

# Notification For Hazardous Substance Discharge

09-37-560156 NAR 03-01-2013  
Kemp's Center  
Marathon WCR022

Emergency Discharges / Spills should be reported via

**Notice:** Hazardous substance discharges must be reported immediately as substance discharges may be reported by telefaxing or e-mailing a completed r office in person. If you choose to notify the Department by telefax or by ema information is included. However, use of this form is not mandatory. Under s. requirements of ch. 292 Wis. Stats., shall be no less than \$10 nor more than \$5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** NOTIFY appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from (check one):

- Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)
- Aboveground Petroleum Storage Tank System
- Dry Cleaner Facility
- Other - Describe: \_\_\_\_\_

ATTN DNR: **R & R Program Associate**

Date DNR Notified: 2/19/13

### 1. Discharge Reported By

Name	Firm	Phone No. (include area code)
MR STEVEN KEMP	KEMP SERVICE CENTER INC	715-842-2129
Mailing Address		Email Address
2202 N 6th STREET		KEMPIRE6@AOL.COM

### 2. Site Information

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property.

KEMP SERVICE CENTER INC

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60.

2202 N 6th STREET 44° 58.439 N 089° 37.425 W

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city.

WAUSAU

County:	Legal Description:	WTM:
<u>MARATHON</u>	___ 1/4 ___ 1/4 Sec ___ Tn ___ Range ___ <input type="radio"/> E <input type="radio"/> W	X ___ Y ___

### 3. Responsible Party (RP) and/or RP Representative

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

KEMP SERVICE CENTER INC (MR STEVE KEMP)

Reported in compliance with s. 292.11(2), Wis. Stats., by a local government exempt from liability under s. 292.11(9)(e), Wis. Stats.  
 For more information see <http://dnr.wi.gov/org/law/rr/lgu/liability.htm>.

Contact Person Name (if different)	Phone Number	Email Address	
Mailing Address	City	State	ZIP Code

Property owner if Different From RP: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email Address	
Mailing Address	City	State	ZIP Code

(continued)

4. Hazardous Substance Information

Identify hazardous substance discharged (check all that apply):

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> VOC's                   | <input checked="" type="checkbox"/> Diesel      | <input type="checkbox"/> PERC (Dry Cleaners)                |
| <input checked="" type="checkbox"/> PAH's        | <input type="checkbox"/> Fuel Oil               | <input type="checkbox"/> RCRA Hazardous Waste               |
| <input type="checkbox"/> Metals (specify): _____ | <input type="checkbox"/> Gasoline               | <input type="checkbox"/> Leachate                           |
| <input type="checkbox"/> Arsenic                 | <input type="checkbox"/> Hydraulic Oil          | <input type="checkbox"/> Fertilizer                         |
| <input type="checkbox"/> Chromium                | <input type="checkbox"/> Jet Fuel               | <input type="checkbox"/> Pesticide/Herbicide/Insecticide(s) |
| <input type="checkbox"/> Cyanide                 | <input type="checkbox"/> Mineral Oil            | <input type="checkbox"/> Other (specify): _____             |
| <input type="checkbox"/> Lead                    | <input type="checkbox"/> Waste Oil              | <input type="checkbox"/> Unknown                            |
| <input type="checkbox"/> PCB's                   | <input type="checkbox"/> Petroleum-Unknown Type |   |

5. Impacts to the Environment Information

Enter "K" for known/confirmed or "P" for potential for all that apply.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Air Contamination                            | <input type="checkbox"/> Sanitary Sewer Contamination   | <input checked="" type="checkbox"/> Soil Contamination |
| <input type="checkbox"/> Co-Contamination (Petroleum & Non-Petroleum) | <input type="checkbox"/> Contamination in Right of Way  | <input type="checkbox"/> Storm Sewer Contamination     |
| <input type="checkbox"/> Contamination Within 1 Meter of Bedrock      | <input type="checkbox"/> Fire Explosion Threat  | <input type="checkbox"/> Surface Water Contamination   |
| <input type="checkbox"/> Contaminated Private Well                    | <input type="checkbox"/> Free Product   | <input type="checkbox"/> Within 100 ft of Private Well |
| <input type="checkbox"/> Contaminated Public Well                     | <input type="checkbox"/> Groundwater Contamination  | <input type="checkbox"/> Within 1000 ft of Public Well |
| <input type="checkbox"/> Contamination in Fractured Bedrock           | <input checked="" type="checkbox"/> Other (specify): <u>OP-17 (CSS # 17) DISPENSER SAMPLE</u> |  |

Contamination was discovered as a result of:

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Tank closure assessment | <input checked="" type="checkbox"/> Site assessment | <input type="checkbox"/> Other - Describe: _____ |
| Date: <u>12/10/11/2012</u>                                  | Date: <u>12/11/12</u>                               | Date: _____                                      |

Lab results:  Lab results will be faxed upon receipt  Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.

6. Federal Energy Act Requirements (Section 9002(d) of the Solid Waste Disposal Act (SWDA))

For all confirmed releases from UST's occurring after 9/30/2007 please provide the following information:

- | Source   | Cause  |
|--|--|
| <input type="checkbox"/> Tank  | <input type="checkbox"/> Spill                             |
| <input type="checkbox"/> Piping  | <input type="checkbox"/> Overfill                          |
| <input checked="" type="checkbox"/> Dispenser ?                                  | <input type="checkbox"/> Corrosion                         |
| <input type="checkbox"/> Submersible Turbine Pump                                | <input type="checkbox"/> Physical or Mechanical Damage     |
| <input type="checkbox"/> Delivery Problem  | <input type="checkbox"/> Installation Problem              |
| <input checked="" type="checkbox"/> Other (specify): <u>PRION SYSTEM RELEASE</u> | <input type="checkbox"/> Other (does not fit any of above) |
|  | <input checked="" type="checkbox"/> Unknown                |

Contact information to report non-emergency releases in DNR's five regions are as follows:

**Northeast Region (FAX: 920-662-5197); Attention -- R&R Program Associate: DNRRRNER@wisconsin.gov**

Brown, Calumet, Door, Fond du Lac (except City of Waupun - see South Central Region), Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara, Winnebago counties

**Northern Region (FAX: 715-623-6773); Attention -- R&R Program Associate: DNRRRNOR@wisconsin.gov**

Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn counties

**South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate: DNRRRSCR@wisconsin.gov**

Columbia, Dane, Dodge, Fond du Lac (City of Waupun only), Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties

**Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate: DNRRRSER@wisconsin.gov**

Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties

**West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: DNRRRWCR@wisconsin.gov**

Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties

**State of Wisconsin**  
DEPARTMENT OF NATURAL RESOURCES  
101 S. Webster Street  
Box 7921  
Madison WI 53707-7921

**Scott Walker, Governor**  
**Cathy Stepp, Secretary**  
Telephone 608-266-2621  
Toll Free 1-888-936-7463  
TTY Access via relay - 711



March 1, 2012

Steven Kemp  
2202 N 6<sup>th</sup> Street  
Wausau, WI 54401

Subject: Kemp Service  
2202 N 6<sup>th</sup> Street, Wausau, WI

Dear Mr. Kemp:

On January 16, 2013, the Wisconsin Department of Natural Resources was notified by REI that an Underground Storage Tank/Subsurface Site Assessment was conducted that the above property. Based on the results of the assessment it does not appear that a NR 716 Site Investigation is warranted for the site described above.

