Robert E. Lee & Associates, Inc.
Engineering, Surveying, Environmental Services

December 10, 2010

Mr. Don Hermansen
MARINETTE MARINE CORPORATION
1600 Ely Street
Marinette, WI 54143

Green Bay Office
4664 Golden Pond Park Ct.
Hobart, WI 54155
920-662-9641
FAX 920-662-9141
E Mail rel@releeinc.com

RE: **TANK-SYSTEM SITE ASSESSMENT**
Marinette Marine Corporation – Building #10 Expansion (NE Gasoline UST)
1600 Ely Street, Marinette, Wisconsin
BRRTS #02-38-555082

Dear Mr. Hermansen:

On behalf of Marinette Marine Corporation (MMC) and Smet Construction Services (Smet), Robert E. Lee & Associates, Inc. (REL), completed a tank-system site assessment (TSSA) for an underground storage tank (UST) at the above-referenced property (the Site). This letter report presents the summary of activities and conclusions based upon the findings of the TSSA.

SITE LOCATION

The Site is the location of Building #10 (ship erection building) of the Marinette Marine Corporation (MMC) facility. The Wisconsin Transverse Mercater coordinates for the Site are 707265, 516830. The Site location and local topography is shown in Figure 1. The Site is a part of a 28-acre shipyard that builds ships for commercial use and the United States Navy and Coast Guard. The MMC facility is located in a mixed-use industrial, commercial, and residential area in the City of Marinette within the northeast quarter of the southeast quarter of Section 6, Township 30, Range 24 East, Marinette County, Wisconsin.

BACKGROUND INFORMATION

During February 2010, a Phase II Environmental Site Assessment (ESA) was completed in the immediate vicinity of Building #10 in preparation for a building addition. Numerous soil borings were completed throughout the area of planned construction. Soil samples were laboratory analyzed for Resource Conservation and Recovery Act (RCRA) metals, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). Laboratory analysis detected concentrations of metals, PAHs, and/or VOCs in each of the soil borings. In accordance with the Wisconsin Spills Law, the detection of contaminants was reported to the WDNR on March 4, 2010. Subsequently, the WDNR assigned Bureau of Remediation and Redevelopment Tracking System (BRRTS) #02-38-555082 to the Site and requested that a site investigation be completed to define the magnitude and extent of the contaminants in soil and/or groundwater. REL was retained by MMC and Smet Construction Services to perform an investigation of the contaminants and provide oversight of the handling of contaminated soils during construction activities, respectively.

During April 2010, construction for the Building #10 addition was initiated by Smet Construction Services. On October 10, 2010, a 1,000-gallon UST was discovered during the installation of a new water line located in the eastern addition of Building #10. MMC believes the UST was installed in the 1940s and likely contained leaded gasoline used for fueling purposes. During exploratory excavation, the UST was observed to be located in close proximity to a new building foundation structure (i.e., pile cap) and several high-voltage underground electric lines. A high groundwater table was also encountered during excavation. Given the USTs proximity to these structures coupled with the high groundwater table, approval for closure in-place of the UST was granted by the Wisconsin Department of Commerce (WDCOMM) inspector. The former UST location is shown on Figure 2.

UST CLOSURE ACTIVITIES AND RESULTS

On October 13, 2010, REL environmental scientist, Mr. Kevin Eibenholzl (WDCOMM Certification #649863), was on-site to oversee the closure-in-place of the gasoline UST, and complete the TSSA. Barley Excavating and Trucking provided excavation services. The UST was cleaned and closed-in-place by SGS Environmental Contracting, LLC (SGS) (WDCOMM Certification #42227). The UST was abandoned with approximately 5 cubic yards of concrete slurry.

All UST closure activities were conducted in accordance with Chapter Comm 10, Wisconsin Administrative Code, and the TSSA was completed in accordance with the *Assessment and Reporting of Suspected and Obvious Releases from Underground and Aboveground Storage Tank System Guidance* published by the Wisconsin Department of Commerce (WDCOMM, 2010). Detailed information regarding the UST system, UST closure-in-place and cleaning, surplus product and sludge disposal, and photographs are included in Attachments A through E.

Prior to the closure, approximately 2,500 gallons of water was pumped from the UST and the adjacent water line trench excavation to a vac truck by Chief Liquid Waste. In addition, 239.7 tons of soil was excavated from the water line trench and was handled as potentially containing petroleum compounds. The soil was stockpiled on-site pending approval for off-site disposal at Waste Management's Menominee Landfill in Menominee, Michigan. Barley Excavating & Trucking subsequently transported the stockpile soil for landfill disposal on October 27, 2010. Soil disposal documentation is included in Attachment F.

During the UST closure, obvious staining and petroleum odors were observed in soil surrounding the UST. The UST was observed to be in poor condition with rusting, pitting, and contained multiple holes. A petroleum sheen was observed on the groundwater present in the excavation. Two soil samples (S1 and S2) were collected to evaluate soil conditions. The samples were collected from native soil adjacent the UST located above the apparent water table. Each soil sample was described in the field and properly containerized for field screening and possible laboratory analysis. Soil sample collection, handling, and field-screening procedures followed WDNR guidance. Field screening was performed using an Ion Science Photocheck 1000 photoionization detector (PID). The soil sample locations are shown in Figure 2.

Field screening of Samples S1 and S2 produced PID readings ranging of 218 to 121 parts per million, respectively. Strong petroleum odors were noted in the soil samples. Field screening results indicate that petroleum product is present in the soil. To confirm the presence of petroleum contamination, the soil sample (S1) exhibiting the highest PID reading was submitted under chain-of-custody protocol to Pace Analytical Services, Inc., (WDNR Certification #405132750) for laboratory analysis of gasoline range organics (GRO), petroleum volatile organic compounds (PVOCs), and naphthalene. Laboratory analysis detected concentration of GRO, PVOCs, and naphthalene in the soil sample. Notably, benzene was detected in Sample S1 in excess of the Chapter NR 720, Wisconsin Administrative Code (Wis. Admin. Code) residual contaminant levels (RCLs). Laboratory analytical results are summarized in Tables 1 and 2 of the TSSA checklist included as Attachment E. The laboratory analytical reports are included in Attachment G.

Based on the results of the TSSA, a release has occurred from the gasoline UST. We trust this information meets your needs. Please feel free to contact our office if you have any questions.

