadiene/ppb	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	==	==
Isopropylbenzene/ppb	9.3	< 0.29	< 0.29	< 0.29	7.1	< 0.29	< 0.29	==	==
p-lsopropyltoluene/ppb	2.06	< 0.28	< 0.28	< 0.28	0.78 "J"	< 0.28	< 0.28	==	==
Methylene chloride/ppb	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	5	0.5
Methyl tert-butyl ether (MTBE)/ppb	< 0.82	< 0.82	< 0.82	6.5	< 0.82	< 0.82	< 0.82	60	12
Naphthalene/ppb	159	< 2.17	< 2.17	< 2.17	< 2.17	< 2.17	< 2.17	100	10
n-Propylbenzene/ppb	18	< 0.19	< 0.19	< 0.19	15.2	< 0.19	< 0.19	==	
1,1,2,2-Tetrachloroethane/ppb	< 0.69 < 0.47	0.2	0.02						
1,1,1,2-Tetrachloroethane/ppb Tetrachloroethene (PCE)/ppb	17.3	< 0.47	< 0.47	< 0.47	< 0.47	2.68	< 0.47	70 5	7 0.5
Toluene/ppb	23.4	< 0.48	< 0.48	< 0.48	4.4	< 0.67	< 0.46	800	160
1,2,4-Trichlorobenzene/ppb	< 1.29	< 1.29	< 1.29	< 1.29	< 1.29	< 1.29	< 1.29	70	14
1,2,3-Trichlorobenzene/ppb	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	==	==
1,1,1-Trichloroethane/ppb	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	200	40
1,1,2-Trichloroethane/ppb	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	5	0.5
Trichloroethene (TCE)/ppb	470	33	10.1	10.5	15.6	1070	8.8	5	0.5
Trichlorofluoromethane/ppb	< 0.64	< 0.64	< 0.64	< 0.64	< 0.64	< 0.64	< 0.64		==
1,2,4-Trimethylbenzene/ppb	166	< 1.14	< 1.14	< 1.14	3.9	< 1.14	< 1.14		
1,3,5-Trimethylbenzene/ppb	73	< 0.91	< 0.91	< 0.91	< 0.91	< 0.91	< 0.91	Total TMB's 480	Total TMB's 96
Vinyl Chloride/ppb	5.1	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	0.2	0.02
m&p-Xylene/ppb	188	< 1.56	< 1.56	< 1.56	1.8 "J"	< 1.56	< 1.56		
o-Xylene/ppb	122	< 0.39	< 0.39	< 0.39	0.71 "J"	< 0.39	< 0.39	Total Xylenes 2000	Total Xylenes 400

NS = Not Sampled, NM = Not Measured

<sup>= =</sup> No Exceedences

<sup>(</sup>ppb) = parts per billion

<sup>(</sup>ppm) = parts per million
"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

## A.1 Groundwater Analytical Table 105 E. Main St. Property – WI DOT BRRTS 03-71-562271

Well Sampling Conducted on:

**ENFORCE MENT** STANDARD = ES -REVENTIVE ACTION VOC's Bold LIMIT = PAL - Italics Well Name MW-1 MW-2 MW-3 MW-4 TRC-11-1 TRC-11-2 TRC-11-3 Lead/ppb < 4.5 15 1.5 < 4.5 < 4.5 < 4.5 < 4.5 < 4.5 < 4.5 0.5 Benzene/ppb < 17 < 0.17 < 0.17 < 0.17 25.2 < 34 < 0.17 5 Bromobenzene/ppb < 4.3 < 0.43 < 0.43 < 0.43 < 0.43 < 8.6 < 0.43 < 0.31 < 0.31 O OF Bromodichloromethane/ppb < 3.1 < 0.31 < 0.31 < 62 < 0.31 0.6 < 0.49 < 0.49 0.44 Bromoform/ppb < 49 < 0.49< 0.49< 0.49< 9.8 4.4 < 0.39 < 0.39 tert-Butylbenzene/ppb < 3.9 < 0.39< 0.39 < 78 < 0.39 == < 0.24 sec-Butylbenzene/ppb 24".1 < 0.24< 0.2432 < 48 < 0.24== == 10.4 ".1" < 0.34 < 0.34< 0.34 n-Butylbenzene/ppb < 0.345.3 < 6.8 0.5 < 0.21 < 0.21 < 0.21 < 0.21 < 0.21 5 Carbon Tetrachloride/ppb < 21 < 42 Chlorobenzene/ppb < 2.7 < 0.27 < 0.27 < 0.27 < 0.27 < 5.4 < 0.27 400 80 Chloroethane/ppb < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 10 < 0.5 Chloroform/ppb < 9.6 < 0.96 < 0.96 < 0.96 < 0.96 < 19.2 < 0.96 0.6 6 < 26 30 Chloromethane/ppb < 13 < 1.3 < 1.3 < 13 < 13 < 13 .3 2-Chlorotoluene/ppb < 0.36 < 0.36 < 0.36 < 0.36 < 0.36 < 3.6 < 7.2 == < 0.35 < 0.35 4-Chlorotoluene/ppb < 3.5 < 0.35 < 0.35 < 7 < 0.35 0.02 < 1.88 < 1.88 < 37.6 0.2 1.2-Dibromo-3-chloropropane/ppb < 18.8 < 1.88 < 1.88 < 1.88 < 4.5 < 0.45 < 0.45 < 0.45 < 0.45 < 0.45 60 Dibromochloromethane/ppb < 9 6 < 0.42 < 0.42 < 0.42 < 0.42 15 1.4-Dichlorobenzene/ppb < 4.2 < 0.42 < 8.4 75 < 0.45 < 0.45 < 0.45 < 0.45 < 9 < 0.45 1.3-Dichlorobenzene/ppb < 4.5 600 120 < 0.34 < 0.34 < 0.34 < 0.34 60 1.2-Dichlorobenzene/ppb < 3.4 < 0.34 < 6.8 600 Dichlorodifluoromethane/ppb < 3.8 < 0.38 < 0.38 < 0.38 < 0.38 < 7.6 < 0.38 1000 200 1,2-Dichloroethane/ppb < 4.5 < 0.45 < 0.45 < 0.45 < 0.45 < 9 < 0.45 0.5 1.1-Dichloroethane/ppb < 4.2 < 0.42 < 0.42 < 0.42 < 0.42 < 8.4 < 0.42 850 85 1.1-Dichloroethene/ppb < 0.46 < 0.46 0.82 "J" < 0.46 0.7 < 4.6 < 0.46 < 9.2 cis-1,2-Dichloroethene/ppb 22.8 2.83 0.59 "J" < 0.41 < 0.41 104 < 8.2 70 20 trans-1,2-Dichloroethene/ppb < 0.35 < 0.35 < 0.35 < 0.35 100 < 3.5 15.4 < 7 < 3.9 < 0.39 < 0.39 < 0.39 0.74 "J" < 7.8 < 0.39 0.5 1.2-Dichloropropane/ppb 5 1,3-Dichloropropane/ppb < 4.9 < 0.49 < 0.49 < 0.49 < 0.49 < 0.49 < 9.8 trans-1,3-Dichloropropene < 4.2 < 0.42 < 0.42 < 0.42 < 0.42 < 8.4 < 0.42 == == cis-1,3-Dichloropropene < 2.1 < 0.21 < 0.21 < 0.21 < 0.21 < 4.2 < 0.21 == == Di-isopropyl ether/ppb < 2.6 < 0.26 < 0.26 < 0.26 < 0.26 < 5.2 < 0.26 EDB (1,2-Dibromoethane)/ppb < 3.4 < 0.34 < 0.34 < 0.34 < 0.34 < 6.8 < 0.34 0.05 0.008

05/15/17 05/15/17 05/15/17 05/15/17 05/15/17 05/15/17

o 7.3.0110/pp2
NS = Not Sampled, NM = Not Measured
= = No Exceedences
(ppb) = parts per billion

Ethylbenzene/ppb

Naphthalene/ppb

Toluene/ppb

n-Propylbenzene/ppb

Hexachlorobutadiene/ppb

Isopropylbenzene/ppb

p-Isopropyltoluene/ppb

Methylene chloride/ppb

Methyl tert-butyl ether (MTBE)/ppb

1,1,2,2-Tetrachloroethane/ppb

1,1,1,2-Tetrachloroethane/ppb

Tetrachloroethene (PCE)/ppb

1,2,4-Trichlorobenzene/ppb

1,2,3-Trichlorobenzene/ppb

1,1,1-Trichloroethane/ppb

1,1,2-Trichloroethane/ppb

Trichloroethene (TCE)/ppb

Trichlorofluoromethane/ppb

1,2,4-Trimethylbenzene/ppb

1,3,5-Trimethylbenzene/ppb

Vinyl Chloride/ppb

m&p-Xylene/ppb

o-Xylene/oph

(ppm) = parts per million
"J" Flag: Analyte detected between LOD and LOQ LOD Limit of DetectionLOQ Limit of Quantitation

52

< 14.7

7.3 "J"

< 2.8

< 9.4

< 8.2

124

17.9

< 6.9

< 4.7

13.4 "J"

7.4 "J"

< 12.9

< 8.3

< 3.5

< 6.5

450

< 6.4

44

57

78

3 "J"

8.8 "J"