The Bureau for Remediation and Redevelopment Tracking System ("BRRTS") will show the status of the site described above as a "no action required" site. You may view the information related to your site at any time (<http://www.dnr.state.wi.us/org/aw/rr/brrts>) and use the feedback system to alert us to any errors in the data.

If you want a more detailed written response from the Department regarding the "no action required" status, please be advised that under s. 292.55, Wis. Adm. Code, a \$500.00 fee is required for a General Liability Clarification Letter.

If you should have any questions regarding this letter or your site, please feel free to contact me at (715) 421-7873, or e-mail me at [David.Rozeboom@wi.gov](mailto:David.Rozeboom@wi.gov).

Thank you for your cooperation.

Sincerely,

  
Dave Rozeboom  
Hydrogeologist  
Bureau for Remediation & Redevelopment

cc: Dave Larsen, REI

## File Note

**DATE:** March 1, 2013

**TIME:**

**WITH:**

**SUBJECT:** Kemps Service

**BRRTS#:**

Rozeboom reviewed the Storage Tank / Subsurface Site Assessment. DRO at CSS#17 would normally require additional assessment. PAH's were not analyzed. However, Naphthalene was below detect indicating that there likely is not a significant source of PAH's in the area.

## Rozeboom, David B - DNR

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**From:** Rozeboom, David B - DNR  
**Sent:** Friday, February 22, 2013 2:00 PM  
**To:** 'Dave Larsen'  
**Subject:** FW: Kemps Service

Hi Dave-

I tried to leave a voicemail, but your mailbox is full. I'm wondering if there is something that I am missing... Between reading the cover letter and report for this site and a conversation I had with Steve Kemp I am getting conflicting messages.

Your conclusions in the report state that a new release may have occurred and recommends review of the closed site. Your cover letter states that no action required is recommended. Steve Kemp gets the impression that no action should be required.

My interpretation of the report is that a release was identified at CSS#17. DRO was identified at 186ppm and PAH's were not sampled. I reviewed the report for the closed site and there was no prior assessment in the area of CSS#17. This lead me to request the release notification.

Is there something else I should be reviewing that indicate further investigation is not necessary at CSS#17?

Thanks,

Dave Rozeboom  
Hydrogeologist  
WI Department of Natural Resources  
473 Griffith Avenue, Wisconsin Rapids, WI 54494  
Phone: (715) 421-7873 / Fax: (715) 421-7830  
E-Mail: [David.Rozeboom@wi.gov](mailto:David.Rozeboom@wi.gov)

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**From:** Rozeboom, David B - DNR  
**Sent:** Thursday, January 24, 2013 9:02 AM  
**To:** 'Dave Larsen'  
**Subject:** Kemps Service

Hi Dave-

I have reviewed the site assessment report for the Kemps Service site. Based on the results and the reports from the previous investigation it appears that additional investigation will be necessary. The previous investigation did not assess the area of GP-17. Attached are the results from the previous investigation.

Please submit a release notification and I will follow up with an RP letter.



Kemps\_2013012...

**Dave Rozeboom**

Hydrogeologist

WI Department of Natural Resources

473 Griffith Avenue, Wisconsin Rapids, WI 54494

Phone: (715) 421-7873 / Fax: (715) 421-7830

E-Mail: [David.Rozeboom@wi.gov](mailto:David.Rozeboom@wi.gov)

**Rozeboom, David B - DNR**

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Please submit a release notification and I will follow up with an RP letter.

**Dave Rozeboom**  
Hydrogeologist  
WI Department of Natural Resources  
473 Griffith Avenue, Wisconsin Rapids, WI 54494  
Phone: (715) 421-7873 / Fax: (715) 421-7830  
E-Mail: [David.Rozeboom@wi.gov](mailto:David.Rozeboom@wi.gov)

**Rozeboom, David B - DNR**

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**From:** Kinney, Deena - DNR  
**Sent:** Thursday, February 21, 2013 2:20 PM  
**To:** Rozeboom, David B - DNR  
**Subject:** HAZARDOUS SUBSTANCE DISCHARGE NOTIF - KEMPS, WAUSAU  
**Attachments:** 20130221142329335.pdf

Hi Dave, I just received this in the mail.

Deena M Kinney  
Environmental Program Assistant  
Remediation and Redevelopment  
Wisconsin Department of Natural Resources Eau Claire Service Center  
(\* phone: (715) 839-2784  
(\* fax: (715) 839-6076  
(\* e-mail: [deena.kinney@wisconsin.gov](mailto:deena.kinney@wisconsin.gov))





January 7, 2013

Wisconsin Department of Natural Resources  
Attn: Deena Kinney  
1300 West Clairemont Avenue  
Eau Claire, WI 54701



**Subject:**

Underground Storage Tank / Subsurface Site Assessment  
Kemp Service  
2202 N 6<sup>th</sup> Street  
Wausau, WI 54401

REC'D JAN 16 2013

Dear Deena,

*Lisa*

Enclosed please find a copy of the Underground Storage Tank/Subsurface Site Assessment for the above referenced site. Low level petroleum compounds were identified in the soil sample collected from immediately beneath the dispensers. REI is recommending that no additional site investigation measures are necessary at this site.

If you have any questions or comments, please contact our office at (715) 675-9784.

Sincerely,  
REI Engineering, Inc.