Sincerely,

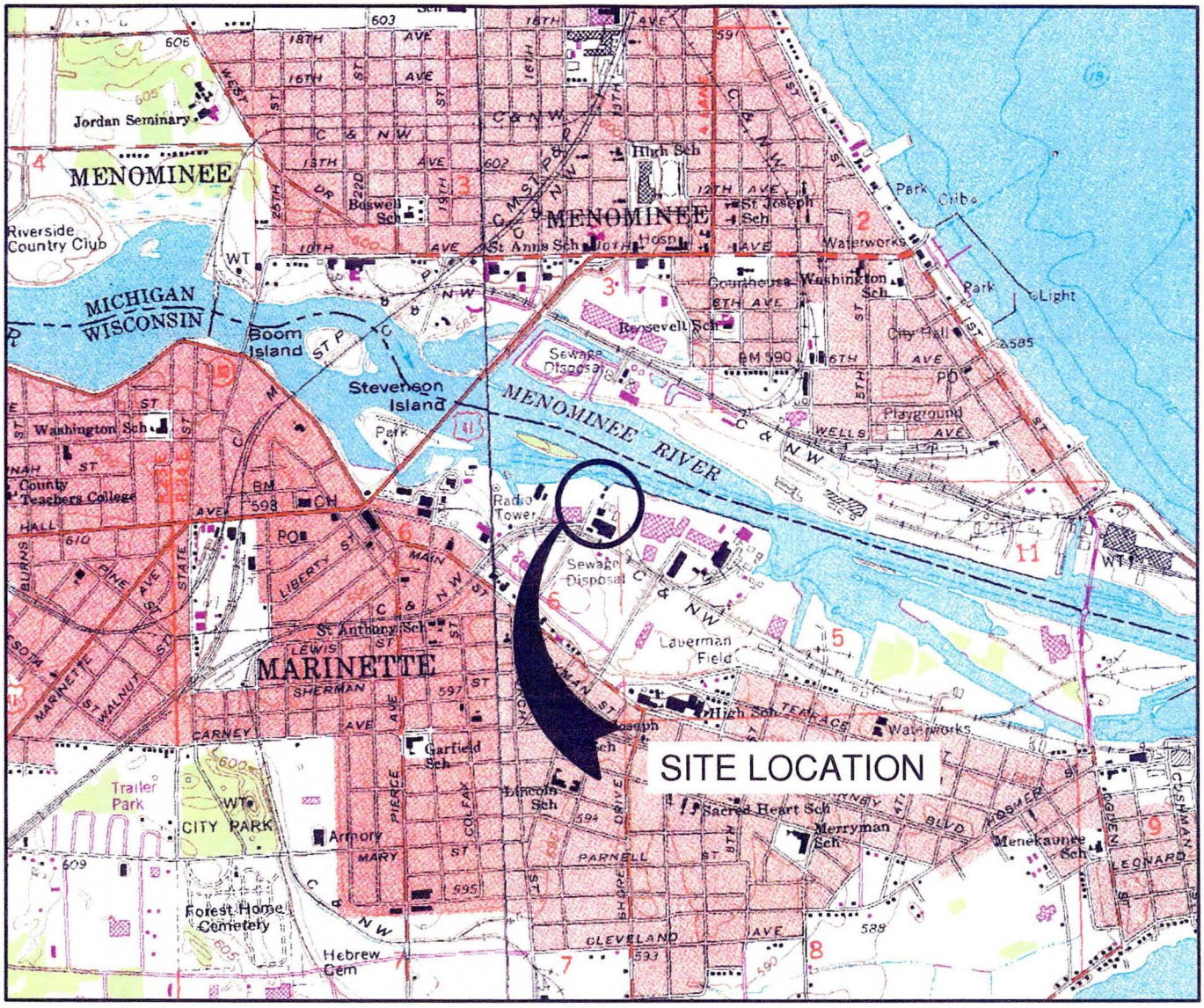
ROBERT E. LEE & ASSOCIATES, INC.

Kevin R. Eibenholzl
Environmental Scientist

KRE/NJM

ENC.

CC/ENC.: Mr. Jason Moeller, WDNR
Mr. Joash Smits, Smet Construction Services Corp.



MAP USED - MARINETTE EAST - 1976
MAP USED - MARINETTE WEST - 1976

SITE LOCATION AND LOCAL TOPOGRAPHY

MARINETTE MARINE CORP-BLDG. NO.10 EXPANSION
MARINETTE, WISCONSIN

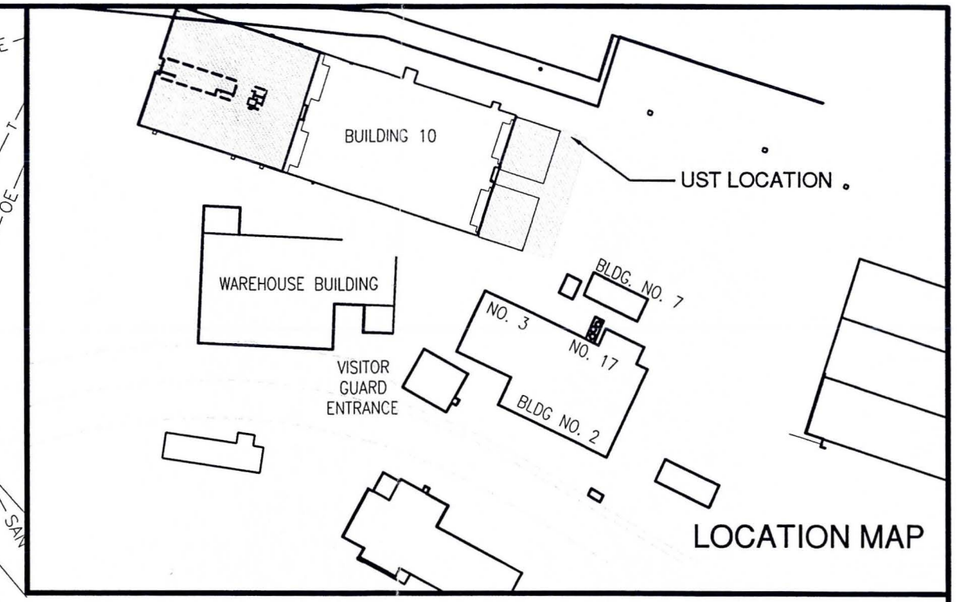
NORTH

1" = 2000'

Robert E. Lee & Associates, Inc.
ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES
4664 GOLDEN POND PARK COURT
HOBART, WI 54155 PHONE:(920) 662-9641
INTERNET: www.releeinc.com FAX:(920) 662-9141

FIGURE 1

File: R:\3400\3499\3499011\dwg\LOCATION SKETCH.dwg
Plot Date: Dec 07, 2010 - 3:02pm



APPROX. 8' UTILITY TRENCH EXCAVATION

UST LOCATION (CLOSED IN-PLACE)

S1

S2

BUILDING 10 – EAST EXPANSION AREA

NORTH

0' 20' 40'

SCALE IN FEET

LEGEND

- ▲S1 SOIL SAMPLE LOCATION
- ⊕ STORM SEWER CATCH BASIN
- —Sto—Sto— STORM SEWER
- —SAN— SANITARY SEWER
- —W— WATERMAIN
- —E— ELECTRIC LINE (UNDERGROUND)
- —OE— ELECTRIC LINE (OVERHEAD)
- PILE CAP

NOTE:
UNDERGROUND WATER UTILITY AND TRENCH EXCAVATION LOCATIONS ARE APPROXIMATE.