< 0.2

< 1.47

< 0.29

< 0.28

< 0.94

< 0.82

< 2.17

< 0.19

< 0.69

< 0.47

< 0.48

< 0.67

< 1.29

< 0.83

< 0.35

< 0.65

< 0.64

< 1.14

< 0.91

< 0.19

< 1.56

< 0.39

27.4

< 0.2

< 1.47

< 0.29

< 0.28

< 0.94

< 0.82

< 2.17

< 0.19

< 0.69

< 0.47

< 0.48

< 0.67

< 1.29

< 0.83

< 0.35

< 0.65

< 0.64

< 1.14

< 0.91

< 0.19

< 1.56

< 0.39

7.2

< 0.2

< 1.47

< 0.29

< 0.28

< 0.94

< 2.17

< 0.19

< 0.69

< 0.47

< 0.48

< 0.67

< 1.29

< 0.83

< 0.35

< 0.65

< 0.64

< 1.14

< 0.91

< 0.19

< 1.56

< 0.39

11.6

6.1

104

< 1.47

0.36 "J"

< 0.94

< 0.82

4.6 "J"

< 0.69

< 0.47

20.3

< 1.29

< 0.83

< 0.35

< 0.65

< 0.64

27.3

4.2

17.7

7.8

0.29 "J"

1.03 "J"

0.60 "J"

30

11.8

< 4

< 29 4

< 5.8

< 56

< 18.8

< 16.4

< 43.4

< 3.8

< 13.8

< 9.4

< 9.6

< 13.4

< 25.8

< 16.6

< 7

< 13

1190

< 12.8

< 22.8

< 18.2

< 3.8

< 31.2

< 7.8

< 0.2

< 1.47

< 0.29

< 0.28

< 0.94

< 0.82

< 2.17

< 0.19

< 0.69

< 0.47

< 0.48

< 0.67

< 1.29

< 0.83

< 0.35

< 0.65

< 0.64

< 1.14

< 0.91

< 0.19

< 1.56

< 0.39

700

==

==

60

100

0.2

70

800

70

200

Total TMB's 480

0.2

Total Xylenes 2000

140

==

==

0.5

12

10

0.02

0.5

160

14

40

0.5

0.5

Total TMB's 96

0.02

Total Xylenes 400

# A.1 Groundwater Analytical Table

105 E: Main St. Property – WI DOT BRRTS 03-71-562271 (Metals)

# Well TRC-11-1

	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
	Total	Total	Total	Total	Total	Total	Total	Total
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/22/14	8.30	108	<0.60	<2.1	<3.0	<0.10	<6.7	<2.7
ENFORCE MENT STANDARD ES = Bold	10	2000	5	100	15	2	50	50
PREVENTIVE ACTION LIMIT PAL = Italics	1	400	0.5	10	1.5	0.2	10	10

(ppb) = parts per billion

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

# Well TRC-11-2

	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
	Total	Total	Total	Total	Total	Total	Total	Total
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/22/14	<7.2	52.10	<0.60	<2.1	<3.0	<0.10	<6.7	<2.7
ENFORCE MENT STANDARD ES = Bold	10	2000	5	100	15	2	50	50
PREVENTIVE ACTION LIMIT PAL = Italics	1	400	0.5	10	1.5	0.2	10	10

(ppb) = parts per billion

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

# Well TRC-11-3

	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
	Total	Total	Total	Total	Total	Total	Total	Total
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/22/14	<7.2	116	<0.60	<2.1	<3.0	<0.10	<6.7	<2.7
ENFORCE MENT STANDARD ES = Bold	10	2000	5	100	15	2	50	50
PREVENTIVE ACTION LIMIT PAL = Italics	1	400	0.5	10	1.5	0.2	10	10

(ppb) = parts per billion

ns = not sampled

nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

# A.6 Water Level Elevations 105 E. Main St. Property – WI DOT BRRTS 03-71-562271 Winneconne, Wisconsin

	MW-1	MW-2	MW-3	MW-4	TRC-11-1	TRC-11-2	TRC-11-3
Ground Surface (feet msl)	958.22	953.59	953.41	953.17	956.38	959.01	962.12
PVC top (feet msl)	957.84	953.18	953.03	952.72	955.86	958.63	961.69
Well Depth (feet)	15.0	13.0	13.0	13.0	17.0	18.0	16.0
Top of screen (feet msl)	953.22	950.59	950.41	950.17	949.38	951.01	956.12
Bottom of screen (feet msl)	943.22	940.59	940.41	940.17	939.38	941.01	946.12
Depth to Water From Top of P	VC (feet)						
02/15/17	6.52	5.08	5.02	4.82	5.04	6.11	7.07
05/15/17	6.44	4.78	4.68	4.42	4.31	6.21	5.65
Depth to Water From Ground 5 02/15/17 05/15/17	<b>Surface (f</b> 6.90 6.82	<b>Feet)</b> 5.49 5.19	5.40 5.06	5.27 4.87	5.56 4.83	6.49 6.59	7.50 6.08
Groundwater Elevation (feet n 02/15/17 05/15/17	<i>nsl)</i> 951.32 951.40	948.10 948.40	948.01 948.35	947.90 948.30	950.82 951.55	952.52 952.42	954.62 956.04

CNL = Could Not Locate
A = Abandoned and removed during soil excavation project
NI = Not Installed

# A.7 Other

**Groundwater NA Indicator Results** 

105 E. Main St. Property - WI DOT BRRTS 03-71-562271

# Well MW-1

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppb)
02/15/17	0.24	7	285	7.2	830	0.32	44.7	<0.03	684
05/15/17	0.19	6.82	275	12.4	731	NS	NS	NS	NS
ENFORCE MENT STANDARD = <b>ES - Bold</b>						10	-	-	300
PREVENTIVE ACTION LIMIT = PAL - Italics						2	-	-	60

ns = not sampled

(ppb) = parts per billion (ppm) = parts per million

nm = not measured

ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

# Well MW-2

	Dissolved		·			Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pΗ	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppb)
02/15/17	1.35	7.13	253	8.8	2102	0.31	65.3	< 0.03	224
05/15/17	1.88	7.83	212	11.3	999	NS	NS	NS	NS
ENFORCE MENT STANDARD = <b>ES - Bold</b>						10	-	-	300
PREVENTIVE ACTION LIMIT = PAL - Italics						2	-	1	60

(ppb) = parts per billion (ppm) = parts per million ns = not sampled

nm = not measured ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

# Well MW-3

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	рΗ	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm·)	(ppm)	(ppb)
02/15/17	1.26	7.06	268	9.4	832	0.72	61.1	<0.03	51.9
05/15/17	3.41	7.72	256	11.1	774	NS	NS	NS	NS
ENFORCE MENT STANDARD = <b>ES - Bold</b>						10	-	-	300
PREVENTIV	PREVENTIVE ACTION LIMIT = PAL - Italics						-	-	60

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

# Well MW-4

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppb)
02/15/17	0.64	6.89	273	8.4	2775	3.87	67.5	< 0.03	200
05/15/17	0.35	7.02	259	10.6	2154	NS	NS	NS	NS
ENFORCE MENT STANDARD = <b>ES - Bold</b>							-	-	300
PREVENTIV	PREVENTIVE ACTION LIMIT = PAL - Italics						-	-	60

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

#### A.7 Other

**Groundwater NA Indicator Results** 

105 E. Main St. Property - WI DOT BRRTS 03-71-562271

#### Well TRC-11-1

	Dissolved		,			Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppb)
02/15/17	0.55	7.33	236	7.9	985	<0.17	16.6	< 0.03	258
05/15/17	0.22	7.36	161	12.0	807	NS	NS	NS	NS
ENFORCE MENT STANDARD = ES - Bold			10	•	-	300			
PREVENTIVE ACTION LIMIT = PAL - Italics					2	-	-	60	

(ppb) = parts per billion (ppm) = parts per million ns = not sampled

nm = not measured

ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

#### Well TRC-11-2

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	рΗ	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppb)
02/15/17	1.73	7.69	239	9.6	774	2.2	21.3	< 0.03	14.8
05/15/17	1.57	9.74	120	11.1	447	NS	NS	NS	NS
ENFORCE N	L MENT STANE	ARD = E	S – Bold		<u> </u>	10	-	-	300
PREVENTIVE ACTION LIMIT = PAL - Italics					2	-		60	

(ppb) = parts per billion (ppm) = parts per million ns = not sampled

nm = not measured

ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

#### Well TRC-11-3

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	рН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			(C)	Conductance	(ppm)	(ppm)	(ppm)	(ppb)
02/15/17	3.53	7.14	254	8.6	1250	1.09	58.3	< 0.03	26.1
05/15/17	2.82	7.25	171	10.8	975	NS	NS	NS	NS
				<u> </u>					
ENFORCE MENT STANDARD = <b>ES - Bold</b>			10	-	-	300			
PREVENTIVE ACTION LIMIT = PAL - Italics					2	-	-	60	

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled

nm = not measured

ORP = Oxidation Reduction Potential

Note: Elevations are presented in feet mean sea level (msl).