David N. Larsen P.G.  
Hydrogeologist/Project Manager

CC: Environmental Services Plus, Jesse Rose, PO Box 187, W1734 KenDale Drive, Kaukauna, WI 54130



**RESPONSIVE. EFFICIENT. INNOVATIVE.**

4080 N. 20th Avenue Wausau, WI 54401  
715-675-9784 [www.REIengineering.com](http://www.REIengineering.com)

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**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 Safety and Professional Services  
 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 service 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 <b>KEMP SERVICE CENTER</b>		2. Owner Name <b>STEVE KEMP</b>	
Facility Street Address (not P.O. Box) <b>2202 N 6th STREET</b>		3. Contact Name <b>STEVE KEMP</b> Job Title <b>OWNER</b>	
Municipality <b>WAUSAU</b>		ng Address <b>2202 NORTH 6th STREET</b>	
<input checked="" type="checkbox"/> City <input type="checkbox"/> Village <input type="checkbox"/> Town of: <b>WAUSAU</b>		Post Office <b>WAUSAU</b> State Z <b>WI</b> ip Code <b>54403</b>	
Zip Code <b>54403</b>	County <b>MARATHON</b>	County <b>MARATHON</b>	Telephone No. (include area code) <b>(715) 842-2129</b>
4. Primary Service Contractor Section A above <b>ENVIRONMENTAL SERVICES PLUS</b>		Service Contractor Street Address <b>W1734 KEN-DALE DR P.O. BOX 187</b>	
Service Contractor Telephone No. (include area code) <b>(1) 920-766-6756</b>		Service Contractor City, State, Zip Code <b>KAUKAUNA WI 54130</b>	

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

a Tank ID #	b Type of Closure <sup>1</sup>	c Tank Material of Construction	d Piping Material of Construction	e Tank Capacity (gallons)	f Contents <sup>2</sup>	g Release - System Integrity Compromised (e.g. holes, cracks, loose connection, etc)?		h If "Yes" to "g", Then Specify Source & Cause of Release <sup>5</sup>	
						Y	N	Source of Release <sup>3</sup>	Cause of Release <sup>4</sup>
289440	P	STEEL	FIBER GL	10,000	UG	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N		
289441	P	STEEL	FIBER GL	8,000	UG	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N		
289442	P	STEEL	FIBER GL	4,000	UG	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N		
289443	P	STEEL	FIBER GL	4,000	DL	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N		
						<input type="checkbox"/> Y	<input type="checkbox"/> N		
						<input type="checkbox"/> Y	<input type="checkbox"/> 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, UNK = Unknown

4. Cause of release: S = spill, O = overfill, POMD = physical or mechanical damage, C = corrosion, IP = installation problem, O = other, UNK = Unknown

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 5 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 DSPS 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	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
b. All product removed to bottom of suction line, OR	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
c. All product removed to within 1" of bottom.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
3. All product lines at the islands or pumps located elsewhere are removed and capped, OR	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>

4. Dispensers/pumps left in place but locked and power disconnected.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
5. Vent lines left open.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
6. Inventory form filed indicating temporarily out-of-service (TOS) closure.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>

**D.2.  CLOSURE BY REMOVAL OR IN-PLACE**

**1. General Requirements**

a. Product from piping drained into tank (or other container).	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
b. Piping disconnected from tank and removed.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
c. All liquid and residue removed from tank using explosion-proof pumps or hand pumps.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
d. All pump motors and suction hoses bonded to tank or otherwise grounded.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
e. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
f. Vent lines left connected until tanks purged.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
g. Tank openings temporarily plugged so vapors exit through vent.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
h. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section E.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>

**2. Specific Closure-by-Removal Requirements**

a. Tank removed from excavation after PURGING/INERTING; placed on level ground and blocked to prevent movement.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
b. Tank cleaned before being removed from site.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
c. Tank labeled in 2" high letters after removal but before being moved from site.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
<b>NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE; FORMER CONTENTS; VAPOR STATE; VAPOR FREEING TREATMENT; DATE.</b>				
d. Tank vent hole (1/8" in uppermost part of tank) installed prior to moving the tank from site.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>
e. Site security is provided while the excavation is open.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	044	<input type="checkbox"/> N	<input type="checkbox"/>

**3. Specific Closure-In-Place Requirements**

**NOTE: CLOSURES IN-PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) OR LOCAL AGENT.**

a. Tank properly cleaned to remove all sludge and residue.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
b. Solid inert material (sand, cyclone boiler slag, or pea gravel recommended) introduced and tank filled.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
c. Vent line disconnected or removed.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>
d. Inventory form filed by owner with the DSPS indicating closure in-place.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/>

**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 ERS-7437 or  ERS-8731 filed by owner with the DSPS indicating change-in-service.

Y  N  NA  
 Y  N  NA  
 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<sub>2</sub> or N<sub>2</sub> **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**

JESSE F ROSE

Remover/Cleaner Name (print)

Jesse F Rose

Remover/Cleaner Signature

41240

Certification No.

12/11/12

Date Signed

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

REI - WAUSAU WI

**H. INSPECTOR INFORMATION**

Darrell Christy

Inspector Name (print)

Darrell J. Christy

Inspector Signature

35105

Inspector Cert #

LPO Agency #:

Wausau

715-878-4499

12/11/12

FDID # For Location Where Inspection Performed

Inspector Telephone Number

Date Signed

**UNDERGROUND STORAGE TANK/  
SUBSURFACE SITE ASSESSMENT**

**KEMP SERVICE  
2202 N 6<sup>TH</sup> STREET  
WAUSAU, WI**

**REI PROJECT #6245**

**PREPARED FOR:**

**Environmental Services Plus  
Attn: Mr. Jesse Rose  
PO Box 187  
W1734 KenDale Drive  
Kaukauna, WI 54130**

**PREPARED BY:**

**REI Engineering, Inc.  
4080 North 20th Ave.  
Wausau, WI 54401  
(715) 675-9784**

**January 2013**

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# **UNDERGROUND STORAGE TANK/ SUBSURFACE SITE ASSESSMENT**

**KEMP SERVICE  
2202 N 6<sup>TH</sup> STREET  
WAUSAU, WISCONSIN**

**REI PROJECT #6245**

## **1.0 INTRODUCTION**

This report represents the results and observations made from an Underground Storage Tank (UST) assessment at the Kemp Service property located at 2202 N 6<sup>th</sup> Street, City of Wausau, Marathon County, Wisconsin (Figure 1). Wisconsin Transverse Mercator (WTM) coordinates of the former UST location are 549650, 500125.

The scope of services included the following:

1. Observe the excavation and removal of a four thousand (4,000) gallon unleaded gasoline Underground Storage Tank (UST), a four thousand (4,000) gallon diesel UST, a eight thousand (8,000) gallon unleaded gasoline UST, a ten thousand (10,000) gallon unleaded gasoline UST and associated piping.
2. Collect representative soil samples for laboratory analysis for Gasoline Range Organics (GRO), Diesel Range Organics (DRO), Petroleum Volatile Organic Compounds (PVOCs), naphthalene. Soil Sample locations will be consistent with the Tank System Site Assessment (TSSA).
3. Provide a report summarizing all data and methodologies from the assessment.