MARINETTE MARINE CORP.
BLDG NO. 10 EXPANSION
NE GASOLINE UST CLOSURE
MARINETTE, WISCONSIN

SOIL SAMPLE LOCATIONS

FIGURE 2

Robert E. Lee & Associates, Inc.
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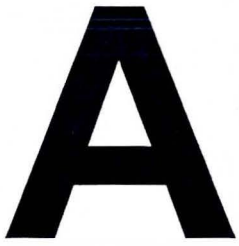
4664 GOLDEN POND PARK COURT
HOBART, WI 54155 PHONE:(920) 662-9641
INTERNET: www.releeinc.com FAX:(920) 662-9141

File: R:\3400\3499\3499015\DWG\SOIL SAMPLE MAP EAST.dwg
Plot Date: Dec 09, 2010 – 11:02am



ATTACHMENT A

PROJECT CONTACTS

PROJECT CONTACTS

Site Owner/Operator

Marinette Marine Corporation
1600 Ely Street
Marinette, WI 54143-2434
(715) 735-9341
Mr. Don Hermansen

Certified Site Assessor

Robert E. Lee & Associates, Inc.
4664 Golden Pond Park Court
Hobart, WI 54155
(920) 662-9641
Mr. Kevin Eibenholzl, WDCOMM Certification # 649863

UST Removal and Cleaning Contractor

SGS Environmental Contracting, LLC
N2570 Daytona Drive
Merrill, WI 54452
(715) 539-2803
Mr. Jay Schlueter, WDCOMM Certification # 42227

UST Excavation Contractor

Barley Trucking & Excavating
1824 10th Avenue
Menominee, MI 49858
(906) 863-9373

Water Transporter

Chief Liquid Waste, Inc.
210 Tower Road
Winneconne, WI 54986
(920) 582-7596

Water Disposal Facility

Chief Waste Treatment Corporation
210 Tower Road
Winneconne, WI 54986

B

ATTACHMENT B

TANK SYSTEM INFORMATION

TANK SYSTEM INFORMATION

Number of Tanks: 1

Tank I.D. #: 1286752

Capacity: 1,000 gallons

Contents: Leaded Gasoline

Dimensions: 5 feet by 6 feet

Age: +/- 70 years

Tank Construction: Bare steel

Tank Condition: Poor condition; pitted and rusted with multiple holes

Piping Construction: Steel

Piping Condition: Not applicable; only a small portion of piping remained near the vicinity of the UST

C

ATTACHMENT C

TANK CLEANING & DISPOSAL AND SURPLUS PRODUCT & SLUDGE MANAGEMENT

TANK CLEANING AND DISPOSAL

Location and Method of Cleaning: A hole was cut in the top of the UST, and the UST was then emptied of infiltrated groundwater, cleaned in-place, and inspected. The inside of the UST was wiped clean by SGS personnel.

Method of Tank Transport and Disposal: Not applicable. The UST was closed-in-place.

Handling of Cleaning Wastewater: No water was used to clean the tank.

SURPLUS PRODUCT/WATER AND SLUDGE MANAGEMENT

Approximately 2,500 gallons of water were removed from the UST and adjacent water line trench excavation utilizing a vac truck operated by Chief Liquid Waste, Inc., Winneconne, Wisconsin. Disposal documentation is attached. No residual sludge was generated from the cleaning of the UST.

CHIEF LIQUID WASTE, INC.

8073

210 Tower Road • Winneconne, WI 54986
Phone: 920-582-7596 • Fax: 920-582-3989

NON HAZARDOUS WASTE CERTIFICATION MANIFEST

SHIPPER Robert E. Lee & Associates, Inc DESCRIPTION 1 - tank Underground Groundwater & Sand / Gasy water

ADDRESS 1664 Golden Road Trk #2 VOLUME 2,500 Gals LIQUID ☒ SOLID ☐

CITY Oneida WI. 54155 STATE WI. PHONE (Nicole M. Lyons) 920) 662-9041

RECEIVING FACILITY Chief Wastewater Treatment Inc. PROFILE #

ADDRESS 210 Tower Road DATE 10/13/10

CITY, STATE, ZIP Winneconne, WI. 54986

I **SHIPPER** UNDER PENALTY OF LAW CERTIFIES THAT THIS WASTE IS NON HAZARDOUS PER 40 CFR PART 261. THIS WASTE DOES NOT CONTAIN PCB'S IN CONCENTRATIONS ABOVE LIMITS FOR SUBTITLED FACILITIES. I AM AWARE OF PENALTIES FOR FALSE CERTIFICATIONS.

SHIPPER X John Smith PM Smith Const SIGNATURE X

DRIVER Bobby Schroeder SIGNATURE

RECEIVED BY SIGNATURE

WHITE & YELLOW - CLW / PINK - RECEIVING FACILITY / GOLD - GENERATOR

D

ATTACHMENT D

VISUAL INSPECTION AND PHOTOGRAPHS

VISUAL INSPECTION

Weather Conditions: 60° F, sunny, no precipitation, 5 to 10 mph winds.

Site Conditions: The Site is currently used as a ship manufacturing facility.

Excavation Conditions: Since the UST was closed-in-place, limited excavation was performed in the vicinity of the UST. Staining and petroleum odors were observed in soils adjacent the UST. Groundwater was encountered in the excavated area at approximately 5 feet below grade. A petroleum sheen was observed on the groundwater that was present within excavation. Materials around the UST consisted mainly of imported sand fill.

Local Groundwater Use: The Site receives potable water from the City of Marinette municipal distribution system. The Menominee River is located approximately 120 feet north of the UST location.

Photo 1 – UST Location.

Photo 2 – Location of UST in Relation to Pile Cap.