# Appendix C UST Disposal Documentation

## SGS EnvironmentalContracting, LLC



N2570 Daytona Drive MERRILL, WI 54452 1-800-261-2803 715-539-2803 Fax 715-539-2661

Jay A. Schlueter CELL (715) 218-1001

jay@sgs-env.com



CONSTRUCTION



CONTAMINATED SOIL



GEOPROBE SOIL BORING

#### CERTIFICATE OF UNDERGROUND STORAGE TANK DISPOSAL

On October 18<sup>th</sup>, 2017 SGS Environmental Contracting LLC, completed the removal of (1) - Underground Storage Tank: (1) – 1,000 gallon Fuel Oil UST for:

WDOT Hwy 116 Construction Site 105 E Main St. Winneconne WI 54986

Sludge generated at the job site was barreled and left on site for others to handle.

Tank was taken to:

Fox Valley Iron, Metal & Auto, Inc. 3446 Witzel Ave. Oshkosh WI 54904

Bobbie Jo Hoffman

Office Manager

SGS Environmental Contracting LLC, N2570 Daytona Drive, Merrill, WI 54452 715.539.2803 Fax 715.539.2661 jay@sgs-env.com

# Appendix D UST Closure Checklist



Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures, Permits and Licensing P.O. Box 7837 Madison, WI 53707-7837 (608) 224-4942

FOR OFFICE USE ONLY

CHECK C	NE.	TANK	OVOTER						
	71140		SYSTEMS	ERVICE	AND CLO	SURE AS	SESSMEN	T REPORT	
	DNE:	<b>⊠</b> l	JNDERGROU	JND	□AB(	VEGROU	ND		
FOR PORTIC	NS OF THE	FORM THAT DO	NOT APPLY, CHE	CK THE 'N/A' BO	OX				
		ich System Servi							
			purposes other tha				1) (m), Wis. Stats.	.).	
			ontractor per						
Indicate	portion of sy mote fill	stem being servi	□ REPAIR/UPGF ced if a <u>repair</u> , <u>upo</u> □ Piping	grade or chang	ANGE-IN-SER e-in-service is sition/containm	being performe		bucket   Dispe	nsor
. IDENTIFIC		ease Print)					Ц орш	D Dispe	1361
1. Facility Nar		Construction	Cito		2. Owner Na				
acility Street			1 Site		3. Contact N		ment of Tra		b Title
105 E Mai					J. Contact 14	arrie		30	o ritte
lunicipality					Mailing Addr				
Winnecor		7			PO Box	7965			
☐ City 🗵 V	mage 🔲 To	own of:			Post Office Madison	WI 53707		State	Zip Code
ip Code		County			County	***************************************		Telephone No. (include a	area code)
4986		Winnebeg			Dane			( 608 ) 266-147	6
		tor Section A about				ractor Street A			
		one No. (include				Daytona Di ractor City, Str			
	539-280				Merrill W		are, zip code		
		2000 C 10							
. TANK SYS	TEM DETAI	L (Complete for	all service activ		1			-	
-				е	f	Pologeo S	g ystem Integrity		h .
Tank ID#	Type of Closure <sup>1</sup>	Tank Material of Construction	Piping Material of Construction	Tank Capacity	Contents <sup>2</sup>	Compromis	ed (e.g. holes, se connection,	If "Yes" to "g", Then Sp Rele	
-	0		150000000000000000000000000000000000000	(gallons)			tc)?	Source of Release <sup>3</sup>	Cause of Releas
	P	STEEL	STEEL	1,000	F.O.	<b>₩</b> Y	□ N	TANK	CORROTTER
						□ Y	□ N		
						□ Y			
						□ Y	□ N		
						□ Y	□ N		İ
						□ Y	□ N		
Indicate typ	e of closure:	P = Permanent	TOS = Tempora	rily Out-of-Sen	rice CIP = Cio	sure In Diace			
Indicate typ	e of product:	DI = Diesel 10	G = Leaded Gase	ine 110 - 11-1			Dil, GH = Gasoh er Chemical (indi	ol, AF = Aviation Fuel, K cate the chemical name(s	= Kerosene, PX =
AS number(s	1:								
		tank. P = piping	D = dispenser S	TP = subman	ible turbine	- DD - : :		= other, UNK = Unknown	
Cause of re	lease: S = s	pill, O = overfill.	POMD = physica	or mechanica	damage C =	np, DP = deli	ery problem, O	= other, UNK = Unknown oblem, O = other, UNK =	1
Has release	been report	ed to the Departr	ment of Natural Re	esources? "	Yes N	0 Rele	ase not evident	at this time	Unknown

D. CLOSURES (Check applicable box at right in response to all statements in section D)  Written notification was provided to the local agent 5 days in advance of closure date.  All local permits were obtained before beginning closure.  UST Form TR-WM-137 orAST Form TR-WM-118 filed by owner with the DATCP indicating closure.  NOTE: TANK INVENTORY FORM TR-WM-137 or TR-WM-118 SIGNED BY THE OWNER MUST BE SUBMITTED WITH E CHECKLIST		N NA CHANGE-IN-SE	RVICE
D.1 TEMPORARILY OUT-OF-SERVICE  1. Product removed.	Remover Verified	Inspector Verified	NA NA
a. Product lines drained into tank (or other container) and liquid removed, and	OY ON	DY DN	
b. All product removed to bottom of suction line, OR	OY ON	OY ON	
c. All product removed to within 1" of bottom.	□Y □N	OY ON	
Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.	DY DN	DY DN	
3. All product lines at the islands or pumps located elsewhere are removed and capped, OR     4. Dispensers/pumps left in place but locked and power disconnected.	N Y N	OY ON	
5. Vent lines left open.	Y ON	DY DN	H
Inventory form filed indicating temporarily out-of-service (TOS) closure.	OY ON	OY ON	
D.2. CLOSURE BY REMOVAL OR IN-PLACE  1. General Requirements			
Product from piping drained into tank (or other container).	MY ON	PY ON	
b. Piping disconnected from tank and removed.	XY ON	QY ON	
c. All liquid and residue removed from tank using explosion-proof pumps or hand pumps.     d. All pump motors and suction hoses bonded to tank or otherwise grounded.	ZY UN	N YE	
Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.	ZY ON	N NE	
f. Vent lines left connected until tanks purged.	DYDN	DYDN	100
g. Tank openings temporarily plugged so vapors exit through vent.	Y N	OY ON	
h. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section E.	ZY ON	Y DN	
<ol> <li>Specific Closure-by-Removal Requirements</li> <li>Tank removed from excavation after PURGING/INERTING; placed on level ground and blocked to prevent movement.</li> </ol>	N DN	□Y □N	
b. Tank cleaned before being removed from site.	MY ON	- DRITH	
c. Tank labeled in 2" high letters after removal but before being moved from site.	MY ON	DAY ON	
NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE; FORMER CONTENTS; VAPOR STATE; VAPOR FREEING TREATMENT; DATE.			
d. Tank vent hole (1/8" in uppermost part of tank) installed prior to moving the tank from site.	□Y □N	OY ON	K
Site security is provided while the excavation is open.     Specific Closure-In-Place Requirements	ZY DN	NO YE	
NOTE: CLOSURES IN-PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTI CONSUMER PROTECTION (DATCP) OR LOCAL AGENT.  a. Tank properly cleaned to remove all sludge and residue.  b. Solid inert material (sand, cyclone boiler slag, or pea gravel recommended) introduced and tank filled.  c. Vent line disconnected or removed.	MENT OF AGRICU	OY ON	AND
<ul> <li>Inventory form filed by owner with the DATCP indicating closure in-place.</li> </ul>	DYDN	DY DN	1
E. REPAIR, UPGRADE OR CHANGE-IN-SERVICE Written notification was provided to the local agent 5 days in advance of service date. All local permits were obtained before beginning service. Form TR-WM-137 or TR-WM-118 filed by owner with the DATCP indicating change-in-service. F. METHOD OF VAPOR FREEING OF TANK	ПУ ПИ	NA NA NA	
□ Displacement of vapors by eductor or diffused air blower.  Eductor driven by compressed air, bonded and drop tube left in place; vapors discharged minimum of 12 feet above gro Diffused air blower bonded and drop tube removed. Air pressure not exceeding 5 psig.  □ Inert gas using dry ice or liquid carbon dioxide. □ Inert gas using Co <sub>2</sub> or N <sub>2</sub> NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. LEL METE: THE TANK MAY NOT BE ENTERED IN THIS STATE WITHOUT SPECIAL EQUIPMENT. Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank opposite the vent. Gas introduced under low pressure not to exceed 5 psig to reduce static electricity. Gas introducing device grounded.  Readings of 10% or less of the lower flammable range (LEL) or 0% oxygen obtained before removing tank from ground. □ Tank atmosphere monitored for flammable or combustible vapor levels prior to and during cleaning and cutting. □ Calibrate combustible gas indicator and/or oxygen meter prior to use. Drop tube removed prior to checking atmosphere.  □ Under the provided of the	RS MAY NOT FUN		
G. REMOVER/CLEANER INFORMATION			
DAY A. SCHLUETER FINE Shith 40	1504	10-18	-17
Remover/Cleaner Name (print) Remover/Cleaner Signature Certific	ation No.	Date Sign	ed
I attest that the procedures and information which I have provided as the tank closure contractor are correct and comply with A Company expected to perform soil contamination assessment	TCP 93.	Date Oigh	
H. INSPECTOR INFORMATION  Inspector Name (print)  Inspector Name (print)  Inspector Signature  Inspector Signature  Inspector Signature	402 108 hspector Cert #	LPO Age	ency#:
7012  FDID # For Location Where Inspection Performed  920 - 309 - 3954 Inspector Telephone Number		0-18-17 Date Signed	
and the second s	-	Date Signed	