## **2.0 SITE INFORMATION AND GENERAL GEOLOGY**

### **2.1 Surrounding Population and Land Use**

The site is located at 2202 N 6<sup>th</sup> Street, Wausau, WI and is located in a mixed commercial and residential setting. The surrounding properties are as follows:

North: a residential area

South: East Wausau Avenue and mixed residential and commercial

East: N. 6<sup>th</sup> Street and mixed commercial and residential

West: a residential area

## **2.2 Geological Conditions**

The geology and water resources of the basin as described by Devaul and Green (1971) indicate that almost the entire Central Wisconsin River Basin is covered with unconsolidated deposits consisting of unpitted outwash, pitted outwash, lake deposits, end moraines and ground moraines. The outwash deposits average about 100 feet in thickness but may be as thick as 250 feet over channels in bedrock. Soil permeability for the sandy soils as described on the site are 2.5 to 5.0 inches per hour. The average annual precipitation in the area is about 30.9 inches. The typical evapotranspiration rate is about 19.7 inches per year, leaving about 11.2 inches per year for both groundwater recharge and surface runoff Devaul and Green (1971).

## **3.0 PROJECT RESULTS**

### **3.1 Underground Storage Tank Excavations**

The Tank System Site Assessment (TSSA) was completed on December 11, 2012. David Larsen, Certified Site Assessor #252441, of REI Engineering, Inc. (REI) was on site to observe the removal of the UST and to complete site assessment requirements. Arnott trucking, Inc., Tomahawk, WI performed the excavation activities and Environmental Services Plus performed the UST purge, cut, and clean activities. The UST's appeared to be in very good condition at the time of removal. Groundwater was not encountered at the time the UST's were removed.

### **3.2 Chemical Analysis of Soil**

Confirmation soil samples CSS#1-CSS#14 were collected from the base or sidewalls of the former UST basin. Confirmation soil samples CSS#15-CSS#18 were collected beneath the petroleum dispensers. A total of eighteen (18) soil samples were collected and submitted for laboratory analysis.

The samples were field screened with a MiniRAE 3000 Photo ionization Detector (PID) with an 10.6 eV lamp. The soil samples were collected and placed in laboratory prepared jars, preserved with methanol, packed on ice, and relinquished to Pace Analytical, Green Bay, Wisconsin where they were analyzed for Gasoline Range Organics (GRO), Diesel range Organics (DRO), Petroleum Volatile Organic Compounds (PVOCs) and naphthalene.

Figure 2 presents the location of the soil sample collected during the UST removal assessment. Analytical results and all field screening results are shown on Table 1. Appendix A presents the methods and procedures for collection of the soil samples. A copy of the soil laboratory analytical report is presented in Appendix B. Copies of the closure checklist and inventory forms and disposal documentation are included in Appendix C. Photographs of the UST removal are presented in Appendix D.

Diesel Range Organic (DRO) related soil contamination in concentrations greater than the NR720.09 compound specific limit was identified in the sample collected beneath a former diesel dispenser (CSS#17). Additionally, the PID detection from CSS#10-11 indicated that the soil sample was likely impacted, the laboratory report indicated no detectable petroleum impacts above the laboratory quantifiable limits.

#### **4.0 RESULTS AND CONCLUSIONS**

The analytical results from the samples collected during the tank system site assessment have indicated levels of contamination above the compound specific Groundwater RCL levels for Diesel Range Organics (DRO) at CSS#17 at a depth of three and one-half feet (3.5) feet below land surface.

Based on these results REI Engineering, Inc. concludes that a release to the environment has occurred. This site was previously investigated for a petroleum release and closed in 1993. While the reported contamination could potentially be from the previously identified release, the WDNR should review the case file to determine if the reported contamination is from the former release or whether a new release has occurred.

#### **5.0 STANDARD OF CARE**

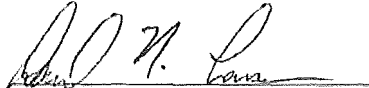
Evaluations derived from field sampling and laboratory analyses are considered accurate only at the specific locations sampled for each phase of this environmental assessment. No warranty is implied or intended.



## **6.0 REFERENCES**

Devaul, R.W. and Green, J.H., 1971, Water Resources of Wisconsin, Central Wisconsin River Basin, U.S. Geologic Survey Hydrologic Investigations Atlas HA-367, Washington D.C.

This report was prepared by:

  
David N. Larsen  
Site Assessor  
Certification #242441

**TABLE 1  
SUMMARY OF SOIL ANALYTICAL RESULTS  
KEMP SERVICE  
2202 N 6TH STREET  
WAUSAU, WISCONSIN**

Sample-->					CSS#1	CSS#2	CSS#3	CSS#4	CSS#5	CSS#6	CSS#7	CSS#8	CSS#9
Date Collected>					12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/11/2012
Sample Depth--(Feet)>					10	5	5	5	10	5	5	5	13
Percent Solids-->					4.3%	6.1%	6.4%	6.7%	3.8%	4.9%	4.8%	6.5%	4.1%
PID Detections-->					0.9	0.2	0.4	0.4	1.8	0.2	0.2	0.3	1.2
PVOC Parameters	RCL	NTEDC	GW	Units									
Benzene	5.5	1,490	2.6	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
Ethylbenzene	2,900	7,470	785	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
Toluene	1,500	818,000	553.6	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
Xylenes	4,100	258,000	1,970	ug/kg	< 50	< 50	< 52.6	< 50	< 50	< 50	< 50	< 50	< 50
Methyl tert-Butyl Ether (MTBE)		59,400	13.5	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
Trimethylbenzene, 1,2,4-		89,800	689.7	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
Trimethylbenzene, 1,3,5-		182,000	689.7	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
Naphthalene		5,150	329.4	ug/kg	< 25	< 25	< 26.3	< 25	< 25	< 25	< 25	< 25	< 25
DRO	100	100	NS	mg/kg	3.4	1.1*	< 0.92	NA	NA	NA	NA	NA	NA
GRO	100	100	NS	mg/kg	NA	NA	NA	< 2.7	< 2.6	< 2.6	< 2.6	< 2.7	< 2.6