Photo 3 – Soil Staining Adjacent to UST.

Photo 4 – Location of UST in Relation to Water Line and High Voltage Underground Electric Lines

Photo 5 – Water in Excavation for Water Line Adjacent to UST.

Photo 6 – Sheen on Water Surface.

Photo 7 – Hole in UST for Cleaning.

Photo 8 – UST Abandoned in Place with Concrete Slurry.

E

ATTACHMENT E

TANK INVENTORY FORM AND CLOSURE CHECKLISTS

TDID#:
Reg Obj #:

UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION

Information Required By Section 101.142, Wis. Stats.

Send Completed Form To:
Department of Commerce
Bureau of Petroleum Products and Tanks
P.O. Box 7837
Madison, WI 53707-7837

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 in the top right corner. Have you previously registered this tank by submitting a form? ☐ Yes ☑ No If yes, are you correcting/updating information only? ☐ Yes ☐ No

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04 (1)(m)].

This registration applies to a tank status that is (check one):
☐ In Use ☑ Closed - Tank Removed ☐ Ownership Change (Indicate new owner name in block 2)
☐ Newly Installed ☐ Closed - Filled with Inert Materials
☐ Abandoned with Product ☐ Abandon with Water
☐ Abandoned without Product (empty) ☐ Temporarily Out of Service - Provide Date: _____

Fire Department providing fire coverage where tank is located:
☑ City ☐ Village ☐ Town of: Marinette

A. IDENTIFICATION (Please Print)

1. Tank Site Name	Site Street Address		Site Telephone Number
Marinette Marine Corporation	1600 Ely St.		( )
☑ City ☐ Village ☐ Town of: Marinette	State: WISCONSIN	Zip Code: 54143	County: Marinette
2. Tank Owner Name	Mailing Address		Telephone Number
Marinette Marine Corporation	1600 Ely St.		( )
◆ City ☐ Village ☐ Town of: Marinette	State: WI	Zip Code: 54143	County: Marinette
3. Property Owner Name (if different than tank owner)	Property Owner Address if different than #1		

B. Site ID #:	Facility ID #:	Customer ID #:
C. Tank Capacity (gallons): 1,000	Tank Age (age or date installed): 1942	Vehicle fueling: ☒ Yes ☐ No

D. LAND OWNER TYPE (check one) Refer to back
☐ County ☐ State ☐ Federal Leased ☐ Federal Owned ☐ Tribal Nation ☐ Municipal ☐ Other Government ☒ Private

E. OCCUPANCY TYPE (check one) Refer to back
☐ Retail Fuel Sales ☐ Bulk Storage ☐ Terminal Storage ☐ Mercantile/Commercial ☒ Industrial ☐ Residential ☐ School
☐ Agricultural (crop or livestock production) ☐ Backup or Emergency Generator ☐ Gov't Fleet ☐ Utility ☐ Other (specify:)

F. Tank Construction:
☒ Bare Steel ☐ Coated Steel ☐ Stainless steel ☐ Steel – Fiberglass Reinforced Plastic Composite
☐ Fiberglass ☐ Unknown ☐ Other (specify): _____ ☐ Lined (date): _____

Overfill Protection? ☐ Yes ☒ No
Spill Containment? ☐ Yes ☒ No

G. Tank Cathodic Protection: ☐ Sacrificial Anodes ☐ Impressed Current ☒ N/A
Tank Double Walled? ☐ Yes ☒ No

H. Primary Tank Leak Detection Method:
☐ Automatic tank gauging ☐ Interstitial monitoring ☐ Inventory control and tightness testing ☐ Groundwater monitoring ☐ Vapor monitoring
☐ Manual tank gauging (only for tanks of 1,000 gallons or less) ☐ Statistical Inventory Reconciliation (SIR) ☒ Unknown

I. Piping Construction:
☒ Bare Steel ☐ Coated Steel ☐ Stainless Steel ☐ Fiberglass ☐ Flexible ☐ Copper ☐ Unknown ☐ NA ☐ Other _____

J. Piping Cathodic Protection: ☐ Sacrificial Anodes ☐ Impressed Current ☒ N/A
Pipe Double Walled? ☒ Yes ☐ No

K. Primary Piping System Type: ☐ Pressurized piping with ⇓ A. ☐ auto shutoff; B. ☐ alarm, or C. ☐ flow restrictor ☐ Unknown
☒ Suction piping with check valve at tank ☐ Suction piping with check valve at pump and inspectable ☐ Not needed if waste oil

L. Piping Leak Detection Method: (used if pressurized or check valve at tank): ☐ SIR ☐ Tightness testing ☐ Electronic line leak monitor
☐ Groundwater monitoring ☐ Vapor monitoring ☐ Interstitial monitoring ☐ Not required ☒ Unknown

M. Vapor Recovery/Stage II ☐ Fiberglass ☐ Flexible ☐ Other: _____ CARB #: _____
☐ Operational - Provide Date (mo./day/yr.): _____ ☐ Non-Operational - Provide Date (mo./day/yr.): _____

N. TANK CONTENTS (Current, or previous product (if tank now empty))
☒ Leaded ☐ Unleaded ☐ Gasohol ☐ E85 ☐ Diesel ☐ Bio-diesel ☐ Aviation ☐ Premix ☐ Fuel Oil ☐ Kerosene ☐ New Oil
☐ Waste/Used Motor Oil ☐ Hazardous Waste* ☐ Unknown ☐ Empty* ☐ Sand/Gravel/Slurry* ☐ Other (specify): _____
☐ Chemical* Name _____ CAS #: _____

* NOT PECFA eligible.

Geo Latitude: **Geo Longitude:**

O. If Tank Closed, Abandoned or Out of Service Give date (mo/day/yr): 10-13-10

Has a site assessment been completed? (see reverse side for details) ◆ Yes ☐ No

Tank Owner Name (please print): DON HERMANSEN

Tank Owner Signature (Note: By signing, signer is accepting legal and financial responsibility for the storage tank system.) **Date:** 10/13/10

ERS-7437 (R 12/09)

Note: Refer to comments on reverse side of form.