### Part B – To be completed by environmental professional

## Submit original Part B to the WDNR along with a copy of Part A

I. TANK-SYSTEM SITE ASSESSME	NT (TSSA)		
Site Name: <u>105 E. Main</u>	Street		
Address:105 E. Main	Street, Winneconne		
Note: Site name and address n	nust match with Part A Section 1.		
UNDERGROUND AND ABOVEG  If a TSSA is required, then follows:	uired, see ATCP 93 and section II part B of ASSI ROUND STORAGE TANK SYSTEMS. low the procedures detailed in ASSESSMENT AI ROUND STORAGE TANK SYSTEMS.		
a. Has there been a previously	documented release at this site? X Y N		
	, or DNR BRR	T's # 03-71-562271 .	
		USTs1 ASTs	
(NOTE 1: Do not include previo	ously closed systems or system components.)		
c. Excavation/trench dimension	s (in feet). (Photos must be provided.)		
EXCAVATION/TRENCH #	LENGTH	WIDTH	DEPTH
1	12	10	9
			_
			. 1
Do any of the following condition a. Stained soils: Y   d. Free product in the excave 3. Geology/Hydrogeology a. Depth to groundwater	ection (Photos must be provided for "Yes" respons exist in or about the excavation(s)?  N b. Petroleum odor:  Y Y N c. Wattion/trench: Y N e. Sheen or free production/trench: Y N n e. Sheen or free production of the facility? Y N If yes, specification in the facility? If yes, yes, yes, yes, yes, yes, yes, yes,	ter In excavation/trench: $\square$ Y $\square$ N duct on water: $\square$ Y $\square$ N $\square$ Y $\square$ N $\square$ Y $\square$ S $\square$ Y $\square$ S $\square$ Y $\square$ S S S S S S S S S S S S S S S S S S S	<u> </u>
J. NOTE RELEVANT OBSERVAT	IONS, SPECIFIC PROBLEMS OR CONCERNS	BELOW	

Distribution: DATCP DNR Inspector Contractor Owner

				9-	ample Colle	ction Math	od	Danth D. I				
Sample ID#		ation & Soil/Geolog escription	jic	Grab	Shelby Tube	Direct Push	Split Spoon	Depth Below Tank/Piping (feet)	Field S Result	creening (ppm)	GRO (mg/kg)	DR (mg.
SWE	sidewall, o	clav		X				5	<	1	NA	N.A
SWN	sidewall,	· · · · · · · · · · · · · · · · · · ·		X				5	2		NA	N.
SWS	sidewall,	-		X				5	2		NA	N.
SWW	sidewall,	•		X				5	<	1	NA	N.
BE	base, clay	•		X				9	5		NA	N.
BW	base, clay			X				9	<	:1	NA	N/
	•											
										-		
		TABLE 2	SOIL LA	ABORAT	ORY ANA	LYTICAL F	RESULTS-I	FOR PETROLEUM	PRODUC	TS		
Sample ID #	BENZENE	TOLUENE	ETH	HYLBENZENE MTBE			BE	TRIMETHYL BENZENES (TOTAL)		XYLENE (TOTAL		NAPHTHALE
#	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg
SWE	<25	<25		<25		<25	5	<50		<75		<25
SWN	<25	<25		51.7 J		<2		1103		176		<25
SWS	<25	<25		200		135		289		378		<25
SWW	<25	<25		<25		<2	5	<50		<75		<25
BE	<25	<25		110		<2				292		155
		<25		<25		<2		<50		<75		<25
BW	<25	<23		\ZJ				<b>\30</b>		//3		\\\ 23
K. TANK-SYS	TEM SITE ASSE	SSMENT INFORM	IATION									
☐ As a tank-s the environmer		or certified under \	Vis. Admi	in. Code	section SP	'S 305.83,	it is my opir	nion that there is no	indication	of a release	e of a regulat	ted substance
(2) (a), the owr Department of	er or operator or Natural Resource	contractor perform	ing work of may res	under ch ult in forf ire treate	apter ATC eitures of a d as separ	P 93 shall i a minimum ate offense	mmediately of \$10 and es.	nin. Code section A y report any release a maximum of \$50	of a regu	latèd substai	nce to the W	isconsin'
Dan Haak					Danu	2 Hun	k				401260	
	Site Assessor Nan	ne (print)		Tan	k-System S	Site Assess	sor Signatu	re			ertification N	lumber#
	5-3628 10/27/17 n Site Assessor Telephone Number Date Signed						TRC Env					

# Appendix E UST Inventory Forms

TR-WM-137 (8/17) Formerly ERS 7437 (3/13)



Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures

PO Box 7837 Madison, WI 53707-7837

(608) 224-4942

TDID#:

Reg Obj #:

Wis. Admin. Code §ATCP 93.140

### UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION

Personal information you provide may be used for purposes other than that for which it was originally collected (s. 15.04(1)(m) Wis. Stats.).

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. A separate form is needed for each tank. Send each completed form to the agency designated above. Have you previously registered this tank by submitting a form? 

Yes 

No

If yes, a	are you correcting/updati	ing information	on only?	∐ No				
This registration applies to a tank status that is (check one):								
☐ In Use ☐ Abar	ndoned with Product (empty	<i>r</i> )	☐ Closed – Fille	ed with Inert Materia	als			
	ndon with Water		7-2-3	hange (Indicate ne		me in block 2	2 – attaci	n deed)
	ed - Tank Removed	7./// 1.05		Out of Service – Pro	vide Date:			
	CITY TOWN	VILLAGE	7012- Winneconne				-	
IDENTIFICATION (Please Print)					1			
1. TANK SITE NAME			COUNTY		PHONE			
WDOT- Hwy 116 Construction Site			Winnebago	ACE DITOWN	) )	STATE	ZIP	
SITE STREET ADDRESS				LAGE TOWN	UF.	WI	5498	6
105 E Main St.			Winneconne		DUONE.	Check C		
2. TANK OWNER LEGAL NAME			COUNTY			266 - 1476		N LAND
Wisconsin Department of Transportation  MAILING ADDRESS	19/2 19/21 19/21		Winnebeao	LAGE TOWN		STATE		
PO Box 7965 Room 451 Attn: S. Te Be	est		Madison	LAGE LITOWIN	01.	WI		7 -796
3. PROPERTY OWNER NAME (if different from Tank Owner				ent from County #2	)	T V V I	10070	1-750.
5. PROPERTY OWNER WANTE (II different from Fank Owner	Legal Name #2)		COONTT (if differ	ent nom county #2,	,			
PROPERTY OWNER ADDRESS (if different from Site Stre	eet Address #1)		CITY DVIL	LAGE TOWN	OF:	STATE	ZIP	
				_		WI		
4. CLASS A NAME	DOB			CERTIFICATION:	(Attach cer	7		- 1
5. CLASS B NAME	DOB			CERTIFICATION:	(Attach cer	tificate)	3	189
			*					**
SITE ID:	FACILITY ID #			CUSTOMER ID#				
Tank Capacity (gallons): 1.006	Tank Age (age or date	installed):			Vehicle fu	ueling: Y	es 🕱	No
LAND OWNER TYPE (check one) Refer to back								
☐ County	ased	☐ Tribal	Nation	unicipal [	Other Go	vernment	☐ Priv	ate
OCCUPANCY TYPE (check one) Refer to back								
☐ Retail Fuel Sales	☐ Industrial ☐ Res	sidential	☐ School ☐	Utility G	overnment	Fleet		
☐ Agricultural (crop or livestock production) ☐ Bac	kup or Emergency Generato	or 🗆 C	ther (specify):					
TANK CONSTRUCTION:				C	verfill Prote	ection?	☐ Yes	No No
Bare Steel ☐ Coated Steel ☐ Steel – Fiberg	lass Reinforced Plastic Con	mposite		s	pill Contain	ment?	☐ Yes	№ No
☐ Fiberglass ☐ Unknown ☐ Other (specify	):	☐ Lined (date	e):	Т	ank Double	Walled?	☐ Yes	No No
TANK CATHODIC PROTECTION:   Sacrificial Anoc	des   Impressed Curre	ent N/	A					
PRIMARY TANK LEAK DETECTION METHOD: Autom	natic tank gauging   Inte	erstitial monitor	ing	☐ Yes ☐ No	☐ Inventor	y control and	tightnes	s testing
Manual tank gauging (only for tanks of 1,000 gallons or le	ss)   Statistical Invent	tory Reconciliat	ion (SIR) Unk	nown				
PIPING CONSTRUCTION: Single Wall Double Wal	:				-			
■ Bare Steel	☐ Flexible ☐ Copper	☐ Unkno	wn N/A	Other:				
PIPING CATHODIC PROTECTION:   Sacrificial Anodes	s   Impressed Currer	nt 💆 N/	4					10
PRIMARY PIPING SYSTEM TYPE:  Pressurized pipin	g with ⇒ 🔲 A. Pump auto	o shutoff - ELL	D B. Flow res	strictor - MLLD		Unknown		
☐ Suction piping with check valve at tank	Suction piping with che	ck valve at pur	np and inspectable		Not needed	if waste oil		
PIPING LEAK DETECTION METHOD:   Interstitial moni	toring	s □ No ⇒	Sump or cable ser	nsor 🗆 Yes 🗆 N	No			A-1
☐ Tightness testing ☐ Electronic line monitor		SIR	200 G	ot required		Unknown		
TANK CONTENTS (Current, or previous product (if tank now	v empty))	Leaded	Unleaded	☐ Gas-ethano	ol blend:	%	☐ Diese	1
☐ Bio-Diesel: % ☐ Aviation ☐ Premix		Kerosene	☐ New Oil	☐ New oil – F				
☐ Waste/Used Motor Oil ⇒ ☐ Used for Heating	☐Hazardous Waste/		☐ Empty*	☐ Sand/Grave	e/Slurry*	☐ Un	known	
☐ Other (specify):	☐ Chemical* Name			CAS#	•			
* NOT PECFA eligible.	Geo Latitude:			Geo Longitude:				
If Tank Closed, Abandoned or Out of Service: 10-1	8-17	Has a site as		mpleted? (see rev	erse side fo	r details) 🗵	Yes I	□ No
TANK OWNER LEGAL NAME (please print)		TANK OWNE	R F-MAII					
Wisconsin Dept. of Transportation				t i				
TANK OWNER SIGNATURE (Note: By signing, signer is ac	centing legal and financial s	snariene	tebeest@do	L.W1.goV	1-			
o.b.o. Wiscon		esponsibility 10	i ine storage tank s	ystem.)		TE: 10/27/20	017	