Sample-->					CSS#10	CSS#11	CSS#12	CSS#13	CSS#14	CSS#15	CSS#16	CSS#17	CSS#18
Date Collected>					12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/11/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012
Sample Depth--(Feet)>					13	13	5	5	5	3.5	3.5	3.5	3.5
Percent Solids-->					4.1%	5.6%	5.4%	5.7%	4.5%	4.8%	2.6%	4.5%	6.3%
PID Detections-->					138	208	0.7	0.9	0.4	32.7	0.4	0.2	56.7
PVOC Parameters	RCL	NTEDC	GW	Units									
Benzene	5.5	1,490	2.6	ug/kg	36.2*	< 25	< 25	< 25	< 25	< 25	< 25	< 25	49.1*
Ethylbenzene	2,900	7,470	785	ug/kg	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	48.1*
Toluene	1,500	818,000	553.6	ug/kg	55.0*	< 25	< 25	< 25	< 25	< 25	< 25	< 25	387
Xylenes	4,100	258,000	1,970	ug/kg	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	213.5
Methyl tert-Butyl Ether (MTBE)		59,400	13.5	ug/kg	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Trimethylbenzene, 1,2,4-		89,800	689.7	ug/kg	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Trimethylbenzene, 1,3,5-		182,000	689.7	ug/kg	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Naphthalene		5,150	329.4	ug/kg	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
DRO	100	100	NS	mg/kg	NA	< 0.75	NA	NA	NA	NA	98.2	186	NA
GRO	100	100	NS	mg/kg	< 2.6	NA	< 2.6	< 2.7	< 2.6	< 2.6	NA	NA	< 2.7

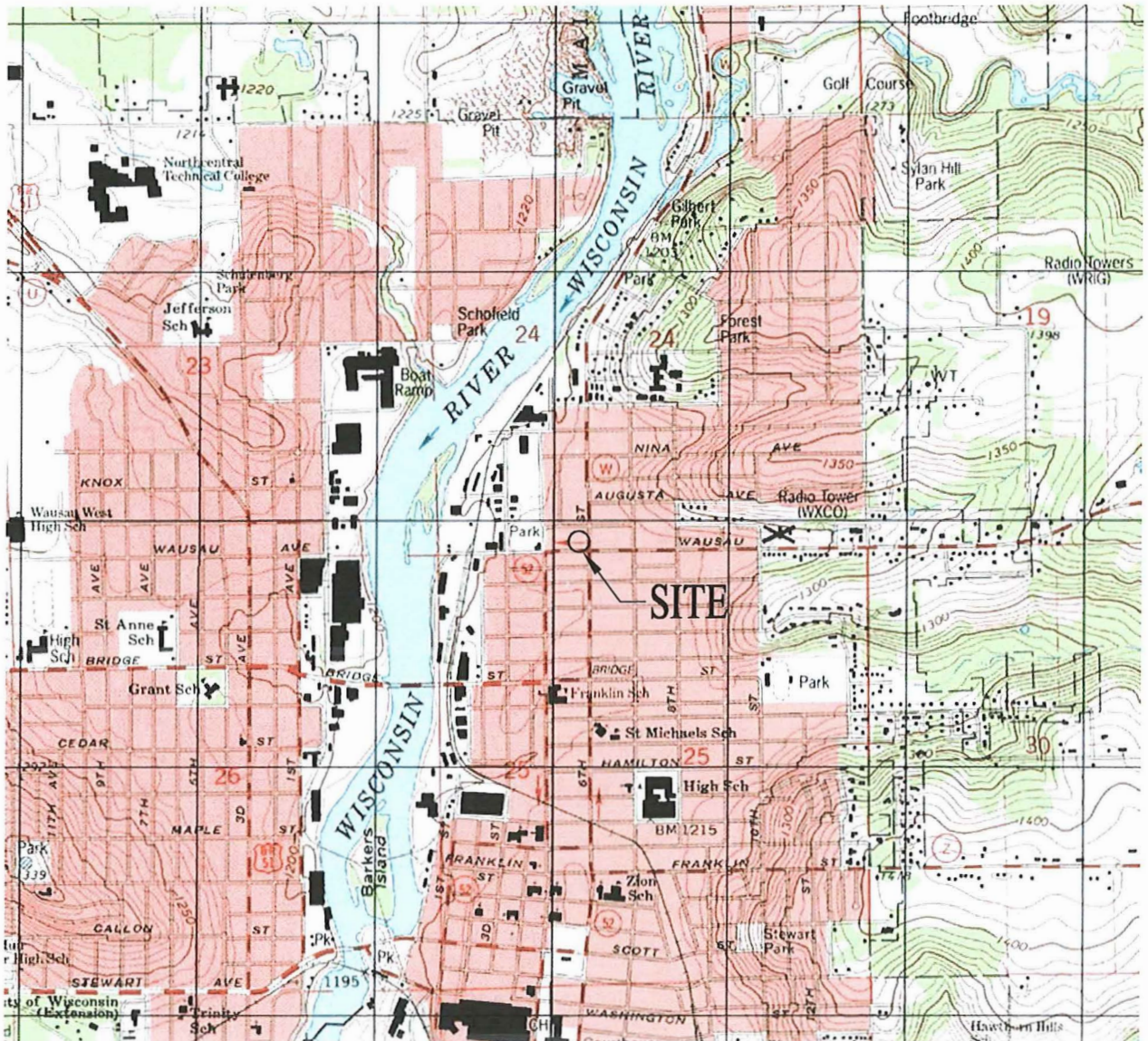
**Notes:**

RCL - NR 720.09 Residual Contaminant Levels  
 NTEDC - Not To Exceed Direct Contact Residual Contaminant Level (RCL)  
 GW - RCL Protective of Groundwater Quality  
 < - Concentration below listed laboratory detection limit  
 NR 720.09 RCL exceedences are bold  
 NTEDC RCL exceedences are outlined in bold  
 GW RCL exceedences are italicized

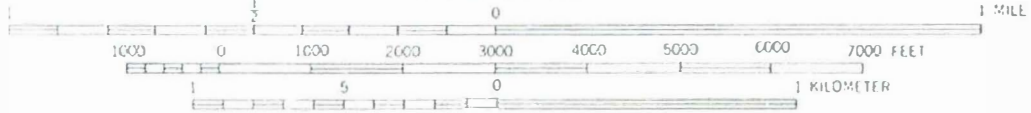
<b>BOLD</b>
<b>BOLD</b>
<i>ITALICS</i>

NA - Not Analyzed  
 NS - No Standard  
 \* = Estimated value between detection limit and quantification limit  
<sup>B</sup> = Analyte was detected in the associated method blank

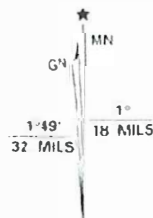
DRAWING FILE: J:\DRAFTING\6245\_KEMP\_SERVICE\DWG\6245-VICIN.DWG LAYOUT: VICINITY PLOTTED: JAN 07, 2013 - 1:29PM PLOTTED BY: TODDW



SCALE 1:24000



CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1993 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