Wisconsin Department of Commerce

Search Instructions | Search by Site, Owner, or Tank Characteristics | Search by Tank ID

Tank Detail

Site and Owner

Site Info	County & Municipality	Owner
Facility ID: 651803 MARINETTE MARINE CORP	38 - MARINETTE	ID: 387126
1600 ELY ST	City of MARINETTE	MARINETTE MARINE CORP
MARINETTE	Fire Dept ID: 3806 - Marinette	1600 ELY ST
Landowner Type: Private		MARINETTE WI 54143
Site Anniversary Date:		

Underground Storage Tank - ID: 1286752, Wang ID: null, Closed Filled With Inert Material as of 10/13/2010

Install Date:		**Capacity in Gallons:**	1000	**Contents:**	Leaded Gasoline
Tank Occupancy:	Industrial	**Marketer:**	N	**CAS Number:**	
Federally Regulated:	Y	**Spill Protection:**		**Overfill Protection:**	
Corrosion Protect Type:		**Date of Lining:**		**Lining Inspected Date:**	
Leak Detection:		**Cath Test Date:**		**Cath Expire Date:**	
Leak Test Meth:		**Leak Expire Date:**		**Leak Test Date:**	
Construction Material:	Bare Steel	**Wall Size:**		**Underground Piping:**	
Close Order Date:		**Close Order By:**			

Piping - Closed Filled With Inert Material

Flex Connectors:	**UST mainfolded:**	**Related Tank ID:**
Type:	**Aboveground Piping:**	**Aboveground Pipe Construction:**
Construction Material:	**Corrosion Protect Type:**	**Leak Detection:**
Cath Test Date:	**Cath Expire Date:**	**Leak Test Meth:**
Leak Test Date:	**Leak Expire Date:**	**Pipe Wall Size:**
Catastrophic Leak Detection:	**Cat Leak Test Date:**	**Piping System Type:**

Inspections Click here for login page

Trans ID	Type Status	Date Fiscal Yr

** No inspections for this tank **

To Top

Close this response window

This document was last revised: February 2010

Wisconsin Department of Commerce

Complete One Form for Each System Service Event

The information you provide may be used for secondary purposes [Privacy Law, s.15.04 (1) (m), Wis. Stats.]

TANK SYSTEM SERVICE AND CLOSURE ASSESSMENT REPORT

CHECK ONE:
☒ **UNDERGROUND**
☐ **ABOVEGROUND**

FOR PORTIONS OF THE FORM THAT DO NOT APPLY, CHECK THE 'N/A' BOX

RETURN COMPLETED CHECKLIST TO:

Wisconsin Department of Commerce
ERS Division
Bureau of Petroleum Products and Tanks
P.O. Box 7837
Madison, WI 53707-7837

Part A – To be completed by contractor performing repair or closure

A. TYPE OF SERVICE ☒ CLOSURE ☐ REPAIR/UPGRADE ☐ CHANGE-IN-SERVICE
Indicate portion of system being serviced if a repair, upgrade or change-in-service is being performed
☐ Remote fill ☐ Tank ☐ Piping ☐ Transition/containment sump ☐ Spill bucket ☐ Dispenser

B. IDENTIFICATION (Please Print)

1. Facility Name: Marinette Marine Corporation	2. Owner Name: Marinette Marine Corporation
Facility Street Address (not P.O. Box): 1600 Ely St	3. Contact Name / Job Title
Municipality: Marinette WI	Mailing Address: 1600 Ely St
☒ City ☐ Village ☐ Town of:	Post Office: Marinette State: WI Zip Code: 54143
Zip Code: 54143 County: Marinette	County: Marinette Telephone No. (include area code): ( )
4. Primary Service Contractor Section A above: SGS Environmental Contracting LLC	Service Contractor Street Address: N2-70 Dayton Dr
Service Contractor Telephone No. (include area code): (715) 539-2803	Service Contractor City, State, Zip Code: Merrill WI 54452

C. TANK SYSTEM DETAIL (Complete for all service activities)

a	b	c	d	e	f	g		h	
Tank ID #	Type of Closure[1]	Tank Material of Construction	Piping Material of Construction	Tank Capacity (gallons)	Contents[2]	Release - System Integrity Compromised (e.g. holes, cracks, loose connection, etc)?		If "Yes" to "g", Then Specify Source & Cause of Release[5]	
								Source of Release[3]	Cause of Release[4]
	CIP	STEEL	STEEL	1,000	LG	☒ Y	☐ N	T	C
						☐ Y	☐ N		
						☐ Y	☐ N		
						☐ Y	☐ N		
						☐ Y	☐ N		
						☐ Y	☐ N		

1. Indicate type of closure: P = Permanent, TOS = Temporarily Out-of-Service, CIP = Closure In-Place
2. Indicate type of product: DL = Diesel, LG = Leaded Gasoline, UG = Unleaded Gasoline, FO = Fuel Oil, GH = Gasohol, AF = Aviation Fuel, K = Kerosene, PX = Premix, WO = Waste/Used Motor Oil, FCHZW = Flammable/Combustible Hazardous Waste, OC = Other Chemical (indicate the chemical name(s):

CAS number(s): _____

3. Source of release: T = tank, P = piping, D = dispenser, STP = submersible turbine pump, DP = delivery problem, O = other
4. Cause of release: S = spill, O = overfill, POMD = physical or mechanical damage, C = corrosion, IP = installation problem, O = other
5. Has release been reported to the Department of Natural Resources? ☐ Yes ☐ No ☐ Release not evident at this time

D. CLOSURES (Check applicable box at right in response to all statements in section D)
Written notification was provided to the local agent 15 days in advance of closure date. ☐ Y ☒ N
All local permits were obtained before beginning closure. ☒ Y ☐ N ☐ NA
☒ UST Form ERS-7437 or ☐ AST Form ERS-8731 filed by owner with the Dept. of Commerce indicating closure. ☒ Y ☐ N ☐ NA
NOTE: TANK INVENTORY FORM ERS-7437 or ERS-8731 SIGNED BY THE OWNER MUST BE SUBMITTED WITH EACH CLOSURE or CHANGE-IN-SERVICE CHECKLIST

D.1 ☐ TEMPORARILY OUT-OF-SERVICE	Remover Verified	Inspector Verified	NA
1. Product removed.			
a. Product lines drained into tank (or other container) and liquid removed, and	☐ Y ☐ N	☐ Y ☐ N	☐
b. All product removed to bottom of suction line, OR	☐ Y ☐ N	☐ Y ☐ N	☐
c. All product removed to within 1" of bottom.	☐ Y ☐ N	☐ Y ☐ N	☐
2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.	☐ Y ☐ N	☐ Y ☐ N	☐
3. All product lines at the islands or pumps located elsewhere are removed and capped, OR	☐ Y ☐ N	☐ Y ☐ N	☐
4. Dispensers/pumps left in place but locked and power disconnected.	☐ Y ☐ N	☐ Y ☐ N	☐
5. Vent lines left open.	☐ Y ☐ N	☐ Y ☐ N	☐
6. Inventory form filed indicating temporarily out-of-service (TOS) closure.	☐ Y ☐ N	☐ Y ☐ N	☐