Note: Refer to comments on reverse side of form.

# Appendix F Laboratory Analytical Results





October 27, 2017

DAN HAAK TRC - MADISON 708 HEARTLAND TRAIL Madison, WI 53717

RE: Project: 282751 105 E MAIN

Pace Project No.: 40159146

#### Dear DAN HAAK:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2017. 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,

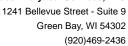
Tod nottemeyor

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

Enclosures

cc: Tom Dushek, TRC Environmental Steve Sellwood, TRC







#### **CERTIFICATIONS**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

#### **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

(920)469-2436



#### **SAMPLE SUMMARY**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40159146001	BE	Solid	10/18/17 11:20	10/20/17 08:50
40159146002	BW	Solid	10/18/17 11:25	10/20/17 08:50
40159146003	SWE	Solid	10/18/17 11:30	10/20/17 08:50
40159146004	SWW	Solid	10/18/17 11:35	10/20/17 08:50
40159146005	SWN	Solid	10/18/17 11:40	10/20/17 08:50
40159146006	SWS	Solid	10/18/17 11:45	10/20/17 08:50
40159146007	TRIP BLANK	Solid	10/18/17 00:00	10/20/17 08:50

(920)469-2436



#### **SAMPLE ANALYTE COUNT**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40159146001	BE	WI MOD GRO	ALD	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40159146002	BW	WI MOD GRO	ALD	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40159146003	SWE	WI MOD GRO	ALD	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40159146004	SWW	WI MOD GRO	ALD	10	PASI-G
40159146005	SWN	WI MOD GRO	ALD	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40159146006	SWS	WI MOD GRO	ALD	10	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40159146007	TRIP BLANK	WI MOD GRO	ALD	10	PASI-G

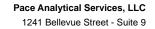


#### **SUMMARY OF DETECTION**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40159146001	BE					
WI MOD GRO	Ethylbenzene	110	ug/kg	70.0	10/23/17 15:59	
WI MOD GRO	Naphthalene	155	ug/kg ug/kg	70.0	10/23/17 15:59	
WI MOD GRO	1,2,4-Trimethylbenzene	487	ug/kg	70.0	10/23/17 15:59	
WI MOD GRO	1,3,5-Trimethylbenzene	226	ug/kg	70.0	10/23/17 15:59	
WI MOD GRO	m&p-Xylene	222	ug/kg	140	10/23/17 15:59	
WI MOD GRO	o-Xylene	70.0	ug/kg	70.0	10/23/17 15:59	
ASTM D2974-87	Percent Moisture	14.3	%	0.10	10/26/17 07:18	
40159146002	вw					
ASTM D2974-87	Percent Moisture	14.6	%	0.10	10/26/17 07:18	
10159146003	SWE					
ASTM D2974-87	Percent Moisture	11.6	%	0.10	10/26/17 07:18	
0159146005	SWN					
WI MOD GRO	Ethylbenzene	51.7J	ug/kg	69.7	10/23/17 16:51	
WI MOD GRO	1,2,4-Trimethylbenzene	968	ug/kg	69.7	10/23/17 16:51	
NI MOD GRO	1,3,5-Trimethylbenzene	135	ug/kg	69.7	10/23/17 16:51	
WI MOD GRO	m&p-Xylene	114J	ug/kg	139	10/23/17 16:51	
WI MOD GRO	o-Xylene	61.8J	ug/kg	69.7	10/23/17 16:51	
ASTM D2974-87	Percent Moisture	14.0	%	0.10	10/26/17 07:18	
0159146006	sws					
WI MOD GRO	Ethylbenzene	200	ug/kg	70.9	10/23/17 16:25	
WI MOD GRO	Methyl-tert-butyl ether	135	ug/kg	70.9	10/23/17 16:25	
WI MOD GRO	1,2,4-Trimethylbenzene	243	ug/kg	70.9	10/23/17 16:25	
WI MOD GRO	1,3,5-Trimethylbenzene	46.7J	ug/kg	70.9	10/23/17 16:25	
WI MOD GRO	m&p-Xylene	191	ug/kg	142	10/23/17 16:25	
WI MOD GRO	o-Xylene	187	ug/kg	70.9	10/23/17 16:25	
ASTM D2974-87	Percent Moisture	15.4	%	0.10	10/26/17 07:18	



Green Bay, WI 54302 (920)469-2436



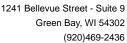
#### **PROJECT NARRATIVE**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: October 27, 2017

The dry weight container had melt water in it. This sample is reported on an as-is basis and not corrected for moisture.





#### **PROJECT NARRATIVE**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Method: WI MOD GRO
Description: WIGRO GCV
Client: TRC - MADISON
Date: October 27, 2017

#### **General Information:**

7 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.

QC Batch: 271424

S7: Surrogate recovery outside control limits (not confirmed by re-analysis).

- SWS (Lab ID: 40159146006)
  - a,a,a-Trifluorotoluene (S)

#### 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.



Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: BE Lab ID: 40159146001 Collected: 10/18/17 11:20 Received: 10/20/17 08:50 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 PI	reparation N	/lethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 15:59	71-43-2	W
Ethylbenzene	110	ug/kg	70.0	29.2	1	10/23/17 08:40	10/23/17 15:59	100-41-4	
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 15:59	1634-04-4	W
Naphthalene	155	ug/kg	70.0	29.2	1	10/23/17 08:40	10/23/17 15:59	91-20-3	
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 15:59	108-88-3	W
1,2,4-Trimethylbenzene	487	ug/kg	70.0	29.2	1	10/23/17 08:40	10/23/17 15:59	95-63-6	
1,3,5-Trimethylbenzene	226	ug/kg	70.0	29.2	1	10/23/17 08:40	10/23/17 15:59	108-67-8	
m&p-Xylene	222	ug/kg	140	58.4	1	10/23/17 08:40	10/23/17 15:59	179601-23-1	
o-Xylene	70.0	ug/kg	70.0	29.2	1	10/23/17 08:40	10/23/17 15:59	95-47-6	
Surrogates a,a,a-Trifluorotoluene (S)	109	%	80-120		1	10/23/17 08:40	10/23/17 15:59	98-08-8	
Percent Moisture	Analytical	Method: AST	ΓM D2974-87						
Percent Moisture	14.3	%	0.10	0.10	1		10/26/17 07:18		



Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: BW Lab ID: 40159146002 Collected: 10/18/17 11:25 Received: 10/20/17 08:50 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 Pi	reparation N	∕lethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	10/23/17 08:40	10/24/17 23:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/24/17 23:17	95-47-6	W
Surrogates a,a,a-Trifluorotoluene (S)	101	%	80-120		1	10/23/17 08:40	10/24/17 23:17	98-08-8	
Percent Moisture	Analytical	Method: AS	ΓM D2974-87						
Percent Moisture	14.6	%	0.10	0.10	1		10/26/17 07:18		



Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: SWE Lab ID: 40159146003 Collected: 10/18/17 11:30 Received: 10/20/17 08:50 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 Pi	reparation N	1ethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	10/23/17 08:40	10/23/17 20:16	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:16	95-47-6	W
Surrogates a,a,a-Trifluorotoluene (S)	99	%	80-120		1	10/23/17 08:40	10/23/17 20:16	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	11.6	%	0.10	0.10	1		10/26/17 07:18		

(920)469-2436



#### **ANALYTICAL RESULTS**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: SWW Lab ID: 40159146004 Collected: 10/18/17 11:35 Received: 10/20/17 08:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI	MOD GRO P	reparation N	/lethod	I: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	10/23/17 08:40	10/23/17 20:42	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 20:42	95-47-6	W
Surrogates a,a,a-Trifluorotoluene (S)	98	%	80-120		1	10/23/17 08:40	10/23/17 20:42	98-08-8	



Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: SWN Lab ID: 40159146005 Collected: 10/18/17 11:40 Received: 10/20/17 08:50 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 Pr	eparation N	/lethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:51	71-43-2	W
Ethylbenzene	51.7J	ug/kg	69.7	29.1	1	10/23/17 08:40	10/23/17 16:51	100-41-4	
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:51	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:51	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:51	108-88-3	W
1,2,4-Trimethylbenzene	968	ug/kg	69.7	29.1	1	10/23/17 08:40	10/23/17 16:51	95-63-6	
1,3,5-Trimethylbenzene	135	ug/kg	69.7	29.1	1	10/23/17 08:40	10/23/17 16:51	108-67-8	
m&p-Xylene	114J	ug/kg	139	58.1	1	10/23/17 08:40	10/23/17 16:51	179601-23-1	
o-Xylene	61.8J	ug/kg	69.7	29.1	1	10/23/17 08:40	10/23/17 16:51	95-47-6	
Surrogates a,a,a-Trifluorotoluene (S)	107	%	80-120		1	10/23/17 08:40	10/23/17 16:51	98-08-8	
Percent Moisture	Analytical	Method: AST	ΓM D2974-87						
Percent Moisture	14.0	%	0.10	0.10	1		10/26/17 07:18		



Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: SWS Lab ID: 40159146006 Collected: 10/18/17 11:45 Received: 10/20/17 08:50 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 I	MOD GRO P	reparation N	/lethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:25	71-43-2	W
Ethylbenzene	200	ug/kg	70.9	29.6	1	10/23/17 08:40	10/23/17 16:25	100-41-4	
Methyl-tert-butyl ether	135	ug/kg	70.9	29.6	1	10/23/17 08:40	10/23/17 16:25	1634-04-4	
Naphthalene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:25	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 16:25	108-88-3	W
1,2,4-Trimethylbenzene	243	ug/kg	70.9	29.6	1	10/23/17 08:40	10/23/17 16:25	95-63-6	
1,3,5-Trimethylbenzene	46.7J	ug/kg	70.9	29.6	1	10/23/17 08:40	10/23/17 16:25	108-67-8	
m&p-Xylene	191	ug/kg	142	59.1	1	10/23/17 08:40	10/23/17 16:25	179601-23-1	
o-Xylene	187	ug/kg	70.9	29.6	1	10/23/17 08:40	10/23/17 16:25	95-47-6	
Surrogates a,a,a-Trifluorotoluene (S)	138	%	80-120		1	10/23/17 08:40	10/23/17 16:25	98-08-8	<b>S</b> 7
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	15.4	%	0.10	0.10	1		10/26/17 07:18		



Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Sample: TRIP BLANK Lab ID: 40159146007 Collected: 10/18/17 00:00 Received: 10/20/17 08:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI	MOD GRO P	reparation N	/lethod	I: TPH GRO/PVO	C WI ext.		
Benzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	10/23/17 08:40	10/23/17 21:33	179601-23-1	W
o-Xylene Surrogates	<25.0	ug/kg	60.0	25.0	1	10/23/17 08:40	10/23/17 21:33	95-47-6	W
a,a,a-Trifluorotoluene (S)	99	%	80-120		1	10/23/17 08:40	10/23/17 21:33	98-08-8	



#### **QUALITY CONTROL DATA**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

QC Batch: 271424 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV

Associated Lab Samples: 40159146001, 40159146002, 40159146003, 40159146004, 40159146005, 40159146006, 40159146007

METHOD BLANK: 1596394 Matrix: Solid

Associated Lab Samples: 40159146001, 40159146002, 40159146003, 40159146004, 40159146005, 40159146006, 40159146007

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	10/23/17 09:34	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	10/23/17 09:34	
Benzene	ug/kg	<25.0	50.0	10/23/17 09:34	
Ethylbenzene	ug/kg	<25.0	50.0	10/23/17 09:34	
m&p-Xylene	ug/kg	<50.0	100	10/23/17 09:34	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	10/23/17 09:34	
Naphthalene	ug/kg	<25.0	50.0	10/23/17 09:34	
o-Xylene	ug/kg	<25.0	50.0	10/23/17 09:34	
Toluene	ug/kg	<25.0	50.0	10/23/17 09:34	
a,a,a-Trifluorotoluene (S)	%	100	80-120	10/23/17 09:34	

LABORATORY CONTROL SAMPL	E & LCSD: 159639	95	15	96396						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1010	1060	101	106	80-120	5	20	
1,3,5-Trimethylbenzene	ug/kg	1000	968	1030	97	103	80-120	6	20	
Benzene	ug/kg	1000	952	1020	95	102	80-120	7	20	
Ethylbenzene	ug/kg	1000	982	1040	98	104	80-120	6	20	
m&p-Xylene	ug/kg	2000	1950	2050	97	102	80-120	5	20	
Methyl-tert-butyl ether	ug/kg	1000	909	992	91	99	80-120	9	20	
Naphthalene	ug/kg	1000	941	1020	94	102	80-120	8	20	
o-Xylene	ug/kg	1000	980	1030	98	103	80-120	5	20	
Toluene	ug/kg	1000	967	1030	97	103	80-120	6	20	
a,a,a-Trifluorotoluene (S)	%				102	103	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.





#### **QUALITY CONTROL DATA**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

QC Batch: 271930 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

40159146001, 40159146002, 40159146003, 40159146005, 40159146006 Associated Lab Samples:

SAMPLE DUPLICATE: 1599084

Date: 10/27/2017 09:34 AM

		40159394001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Percent Moisture	%		15.3	1	10	

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.



#### **QUALIFIERS**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

#### **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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

#### **LABORATORIES**

PASI-G Pace Analytical Services - Green Bay

#### **WORKORDER QUALIFIERS**

WO: 40159146

[1] The dry weight container had melt water in it. This sample is reported on an as-is basis and not corrected for moisture.

#### **ANALYTE QUALIFIERS**

Date: 10/27/2017 09:34 AM

S7 Surrogate recovery outside control limits (not confirmed by re-analysis).

W Non-detect results are reported on a wet weight basis.



#### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 282751 105 E MAIN

Pace Project No.: 40159146

Date: 10/27/2017 09:34 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40159146001	BE	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146002	BW	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146003	SWE	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146004	SWW	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146005	SWN	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146006	SWS	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146007	TRIP BLANK	TPH GRO/PVOC WI ext.	271424	WI MOD GRO	271470
40159146001	BE	ASTM D2974-87	271930		
40159146002	BW	ASTM D2974-87	271930		
40159146003	SWE	ASTM D2974-87	271930		
40159146005	SWN	ASTM D2974-87	271930		
40159146006	SWS	ASTM D2974-87	271930		

C019a(27Jun2006

Receipt Temp = R

റ്

Sample Receipt pH

OK / Adjusted

Present / Not Fregent Cooler Custody Seal

Intact / Not lotact

CRICINAL

2h/b5/10h

PACE Project No

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Company Name:

(Please Print Clearly)

೦

Page 19 of 20

108 Heartland Tr Ste3 MRCHON URSON

Dontook

LAB COMMENTS

Profile #

(Lab Use Only)

- Mary

# Sample Condition Upon Receipt

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

/ Pace Analytical				<b>D</b>		7
701				Project	WO# : 4	0159146
Client Name: TRC			1. /	alter		IN 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Courier: Fed Ex UPS Client Pace	Other:		W '	4		
Tracking #:			-44	yes I no	40159146	
Custody Seal on Cooler/Box Present: yes				T yes no		
Custody Seal on Samples Present:  yes X Packing Material:  Bubble Wrap  Bubb				Other		
Thermometer Used				Blue Dry None		n ice, cooling process has begun
Cooler Temperature Uncorr: Ro 1 / / / / / / / / / / / / / / / / / /	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			ical Tissue is F	1 1	
Temp Blank Present: Tyes K no					no	Person examining contents:
Temp should be above freezing to 6°C.						Date:
Biota Samples may be received at ≤ 0°C.				Comments:		Timodo.
Chain of Custody Present:	XYes [	]No	□n/a	1,		
Chain of Custody Filled Out:	□Yes È	No	□n/a	<u> 21)                                   </u>		
Chain of Custody Relinquished:	<b>≥</b> ∀es □	]No	□n/a	3.		
Sampler Name & Signature on COC:	Yes [	]No	□n/a	4.		
Samples Arrived within Hold Time:	Yes [	JNo	□n/a	5.		
- VOA Samples frozen upon receipt	□Yes □	∃No		Date/Time:		
Short Hold Time Analysis (<72hr):	□Yes	No	□n/a	6.		
Rush Turn Around Time Requested:	□Yes Ì	No				
Sufficient Volume:	□Yes	dNo	□n/a	8. No 15/ho	5201/	Str (oAd-
Correct Containers Used:	Aryes [	JNo	□N/A	9.		
-Pace Containers Used:	Yes [	□No	□N/A			
-Pace IR Containers Used:	□Yes [		SIN/A		. 4 / 5	11 (1) 55
Containers Intact:	☐Yes <b>1</b>	No	□n/A	10.089 - 1-	tospy contrain	ha by meterles (3) Todays
Filtered volume received for Dissolved tests	□Yes [		N/A	9		<i>*</i>
Sample Labels match COC:	□Yes Ì	ŊNo	□n/a	12105 a	nly on Skryde	Brakken
-Includes date/time/ID/Analysis Matrix:	7					
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	□Yes I	□No	<b>S</b> N/A	13.	O3   H2SO4	NaOH NaOH +ZnAct
All containers needing preservation are found to be in						
compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	□Yes	□No	<b>⊉</b> N/A			
exceptions: VOA, coliform, TOC, TOX, TOH,	 □Yes			Initial when completed	Lab Std #ID of preservative	Date/ Time:
O&G, WIDROW, Phenolics, OTHER:			(C) be/A		preservative	
Headspace in VOA Vials ( >6mm):	□Yes <b>≧</b> Yes		N/A □N/A	<u> </u>		
Trip Blank Present:  Trip Blank Custody Seals Present	Yes					
Pace Trip Blank Lot # (if purchased) 376611	43					
Client Notification/ Resolution:					If checked, see atta	ched form for additional comments
Person Contacted:		, ,	-	Time:	1	
Comments/ Resolution:	nk ad	R LL	1	LOC by la	6/20/17	
				450	- 10/5-11/	
Q1-4020A	tabe	di	Res	ed at p	or PM	h x 1/2
1/2 - 2	<u>, [</u>		T	<b>F</b> *	Sn Oly	10/20117
Project Manager Review:	tor		11		Date	s. vy cyr