**WAUSAU EAST, WIS.**

NE 1/4 WAUSAU 15' QUADRANGLE  
44089-H5-TF-024

1993

DMA 3073 1 NE - SERIES V861



QUADRANGLE LOCATION

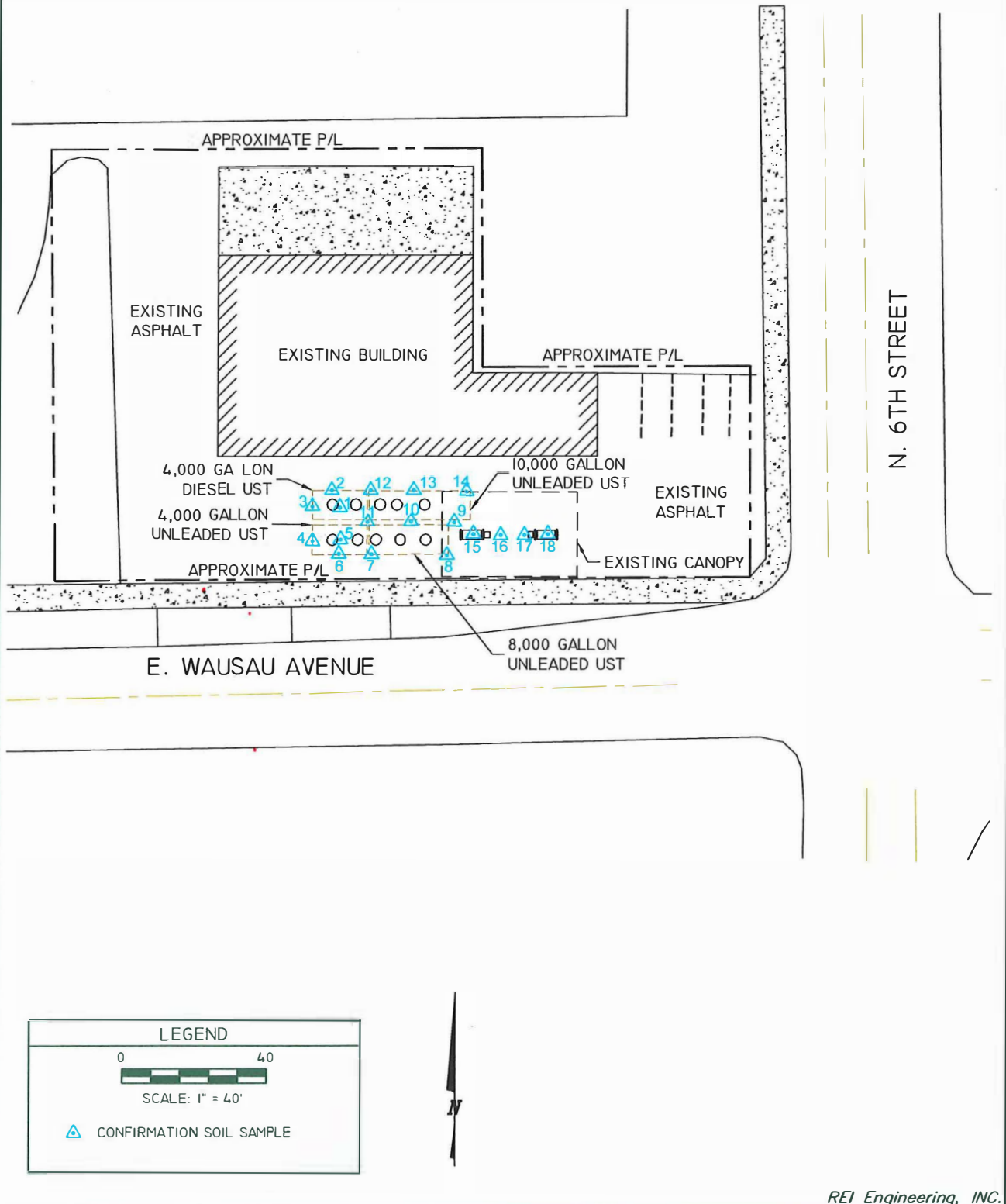
REI Engineering, INC.

KEMP SERVICE  
2202 N. 6TH STREET  
WAUSAU, WISCONSIN 54401

FIGURE 1 : SITE VICINITY MAP

PROJECT NO.	6245	DRAWN BY:	NAP	DATE:	12/19/12
-------------	------	-----------	-----	-------	----------

DRAWING FILE: J:\DRAFTING\6245\_KEMP\_SERVICE\DWG\6245-SITE.DWG LAYOUT: SITE PLOTTED: JAN 07, 2013 - 1:29PM PLOTTED BY: TODDW



LEGEND	
SCALE: 1" = 40'	
	CONFIRMATION SOIL SAMPLE



REI Engineering, INC.

<b>KEMP SERVICE</b> 2202 N. 6TH STREET WAUSAU, WISCONSIN 54401		<b>FIGURE 2 : SITE MAP</b>	
PROJECT NO.	6245	DRAWN BY:	NAP
		DATE:	12/19/12

## **APPENDIX A**

### **METHODS AND PROCEDURES**

**METHODS AND PROCEDURES**  
**FOR**  
**SOIL SAMPLING FOR ABOVEGROUND AND UNDERGROUND**  
**STORAGE TANK REMOVAL**

**SOIL SCREENING**

Immediately upon collection of fresh soil samples, the soil is quickly divided into two portions. One portion is prepared for potential laboratory analysis. The other portion is placed into a clean one-quart Ziploc bag for field screening.

**HEADSPACE ANALYSIS**

The soils were scanned with a RAE Plus Classic photoionization detector equipped with a 10.6 eV lamp and calibrated for direct reading in units of Total Organic Vapors using an isobutylene standard. A Ziploc bag was filled two-thirds of the volume with the sample. The bags were sealed and shaken vigorously before headspace development. Headspace development is allowing the sample to rest for at least ten minutes before scanning. When ambient temperatures were below 60 degrees F, soil samples were allowed to warm for a minimum of 10 minutes in a heated environment prior to headspace development. The Ziploc bag was punctured with the probe and a reading was taken.

**SAMPLE COLLECTION AND CHAIN OF CUSTODY**

Soil samples were collected from the excavation approximately 2-3 feet below the bottom of the storage tank and placed into the proper laboratory prepared glass jars. Upon completion of a sample, a chain of custody log was initiated. The Chain of Custody record included the following information: project work order number, shipped by, shipped to, sampling point, number of containers, type of analysis, sample(s), signature(s), etc... As few people as possible handled the samples.