D.2. ☒ CLOSURE BY REMOVAL OR IN-PLACE			
1. General Requirements			
a. Product from piping drained into tank (or other container).	☐ Y ☐ N	☐ Y ☐ N	☒
b. Piping disconnected from tank and removed.	☒ Y ☐ N	☒ Y ☐ N	☐
c. All liquid and residue removed from tank using explosion-proof pumps or hand pumps.	☒ Y ☐ N	☒ Y ☐ N	☐
d. All pump motors and suction hoses bonded to tank or otherwise grounded.	☒ Y ☐ N	☒ Y ☐ N	☐
e. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.	☒ Y ☐ N	☒ Y ☐ N	☐
f. Vent lines left connected until tanks purged.	☐ Y ☐ N	☐ Y ☐ N	☒
g. Tank openings temporarily plugged so vapors exit through vent.	☐ Y ☐ N	☐ Y ☐ N	☒
h. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section E.	☒ Y ☐ N	☒ Y ☐ N	☐
2. Specific Closure-by-Removal Requirements			
a. Tank removed from excavation after **PURGING/INERTING**; placed on level ground and blocked to prevent movement.	☐ Y ☐ N	☐ Y ☐ N	☐
b. Tank cleaned before being removed from site.	☐ Y ☐ N	☐ Y ☐ N	☐
c. Tank labeled in 2" high letters after removal but before being moved from site.	☐ Y ☐ N	☐ Y ☐ N	☐
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	☐ Y ☐ N	☐
e. Site security is provided while the excavation is open.	☐ Y ☐ N	☐ Y ☐ N	☐
3. Specific Closure-In-Place Requirements NOTE: **CLOSURES IN-PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF COMMERCE OR LOCAL AGENT.**			
a. Tank properly cleaned to remove all sludge and residue.	☒ Y ☐ N	☒ Y ☐ N	☐
b. Solid inert material (sand, cyclone boiler slag, or pea gravel recommended) introduced and tank filled.	☒ Y ☐ N	☒ Y ☐ N	☐
c. Vent line disconnected or removed.	☒ Y ☐ N	☒ Y ☐ N	☐
d. Inventory form filed by owner with the Department of Commerce indicating closure in-place.	☒ Y ☐ N	☒ Y ☐ N	☐

E. REPAIR, UPGRADE OR CHANGE-IN-SERVICE
Written notification was provided to the local agent 15 days in advance of service date. ☐ Y ☐ N ☒ NA
All local permits were obtained before beginning service. ☐ Y ☐ N ☒ NA
Form ERS-7437 or ☐ ERS-8731 filed by owner with the Department of Commerce indicating change-in-service. ☐ Y ☐ N ☒ NA

F. METHOD OF VAPOR FREEING OF TANK
☐ 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 ground.
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_2 or N_2 **NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. LEL METERS MAY NOT FUNCTION ACCURATELY. 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. Tank space monitored at bottom, middle and upper portion of tank.

G. REMOVER/CLEANER INFORMATION

Remover/Cleaner Name (print)	Remover/Cleaner Signature	Certification No.	Date Signed
JAY A SCHLIETER		42227	10-13-10

I attest that the procedures and information which I have provided as the tank closure contractor are correct and comply with Comm 10.

Company expected to perform soil contamination assessment _____

H. INSPECTOR INFORMATION

Inspector Name (print)	Inspector Signature	Inspector Cert #	LPO Agency #:
RANDY PRANTL		32086	262289

FDID # For Location Where Inspection Performed	Inspector Telephone Number	Date Signed
3806	715-472-2268	10-13-10

ERS-8951 (R.01/10) **Part A Distribution:** White – Commerce Blue – Inspector Pink – Contractor Yellow - Owner

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 ASSESSMENT (TSSA)

Site Name: Marinette Marine Corporation

Address: 1600 Ely St. Marinette, WI 54143

Note: Site name and address must match with Part A Section 1.

To determine if a TSSA is required, see Comm 10 and section II part B of *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.*

If a TSSA is required, then follow the procedures detailed in *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.*

1. Site Information

a. Has there been a previously documented release at this site? ☒ Y ☐ N

If yes, provide the Commerce # _____, or DNR BRRT's # 02-38-555082.

b. Number of active tanks[1] at facility prior to completion of current services USTs Ø ASTs Ø.

(NOTE 1: Do not include previously closed systems or system components.)

c. Excavation/trench dimensions (in feet). (Photos must be provided.)

EXCAVATION/TRENCH #	LENGTH	WIDTH	DEPTH
N/A			

2. Visual Excavation/Trench Inspection (Photos must be provided for "Yes" responses, except item b.)

Do any of the following conditions exist in or about the excavation(s)?

a. Stained soils: ☒ Y ☐ N b. Petroleum odor: ☒ Y ☐ N c. Water In excavation/trench: ☒ Y ☐ N

d. Free product in the excavation/trench: ☐ Y ☒ N e. Sheen or free product on water: ☒ Y ☐ N

3. Geology/Hydrogeology

a. Depth to groundwater 5 feet b. Indicate type of geology[2] S

(Note 2: Use these symbols individually or in combination as appropriate: C = Clay, SLT = Silt, S = Sand, Gr = Gravel)

4. Receptors

a. Water supply well(s) within 250 feet of the facility? ☐ Y ☒ N If yes, specify _____

b. Surface water(s) within 1000 feet of the facility? ☒ Y ☐ N If yes, specify The Menominee River is located approximately 120 feet North of UST Location.

5. Sampling

a. Follow the procedures detailed in *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.*

b. Complete Tables 1 and 2 as appropriate. (Attach chain-of-custody and laboratory analytical reports.)

c. Attach a detailed map of site features and sample locations.