(920)469-2436



November 13, 2017

DAN HAAK TRC - MADISON 708 HEARTLAND TRAIL Madison, WI 53717

RE: Project: 282751 105 E. MAIN

Pace Project No.: 40159508

#### Dear DAN HAAK:

Enclosed are the analytical results for sample(s) received by the laboratory on October 26, 2017. 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.

Report revised to include TCLP Lead analysis requested by TRC.

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

Sincerely,

Dan Milewsky for Tod Noltemeyer

Day Mileny

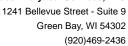
tod.noltemeyer@pacelabs.com

(920)469-2436

Project Manager

Enclosures







#### **CERTIFICATIONS**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

#### **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



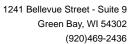


#### **SAMPLE SUMMARY**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40159508001	TANK	Solid	10/26/17 11:00	10/26/17 12:33





#### **SAMPLE ANALYTE COUNT**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40159508001	TANK	WI MOD GRO	ALD	2	PASI-G
		EPA 6010	JLD	1	PASI-G
		EPA 6010	JLD	1	PASI-G
		ASTM D2974-87	AH	1	PASI-G
		EPA 1010	DEY	1	PASI-G





#### **SUMMARY OF DETECTION**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Lab Sample ID	Client Sample ID	Decell	11.5	Daniel Lad	A b d	0
Method	Parameters Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40159508001	TANK					
EPA 6010	Lead	1350	mg/kg	20.1	11/07/17 13:29	
EPA 6010	Lead	0.54	mg/L	0.065	11/13/17 11:44	
ASTM D2974-87	Percent Moisture	71.5	%	0.10	10/27/17 17:24	
EPA 1010	Flashpoint	>210	deg F		10/31/17 11:25	1q



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

# **PROJECT NARRATIVE**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Method: WI MOD GRO
Description: WIGRO GCV
Client: TRC - MADISON
Date: November 13, 2017

# **General Information:**

1 sample was 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:**

**Analyte Comments:** 

QC Batch: 272264

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- TANK (Lab ID: 40159508001)
  - a,a,a-Trifluorotoluene (S)



**PROJECT NARRATIVE** 

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Method: EPA 6010
Description: 6010 MET ICP
Client: TRC - MADISON
Date: November 13, 2017

# **General Information:**

1 sample was analyzed for EPA 6010. 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 3050 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.

### 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:**



Green Bay, WI 54302 (920)469-2436

# **PROJECT NARRATIVE**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Method: EPA 6010

Description: 6010 MET ICP, TCLP
Client: TRC - MADISON
Date: November 13, 2017

# **General Information:**

1 sample was analyzed for EPA 6010. 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 3010 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.

### 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:**



# **PROJECT NARRATIVE**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Method: EPA 1010

Description: 1010 Flashpoint, Closed Cup

Client: TRC - MADISON

Date: November 13, 2017

# **General Information:**

1 sample was analyzed for EPA 1010. 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.

### 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.

# **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

# **Additional Comments:**

**Analyte Comments:** 

QC Batch: 272473

1q: This sample produced an enlarged flame at the cup opening starting at 160 degrees F, but it did not produce a standard flash within the cup.

- TANK (Lab ID: 40159508001)
  - Flashpoint

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



# **ANALYTICAL RESULTS**

Project: 282751 105 E. MAIN

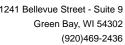
Pace Project No.: 40159508

Date: 11/13/2017 04:19 PM

Sample: TANK Lab ID: 40159508001 Collected: 10/26/17 11:00 Received: 10/26/17 12:33 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 Pr	eparation N	/lethod	: TPH GRO/PVO	C WI ext.			
Benzene	<200	ug/kg	480	200	8	10/30/17 07:19	10/31/17 10:43	71-43-2	W	
Surrogates a,a,a-Trifluorotoluene (S)	102	%	80-120		8	10/30/17 07:19	10/31/17 10:43	98-08-8	D3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050									
Lead	1350	mg/kg	20.1	6.7	5	10/31/17 07:56	11/07/17 13:29	7439-92-1		
6010 MET ICP, TCLP	•		A 6010 Prepar e: EPA 1311; 11			A 3010				
Lead	0.54	mg/L	0.065	0.022	1	11/10/17 12:00	11/13/17 11:44	7439-92-1		
Percent Moisture	Analytical	Method: AS	ΓM D2974-87							
Percent Moisture	71.5	%	0.10	0.10	1		10/27/17 17:24			
1010 Flashpoint,Closed Cup	Analytical	Analytical Method: EPA 1010								
Flashpoint	>210	deg F			1		10/31/17 11:25		1q	





Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Date: 11/13/2017 04:19 PM

QC Batch: 272264 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV

Associated Lab Samples: 40159508001

METHOD BLANK: 1601695 Matrix: Solid

Associated Lab Samples: 40159508001

Blank Reporting Parameter Result Limit Qualifiers Units Analyzed Benzene <25.0 50.0 10/30/17 09:08 ug/kg a,a,a-Trifluorotoluene (S) % 102 80-120 10/30/17 09:08

LABORATORY CONTROL SAMPLE	& LCSD: 1601696		10	601697						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
Benzene	ug/kg	1000	931	971	93	97	80-120	4	20	
a,a,a-Trifluorotoluene (S)	%				103	103	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.



282751 105 E. MAIN Project:

Pace Project No.: 40159508

QC Batch: 272291 QC Batch Method: EPA 3050 Analysis Method:

EPA 6010

Analysis Description:

6010 MET

Associated Lab Samples: 40159508001

METHOD BLANK: 1601770

Matrix: Solid

Associated Lab Samples:

40159508001

Blank Result

Reporting

Parameter

Parameter

Lead

Lead

Date: 11/13/2017 04:19 PM

Units

Limit

Analyzed Qualifiers

Lead mg/kg

Units

mg/kg

< 0.43

1.3 11/07/17 13:22

101

LABORATORY CONTROL SAMPLE: 1601771

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

1601772

1601773

50.6

40159605001 Parameter Units Result mg/kg 401

MS MSD Spike Spike Conc. Conc. 66.4

66.3

50

MS MSD Result Result 418

MS % Rec 425 26

MSD % Rec 35

% Rec Max Limits RPD RPD 75-125

20 P6

Qual

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.



282751 105 E. MAIN Project:

Pace Project No.: 40159508

QC Batch: 273816 Analysis Method: EPA 6010 QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP

Associated Lab Samples: 40159508001

METHOD BLANK: 1611046 Matrix: Water

Associated Lab Samples: 40159508001

Reporting Result Limit Qualifiers Parameter Units Analyzed Lead < 0.0043 0.013 11/13/17 11:39 mg/L

Blank

METHOD BLANK: Matrix: Solid

Associated Lab Samples: 40159508001

Blank Reporting Limit Units Result Analyzed Qualifiers Parameter 11/13/17 12:01 Lead mg/L < 0.022 0.065

METHOD BLANK: 1609678 Matrix: Solid

Associated Lab Samples: 40159508001

Blank Reporting Parameter Units Result Limit Analyzed Qualifiers Lead mg/L < 0.0043 0.013 11/13/17 12:06

METHOD BLANK: 1609725 Matrix: Solid

Associated Lab Samples: 40159508001

Blank Reporting Limit Parameter Units Result Analyzed Qualifiers Lead < 0.022 0.065 11/13/17 12:28 mg/L

METHOD BLANK: 1609964 Matrix: Solid

Associated Lab Samples: 40159508001

Blank Reporting Parameter Units Result Limit Analyzed Qualifiers Lead 0.025J 0.065 11/13/17 12:11 mg/L

LABORATORY CONTROL SAMPLE:

Date: 11/13/2017 04:19 PM

LCS LCS Spike % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Lead mg/L .5 0.49 99 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.



Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Date: 11/13/2017 04:19 PM

MATRIX SPIKE & MATRIX SPI	KE DUPLICA	TE: 161104	18 MS	MSD	1611049							
	4	0159508001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Lead	mg/L	0.54	2.5	2.5	2.9	2.9	93	93	75-125	0	20	
MATRIX SPIKE SAMPLE:	161	1050										
			401603		Spike	MS		1S	% Rec			
Parameter		Units	Res	ult	Conc.	Result	<u></u> %	Rec	Limits		Qualif	iers
Lead		mg/L		0.26	2.5	2	2.7	96	75-	125		
MATRIX SPIKE SAMPLE:	161	1051										
			401603		Spike	MS		1S	% Rec			
Parameter		Units	Res	ult	Conc.	Result	%	Rec	Limits		Qualif	iers
Lead		mg/L		<0.022	2.5	2	2.4	95	75-	125		
MATRIX SPIKE SAMPLE:	161:	2477										
			401603	91002	Spike	MS	N	1S	% Rec			
Parameter		Units	Res	ult	Conc.	Result	%	Rec	Limits		Qualif	iers
Lead		mg/L		<0.022	2.5		 2.5	97	75-	125		

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.



**QUALITY CONTROL DATA** 

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Date: 11/13/2017 04:19 PM

QC Batch: 272217 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40159508001

SAMPLE DUPLICATE: 1601175

Percent Moisture 40159505001 Dup Max Result RPD Qualifiers 3.4 3.4 1 10

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.



EPA 1010

Analysis Method:

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

QC Batch: 272473

QC Batch Method: EPA 1010 Analysis Description: 1010 Flash Point, Closed Cup

Associated Lab Samples: 40159508001

LABORATORY CONTROL SAMPLE: 1602615

Spike LCS LCS % Rec

Parameter Units Conc. Result % Rec Limits Qualifiers

Flashpoint deg F 80.2

SAMPLE DUPLICATE: 1602876

Date: 11/13/2017 04:19 PM

10408655006 Dup Max
Parameter Units Result RepD RPD Qualifiers

Flashpoint deg F 98.2 110

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.



# **QUALIFIERS**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

### **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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

### **LABORATORIES**

PASI-G Pace Analytical Services - Green Bay

# **ANALYTE QUALIFIERS**

Date: 11/13/2017 04:19 PM

1g	This sample produced an enlarged flame at the cup opening starting at 160 degrees F, but it did not produce a standard
•	flash within the cup.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the

spike level.

W Non-detect results are reported on a wet weight basis.



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 282751 105 E. MAIN

Pace Project No.: 40159508

Date: 11/13/2017 04:19 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40159508001	TANK	TPH GRO/PVOC WI ext.	272264	WI MOD GRO	272292
40159508001	TANK	EPA 3050	272291	EPA 6010	272669
40159508001	TANK	EPA 3010	273816	EPA 6010	273896
40159508001	TANK	ASTM D2974-87	272217		
40159508001	TANK	EPA 1010	272473		

OHIGINAL

# **Sample Condition Upon Receipt**

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

Pace Arialytical						
Client Name:				Project #:	WO#	40159508
Courier: Fed Ex UPS Client Pace	e Other:		-	· · · · · · · · · · · · · · · · · · ·	40150500	
Custody Seal on Cooler/Box Present: yes	₹ no	Seals	intact	ves la no	46129200	
Custody Seal on Samples Present:  yes				yes no		
Packing Material: Bubble Wrap Bubble	•					
Thermometer Used				Blue Dry None	Samples	n ice, cooling process has begun
Cooler Temperature Uncorr: Kri /Corr:	. , , , , ,			gical Tissue is Fro	· •	in ice, cooling process has begun
Temp Blank Present:  yes no	**		-		no	Person examining contents:
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C.				Comments:		Date: 18/2/6/7 Initials: 55h
Chain of Custody Present:	<b>⊠</b> Yes [	□No	□n/a	1.		
Chain of Custody Filled Out:	Yes [	□No	□n/a	2.		
Chain of Custody Relinquished:	<b>À</b> (Ŷes [	□No	□n/a	3.		
Sampler Name & Signature on COC:	X₹Yes [	□No	□n/a	4.		
Samples Arrived within Hold Time:	ØK√es [	□No	□n/a	5.		
- VOA Samples frozen upon receipt	□Yes [	□No		Date/Time:		
Short Hold Time Analysis (<72hr):	□Yes⊅	×(ν <sub>ο</sub>	□n/a	6.		
Rush Turn Around Time Requested:	□Yes	XN0	□n/a	7.		
Sufficient Volume:	□Yes )	XNo	□n/a	8. VA A5/25	DWI.	5gm 10/26/17
Correct Containers Used:	ATYes [	□No	□n/a	9.		
-Pace Containers Used:	Yes [	□No	□n/a			
-Pace IR Containers Used:	□Yes [	□No	DAM/A			
Containers Intact:	Yes [	□No	□n/a	10.		
Filtered volume received for Dissolved tests	□Yes □	∃No	DE TA	11.		
Sample Labels match COC:	□Yes	<b>2</b> No	□n/a	12.ID only	an sample	le s
-Includes date/time/ID/Analysis Matrix:	<u> </u>			/		18n (dd al) >
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	□Yes □	٦No	DINA	10 HNO3	H2SO4	NaOH NaOH +ZnAct
All containers needing preservation are found to be in				13.	,	
compliance with EPA recommendation.	□Yes □	∃No	Σπ/A			
(HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12) exceptions: VOA, coliform, TOC, TOX, TOH,				Initial when	ah 044#D -6	Date/
O&G, WIDROW, Phenolics, OTHER:	□Yes 🗜	No			_ab Std #ID of preservative	Time:
Headspace in VOA Vials ( >6mm):	□Yes □	∃No	[X]N/A	14.	-	
Trip Blank Present:	□Yes □	□No	DaN/A	15.		
Trip Blank Custody Seals Present	☐Yes ☐	∃No	DETN/A			
Pace Trip Blank Lot # (if purchased):						
Client Notification/ Resolution:			D - / - ~		hecked, see attach	ned form for additional comments
Person Contacted: Comments/ Resolution:			Date/T	ime:		
Sommonio, resolution.						
Project Manager Review:	AL	Fi	)V _	N	Date:	10-26-17

# Appendix G Soil Disposal and Waste Inventory Records

Laboratory results are included in Appendix F.

Date	Profile #	Manifest #	Ticket #	Material	Facility	Tons / Tonnes	Material Quantity	Material U1
11/01/2017	DCV127923WI	*	1146774	PETROLEUM CONTAMINATED SOIL	Valley Trail RDF	14.29	14.29	TON
11/01/2017	DCV127923WI	*	1146771	PETROLEUM CONTAMINATED SOIL	Valley Trail RDF	14.73	14.73	TON

# **Buss, Amy**

From: Buss, Amy

**Sent:** Tuesday, October 24, 2017 2:11 PM **To:** kenneth.gruennert@veolia.com

Cc: DOT Hazmat Unit; VanPrice, Kathie - DOT; Haak, Daniel

**Subject:** 6190-15-72, Hazardous Waste Inventory, STH 16, Winneconne, Winnebago County 6190-15-72, Hazardous Waste Inventory, Winneconne, Winnebago County.pdf

Attached is the Hazardous Waste Inventory Record (DT1231) for the property located at 105 E. Main Street, in Winneconne, Winnebago County Wisconsin (WisDOT ID# 6190-15-72). Location maps are included in the PDF. Please arrange pickup and disposal of the waste.

Please contact Dan Haak at, 608-826-3628, if you have any questions.

Thank you, Amy

> Amy Buss Administrative Manager



708 Heartland Trail, Suite 3000, Madison, WI 53717 T: 608.826.3617 | F: 608.826.3941 | C: 608.335.4198

<u>LinkedIn | Twitter | Blog | Flickr | www.trcsolutions.com</u>



DTSD Region and Office									
Northeast - Green Bay									
WisDOT Project ID	County	Highway and Termini							
6190-15-72	Winnebago	STH 16							
Site Name									
105 E. Main Street									
Is an EPA ID required for this Site?	E	PA ID Number ♦:							
☐ Yes ☒ No, VSQG Exempt ☐ Other: [E	Explain]								
Consultant Company									
TRC Environmental Corporation									
Consultant Contact									
Dan Haak									
Contact (Area Code) Telephone									
608-826-3628									
Contact Email Address									
dhaak@trcsolutions.com									
Consultant ID for this Site									
282751									
Generation Date (m/d/yyyy)									
10/18/17									
Comments, special instructions for pickup or site acc	cess								
See attached map for drum location.									

• If an EPA ID number is required for this site, contact the DOT hazardous materials specialist.

Number and label each container. Mark each container with contents.										
Container ID Number	Container Size and Type	Estimated Volume of Waste	Waste Source	Contents	Waste Profile and Waste Codes					
Example: MW1-1 and MW 1-2	Example: 55 Gallon Metal Drum	Example: 55 Gal + 35 Gal = 90 Gallons	Example: Monitoring Well 1	Example: purge water and free product (leaded gasoline)	Example: DOT generic profile RCRA Landfill; D001, D008					
1 of 1	55 Gallon Metal Drum	30 Gallons	Tank	Tank Sludge	RCRA Landfill					
Total number of containers to be picked up: 1										

Container Location: Attach map or site sketch to Email Analytical Results: Attach analytical results to Email Email one copy of this form to each of the following:

- DOT Hazardous Materials Specialist
- Regional Environmental or Hazardous Materials Coordinator.
- Hazardous Waste Contractor

Include a copy of this form as the final appendix in the report for this site.



Drum location



Winneconne Winneconne, WI 54986



, Approximate drum location