**ANALYTICAL PROCEDURES**

Gasoline Range Organics (GRO) results were determined using Modified GRO method. Diesel Range Organics (DRO) results were determined using the Modified DRO method.

## **APPENDIX B**

### **CHAIN OF CUSTODY AND SOIL ANALYTICAL RESULTS**

December 18, 2012

DAVID LARSEN  
REI  
4080 NORTH 20TH AVENUE  
Wausau, WI 54401

RE: Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Dear DAVID LARSEN:

Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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,



Brian Basten

brian.basten@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 6245 KEMP SERVICE

Pace Project No.: 4071903

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

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

## REPORT OF LABORATORY ANALYSIS

### SAMPLE SUMMARY

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4071903001	CSS #1	Solid	12/11/12 11:00	12/14/12 08:50
4071903002	CSS #2	Solid	12/11/12 11:10	12/14/12 08:50
4071903003	CSS #3	Solid	12/11/12 11:20	12/14/12 08:50
4071903004	CSS #4	Solid	12/11/12 11:30	12/14/12 08:50
4071903005	CSS #5	Solid	12/11/12 11:40	12/14/12 08:50
4071903006	CSS #6	Solid	12/11/12 11:50	12/14/12 08:50
4071903007	CSS #7	Solid	12/11/12 12:00	12/14/12 08:50
4071903008	CSS #8	Solid	12/11/12 12:10	12/14/12 08:50
4071903009	CSS #9	Solid	12/11/12 12:20	12/14/12 08:50
4071903010	CSS #10	Solid	12/11/12 12:30	12/14/12 08:50
4071903011	CSS #11	Solid	12/11/12 12:40	12/14/12 08:50
4071903012	CSS #12	Solid	12/11/12 12:50	12/14/12 08:50
4071903013	CSS #13	Solid	12/11/12 13:00	12/14/12 08:50
4071903014	CSS #14	Solid	12/11/12 13:10	12/14/12 08:50
4071903015	CSS #15	Solid	12/12/12 10:00	12/14/12 08:50
4071903016	CSS #16	Solid	12/12/12 10:10	12/14/12 08:50
4071903017	CSS #17	Solid	12/12/12 10:20	12/14/12 08:50
4071903018	CSS #18	Solid	12/12/12 10:30	12/14/12 08:50

### REPORT OF LABORATORY ANALYSIS

**SAMPLE ANALYTE COUNT**

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4071903001	CSS #1	WI MOD DRO	DAL	1
		WI MOD GRO	LCF	10
		ASTM D2974-87	SKW	1
4071903002	CSS #2	WI MOD DRO	DAL	1
		WI MOD GRO	LCF	10
		ASTM D2974-87	SKW	1
4071903003	CSS #3	WI MOD DRO	DAL	1
		WI MOD GRO	LCF	10
		ASTM D2974-87	SKW	1
4071903004	CSS #4	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903005	CSS #5	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903006	CSS #6	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903007	CSS #7	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903008	CSS #8	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903009	CSS #9	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903010	CSS #10	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD DRO	DAL	1
4071903011	CSS #11	WI MOD GRO	LCF	10
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903012	CSS #12	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903013	CSS #13	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903014	CSS #14	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD GRO	LCF	11
4071903015	CSS #15	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1
		WI MOD DRO	DAL	1
4071903016	CSS #16	WI MOD GRO	LCF	10
		ASTM D2974-87	SKW	1
		WI MOD DRO	DAL	1

**REPORT OF LABORATORY ANALYSIS**

**SAMPLE ANALYTE COUNT**

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4071903017	CSS #17	WI MOD DRO	DAL	1
		WI MOD GRO	LCF	10
		ASTM D2974-87	SKW	1
4071903018	CSS #18	WI MOD GRO	LCF	11
		ASTM D2974-87	SKW	1

**REPORT OF LABORATORY ANALYSIS**

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### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Sample: CSS #1 Lab ID: 4071903001 Collected: 12/11/12 11:00 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO							
Diesel Range Organics	3.4 mg/kg		1.7	0.87	1	12/18/12 04:30	12/18/12 11:13		T4
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.							
Benzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	71-43-2	W
Ethylbenzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	100-41-4	W
Methyl-tert-butyl ether	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	1634-04-4	W
Naphthalene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	91-20-3	W
Toluene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	108-88-3	W
1,2,4-Trimethylbenzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	108-67-8	W
m&p-Xylene	<50.0 ug/kg		120	50.0	1	12/17/12 09:51	12/17/12 22:17	179601-23-1	W
o-Xylene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/17/12 22:17	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	105 %		80-120		1	12/17/12 09:51	12/17/12 22:17	98-08-8	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	4.3 %		0.10	0.10	1		12/17/12 11:46		

Sample: CSS #2 Lab ID: 4071903002 Collected: 12/11/12 11:10 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO							
Diesel Range Organics	1.1J mg/kg		1.7	0.83	1	12/18/12 04:30	12/18/12 11:18		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.							
Benzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	71-43-2	W
Ethylbenzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	100-41-4	W
Methyl-tert-butyl ether	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	1634-04-4	W
Naphthalene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	91-20-3	W
Toluene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	108-88-3	W
1,2,4-Trimethylbenzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	108-67-8	W
m&p-Xylene	<50.0 ug/kg		120	50.0	1	12/17/12 09:51	12/18/12 00:26	179601-23-1	W
o-Xylene	<25.0 ug/kg		60.0	25.0	1	12/17/12 09:51	12/18/12 00:26	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104 %		80-120		1	12/17/12 09:51	12/18/12 00:26	98-08-8	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	6.1 %		0.10	0.10	1		12/17/12 11:46		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Sample: **CSS #3** Lab ID: **4071903003** Collected: 12/11/12 11:20 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b> Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics	<0.92	mg/kg	1.9	0.92	1	12/18/12 04:30	12/18/12 11:24		
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	71-43-2	W
Ethylbenzene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	100-41-4	W
Methyl-tert-butyl ether	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	1634-04-4	W
Naphthalene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	91-20-3	W
Toluene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	108-88-3	W
1,2,4-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	95-63-6	W
1,3,5-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	108-67-8	W
m&p-Xylene	<52.6	ug/kg	126	52.6	1	12/17/12 09:51	12/18/12 00:51	179601-23-1	W
o-Xylene	<26.3	ug/kg	63.2	26.3	1	12/17/12 09:51	12/18/12 00:51	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 00:51	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	6.4 %		0.10	0.10	1		12/17/12 11:46		