J. NOTE RELEVANT OBSERVATIONS, SPECIFIC PROBLEMS OR CONCERNS BELOW

The UST was abandoned-in-place due to the location of the UST in close proximity to a new building foundation structure and several high-voltage underground electric lines

TABLE 1 SOIL FIELD SCREENING & GRO/DRO LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method: Grab	Shelby Tube	Direct Push	Split Spoon	Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
S1	NE side of UST; Sand	☒	☐	☐	☐		2.18	59.4	N/A
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				
		☐	☐	☐	☐				

TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	BENZENE ug/kg	TOLUENE ug/kg	ETHYLBENZENE ug/kg	MTBE ug/kg	TRIMETHYL - BENZENES (TOTAL) ug/kg	XYLENES (TOTAL) ug/kg	NAPHTHALENE ug/kg
~~S1~~	~~490~~	~~65.3 J~~	~~34.4 J~~	~~300~~	~~8300~~	~~471~~	~~105~~ KRS 12-9-10
S1	490	65.3 J	51.0 J	34.4 J	8300	471	103

K. TANK-SYSTEM SITE ASSESSMENT INFORMATION

☐ As a tank-system site assessor certified under Wis. Admin. Code section Comm 5.83, it is my opinion that there is no indication of a release of a regulated substance to the environment.

☒ Sampling at the site indicates there has been a release to the environment. Pursuant to Wis. Admin. Code section Comm 10.585 (2) (a) and Wis. Stats. section 292.11 (2) (a), the owner or operator or contractor performing work under chapter Comm 10 shall immediately report any release of a regulated substance to the Wisconsin Department of Natural Resources. Failure to do so may result in forfeitures of a minimum of $10 and a maximum of $5000 for each violation under Wis. Stats. section 101.09 (5). Each day of continued violation and each tank are treated as separate offenses.

Kevin R. Eisenhold	Kevin R. Eisenhold	649863
Tank-System Site Assessor Name (print)	Tank-System Site Assessor Signature	Certification Number #
(920) 662-9641	12-9-10	Robert E. Lee & Asso., Inc.
Tank-System Site Assessor Telephone Number	Date Signed	Company Name

ERS-8951 (R.01/10) **Part B Distribution:** White – Commerce Blue – Inspector Pink – Contractor Yellow - Owner

SMET
CONSTRUCTION SERVICES

3148 Mid Valley Drive
De Pere, WI 54115
920-532-3828
Fax: 920-532-3831
Cell 920-676-0065
E Mail jsmits@smet.com

October 14, 2010

Inspector Randy Barnes
Wisconsin Department of Commerce
4595 County S
Conover, WI 54519

RE: Request for Approval of 1,000-Gallon Leaded Gasoline UST Closure In-Place
Marinette Marine Corporation, 1600 Ely Street, Marinette, Wisconsin

Dear Inspector Barnes:

A 1,000-gallon leaded gasoline underground storage tank (UST) was recently discovered during construction activities associated with the expansion of Marinette Marine Corporation's (MMC) Building #10. The UST was encountered during the installation of a new water line, located adjacent to Building #10's new addition. MMC believes the UST was installed during the 1940s.

During further excavation, the UST was observed to be located in close proximity to a new building foundation structure (i.e., pile cap) and several high-voltage underground electric lines. In addition, a high groundwater table was encountered in the excavation. Given the UST's proximity to the structures and the high groundwater table, we believe that the removal of the UST would impact the structural integrity of the pile cap via undermining due the high groundwater table and necessitate the disconnection of the electric line. Therefore on behalf of MMC, Smet Construction Services Corporation requests approval for the UST to be closed in-place.

Respectfully,

SMET CONSTUCTIONS SERVICES CORP

Joash Smits
Digitally signed by Joash Smits
DN: cn=Joash Smits, o=Smet Const., ou=Project Manager, email=jsmits@smet.com, c=US
Date: 2010.10.21 05:45:38 -05'00'

Joash Smits
Project Manager

F

ATTACHMENT F

SOIL DISPOSAL DOCUMENTATION

Customer Summary Report
Business Unit Name: Menominee RDF - S03098 (USA)
Date: Dec 06 2010, 8:59:39 AM - Central Standard Time
Customer Name: SMET CONSTRUCTION SERVICE / MMC BUILDING #10 NE UST AREA

Ticket Date	Ticket ID	Customer	Generator	Manifest	Profile	Truck	Material	Origin	Rate Unit	Rate Qty	Tons
Material Total										6807.25	
10/27/2010	722957	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	53	SpwBioremRGC-Tons	MARIWI	TON	20.59	20.59
10/27/2010	722958	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	35	SpwBioremRGC-Tons	MARIWI	TON	19.07	19.07
10/27/2010	722959	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	36	SpwBioremRGC-Tons	MARIWI	TON	18.39	18.39
10/27/2010	722975	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	53	SpwBioremRGC-Tons	MARIWI	TON	19.78	19.78
10/27/2010	722976	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	35	SpwBioremRGC-Tons	MARIWI	TON	21.16	21.16
10/27/2010	722977	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	36	SpwBioremRGC-Tons	MARIWI	TON	18.76	18.76
10/27/2010	722984	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	49	SpwBioremRGC-Tons	MARIWI	TON	19.7	19.7
10/27/2010	722988	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	53	SpwBioremRGC-Tons	MARIWI	TON	18.8	18.8
10/27/2010	722989	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	35	SpwBioremRGC-Tons	MARIWI	TON	17.82	17.82
10/27/2010	722992	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	36	SpwBioremRGC-Tons	MARIWI	TON	18.99	18.99
10/27/2010	722998	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	49	SpwBioremRGC-Tons	MARIWI	TON	17.97	17.97
10/27/2010	723000	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	53	SpwBioremRGC-Tons	MARIWI	TON	18.28	18.28
10/27/2010	723004	SMET CONSTRUCTION SERVICE	136-MARINETTEMARINE	*	MW104817WI	35	SpwBioremRGC-Tons	MARIWI	TON	10.39	10.39
Material Load Total	13								TONS	239.7	239.7

G

ATTACHMENT G

LABORATORY ANALYTICAL REPORTS

Pace Analytical®
www.pacelabs.com

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

October 20, 2010

Nicole Laplant
ROBERT E. LEE & ASSOCIATES, IN
4664 Golden Pond Park Court
Oneida, WI 54155

RE: Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

Dear Nicole Laplant:
Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Brian Basten

brian.basten@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
California Certification #: 09268CA
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11888
New York Certification #: 11888
North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

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

SAMPLE SUMMARY

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4038344001	S1	Solid	10/13/10 10:41	10/15/10 14:30

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

SAMPLE ANALYTE COUNT

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4038344001	S1	WI MOD GRO	PMS	13
		ASTM D2974-87	AME	1

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

ANALYTICAL RESULTS

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

Sample: S1 **Lab ID: 4038344001** Collected: 10/13/10 10:41 Received: 10/15/10 14:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Benzene	**490**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	71-43-2	
Ethylbenzene	**51.0J**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	100-41-4	
Gasoline Range Organics	**59.4**	mg/kg	3.4	3.4	1	10/19/10 10:22	10/19/10 15:55		
Methyl-tert-butyl ether	**34.4J**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	1634-04-4	
Naphthalene	**103**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	91-20-3	
Toluene	**65.3J**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	108-88-3	
Total Trimethylbenzenes	**8300**	ug/kg	164	68.5	1	10/19/10 10:22	10/19/10 15:55		
1,2,4-Trimethylbenzene	**6610**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	95-63-6	
1,3,5-Trimethylbenzene	**1690**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	108-67-8	
Xylene (Total)	**471**	ug/kg	246	103	1	10/19/10 10:22	10/19/10 15:55	1330-20-7	
m&p-Xylene	**418**	ug/kg	164	68.5	1	10/19/10 10:22	10/19/10 15:55	179601-23-1	
o-Xylene	**53.4J**	ug/kg	82.1	34.2	1	10/19/10 10:22	10/19/10 15:55	95-47-6	
a,a,a-Trifluorotoluene (S)	103	%	80-120		1	10/19/10 10:22	10/19/10 15:55	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.0**	%	0.10	0.10	1		10/16/10 08:33		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

QC Batch: GCV/5729 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 4038344001

METHOD BLANK: 371769 Matrix: Solid
Associated Lab Samples: 4038344001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	10/19/10 09:53	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	10/19/10 09:53	
Benzene	ug/kg	<25.0	60.0	10/19/10 09:53	
Ethylbenzene	ug/kg	<25.0	60.0	10/19/10 09:53	
Gasoline Range Organics	mg/kg	<2.5	2.5	10/19/10 09:53	
m&p-Xylene	ug/kg	<50.0	120	10/19/10 09:53	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	10/19/10 09:53	
Naphthalene	ug/kg	<25.0	60.0	10/19/10 09:53	
o-Xylene	ug/kg	<25.0	60.0	10/19/10 09:53	
Toluene	ug/kg	<25.0	60.0	10/19/10 09:53	
Total Trimethylbenzenes	ug/kg	<50.0	120	10/19/10 09:53	
Xylene (Total)	ug/kg	<75.0	180	10/19/10 09:53	
a,a,a-Trifluorotoluene (S)	%	108	80-120	10/19/10 09:53	

LABORATORY CONTROL SAMPLE & LCSD: 371770 371771

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1030	1080	103	108	80-120	5	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1010	1060	101	106	80-120	5	20	
Benzene	ug/kg	1000	970	1000	97	100	80-120	3	20	
Ethylbenzene	ug/kg	1000	1010	1060	101	106	80-120	4	20	
Gasoline Range Organics	mg/kg	10	10.7	10.9	107	109	80-120	1	20	
m&p-Xylene	ug/kg	2000	2040	2130	102	106	80-120	4	20	
Methyl-tert-butyl ether	ug/kg	1000	973	1020	97	102	80-120	5	20	
Naphthalene	ug/kg	1000	1040	1110	104	111	80-120	7	20	
o-Xylene	ug/kg	1000	1010	1060	101	106	80-120	4	20	
Toluene	ug/kg	1000	990	1040	99	104	80-120	5	20	
Total Trimethylbenzenes	ug/kg	2000	2040	2140	102	107	80-120	5	20	
Xylene (Total)	ug/kg	3000	3050	3190	102	106	80-120	4	20	
a,a,a-Trifluorotoluene (S)	%				107	107	80-120			

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

QUALITY CONTROL DATA

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

QC Batch: PMST/4747
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 4038344001

SAMPLE DUPLICATE: 370985

Parameter	Units	4038341004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.8	8.9	.8	10	

Pace Analytical Services, Inc.
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Green Bay, WI 54302
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QUALIFIERS

Project: BUILDING 10 NE TANK REMOVAL
Pace Project No.: 4038344

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

U - Indicates the compound was analyzed for, but not detected.

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 NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

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

Pace Analytical

Sample Condition Upon Receipt

Client Name: REL Project # 4038344

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: _____

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

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

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

Optional
Proj. Due Date:
Proj. Name:

Thermometer Used 077 **Type of Ice:** Wet Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature 10.2 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: CB 10/18/10
Initials: _____

Temp should be above freezing to 6°C for all sample except Biota.
Biota Samples should be received ≤ 0°C.

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10-18-10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Robert E. Lee & Associates, Inc.
Engineering, Surveying, Environmental Services
4664 Golden Pond Park Court
Hobart, WI 54155
920.662.9641 FAX 920.662.9141

VBK

To ensure the proper handling of samples, please see the back for instructions.

CHAIN OF CUSTODY RECORD

COC # 200134 4038344

Client: Smet Construction

Project Name: Building 10 NE tank Removal

Project Number: BID #:

Environmental Program:
☐ LUST ☐ SDWA ☐ WPDES ☐ RCRA ☐ OTHER ____

Requested Turnaround Time
☒ Normal (10-15 DAYS) ☐ Rush
Date Needed: ____
Rushes accepted only w/prior notification

*Preservation Code
N = Nitric Acid (red) O = Sodium Hydroxide
H = Hydrochloric Acid U = Unpreserved (white)
M = Methanol S = Sulfuric Acid (green)

Sampler: Kevin R. Eisenbalzl

Sample Type (Matrix)
DW = Drinking Water
GW = Groundwater
WW = Wastewater
Soil, Oil, Sludge, Air, Other:

Analyses Required:
(Note special detection limits or methods)

Sample Name	Date	Time		Comp	Grab	Sample Type	No. Of Containers	Filtered? (Y/N)	Preservation *(Code)	GRO	PVOCs + Naphthalene								Laboratory Sample I.D.	Remarks:
S1	10-13-10	1041	~~A~~ P		X	Soil	4	—	M	X	X								001	1-40ml, 1-4oz Clr, 2-40ml
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	
			A P																	

Relinquished By	Date	Time	Received By	Date	Time
1) K. Eisenbalzl	10-15-10	1405 A/P	L. Butterly-Pace	10/15/10	14:05 A/P
2) L. Butterly-Pace	10/15/10	14:30 A/P	Nicole Scott / Pace GB	10/15/10	1430 A/P
3)		A/P			A/P

Received by Lab ____ A = AM P = PM

Report to: Nicole Ca Plant
Company: Robert E. Lee & Assoc.
Address: 4664 Golden Pond Park Ct.
Hobart, WI 54155
Telephone: (920) 662-9641

Invoice to: Same
Company:
Address:

Telephone:

Laboratory Receiving Notes
Temperature of Contents 10 L °C
Custody Seal Intact N/A
Sample Condition good
Sample pH