Sample: **CSS #4** Lab ID: **4071903004** Collected: 12/11/12 11:30 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	100-41-4	W
Gasoline Range Organics	<2.7	mg/kg	2.7	2.7	1	12/17/12 09:51	12/18/12 01:17		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 01:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:17	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104 %		80-120		1	12/17/12 09:51	12/18/12 01:17	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	6.7 %		0.10	0.10	1		12/17/12 11:46		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Sample: CSS #5 Lab ID: 4071903005 Collected: 12/11/12 11:40 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 01:43		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 01:43	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 01:43	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 01:43	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	3.8 %		0.10	0.10	1		12/17/12 11:46		

Sample: CSS #6 Lab ID: 4071903006 Collected: 12/11/12 11:50 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 02:09		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 02:09	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 02:09	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 02:09	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	4.9 %		0.10	0.10	1		12/17/12 11:46		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

**Sample: CSS #7** Lab ID: 4071903007 Collected: 12/11/12 12:00 Received: 12/14/12 08:50 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 03:26		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 03:26	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:26	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104 %		80-120		1	12/17/12 09:51	12/18/12 03:26	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	4.8 %		0.10	0.10	1		12/17/12 11:47		

**Sample: CSS #8** Lab ID: 4071903008 Collected: 12/11/12 12:10 Received: 12/14/12 08:50 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	100-41-4	W
Gasoline Range Organics	<2.7	mg/kg	2.7	2.7	1	12/17/12 09:51	12/18/12 03:52		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 03:52	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 03:52	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104 %		80-120		1	12/17/12 09:51	12/18/12 03:52	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	6.5 %		0.10	0.10	1		12/17/12 11:47		



### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Sample: CSS #9 Lab ID: 4071903009 Collected: 12/11/12 12:20 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 04:17		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 04:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:17	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104 %		80-120		1	12/17/12 09:51	12/18/12 04:17	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	4.1 %		0.10	0.10	1		12/17/12 11:47		

Sample: CSS #10 Lab ID: 4071903010 Collected: 12/11/12 12:30 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext									
Benzene	36.2J	ug/kg	62.6	26.1	1	12/17/12 09:51	12/18/12 04:43	71-43-2	
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:43	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 04:43		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:43	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:43	91-20-3	W
Toluene	55.0J	ug/kg	62.6	26.1	1	12/17/12 09:51	12/18/12 04:43	108-88-3	
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:43	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:43	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 04:43	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 04:43	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 04:43	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	4.1 %		0.10	0.10	1		12/17/12 11:47		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

**Sample: CSS #11** Lab ID: 4071903011 Collected: 12/11/12 12:40 Received: 12/14/12 08:50 Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO							
Diesel Range Organics	<0.75	mg/kg	1.5	0.75	1	12/18/12 04:30	12/18/12 11:30		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.							
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 05:09	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:09	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102 %		80-120		1	12/17/12 09:51	12/18/12 05:09	98-08-8	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	5.6 %		0.10	0.10	1		12/17/12 11:47		

**Sample: CSS #12** Lab ID: 4071903012 Collected: 12/11/12 12:50 Received: 12/14/12 08:50 Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.							
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 05:35		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 05:35	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 05:35	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 05:35	98-08-8	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	5.4 %		0.10	0.10	1		12/17/12 11:47		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE

Pace Project No.: 4071903

Sample: **CSS #13** Lab ID: **4071903013** Collected: 12/11/12 13:00 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	100-41-4	W
Gasoline Range Organics	<2.7	mg/kg	2.7	2.7	1	12/17/12 09:51	12/18/12 06:01		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 06:01	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:01	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 06:01	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	5.7 %		0.10	0.10	1		12/17/12 11:47		

Sample: **CSS #14** Lab ID: **4071903014** Collected: 12/11/12 13:10 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 06:26		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 06:26	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:26	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103 %		80-120		1	12/17/12 09:51	12/18/12 06:26	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	4.5 %		0.10	0.10	1		12/17/12 11:47		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

**Sample: CSS #15**      **Lab ID: 4071903015**      Collected: 12/12/12 10:00      Received: 12/14/12 08:50      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO      Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	100-41-4	W
Gasoline Range Organics	<2.6	mg/kg	2.6	2.6	1	12/17/12 09:51	12/18/12 06:52		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 06:52	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 06:52	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104 %		80-120		1	12/17/12 09:51	12/18/12 06:52	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	4.8 %		0.10	0.10	1		12/17/12 11:47		

**Sample: CSS #16**      **Lab ID: 4071903016**      Collected: 12/12/12 10:10      Received: 12/14/12 08:50      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b> Analytical Method: WI MOD DRO      Preparation Method: WI MOD DRO									
Diesel Range Organics	98.2	mg/kg	3.3	1.6	2	12/18/12 04:30	12/18/12 12:05		T4
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO      Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	12/17/12 09:51	12/18/12 07:18	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/18/12 07:18	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	105 %		80-120		1	12/17/12 09:51	12/18/12 07:18	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	2.6 %		0.10	0.10	1		12/17/12 11:47		

### ANALYTICAL RESULTS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Sample: CSS #17 Lab ID: 4071903017 Collected: 12/12/12 10:20 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO							
Diesel Range Organics	186	mg/kg	7.9	3.9	5	12/18/12 04:30	12/18/12 12:10		T4
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.							
Benzene	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	71-43-2	W
Ethylbenzene	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	100-41-4	W
Methyl-tert-butyl ether	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	1634-04-4	W
Naphthalene	67.0	ug/kg	63.4	26.4	1	12/17/12 09:51	12/17/12 23:09	91-20-3	
Toluene	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	108-88-3	W
1,2,4-Trimethylbenzene	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	95-63-6	W
1,3,5-Trimethylbenzene	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	108-67-8	W
m&p-Xylene	<50.5	ug/kg	121	50.5	1	12/17/12 09:51	12/17/12 23:09	179601-23-1	W
o-Xylene	<25.3	ug/kg	60.6	25.3	1	12/17/12 09:51	12/17/12 23:09	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1	12/17/12 09:51	12/17/12 23:09	98-08-8	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	4.5	%	0.10	0.10	1		12/17/12 11:47		

Sample: CSS #18 Lab ID: 4071903018 Collected: 12/12/12 10:30 Received: 12/14/12 08:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.							
Benzene	49.1J	ug/kg	64.1	26.7	1	12/17/12 09:51	12/17/12 23:34	71-43-2	
Ethylbenzene	48.1J	ug/kg	64.1	26.7	1	12/17/12 09:51	12/17/12 23:34	100-41-4	
Gasoline Range Organics	<2.7	mg/kg	2.7	2.7	1	12/17/12 09:51	12/17/12 23:34		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/17/12 23:34	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/17/12 23:34	91-20-3	W
Toluene	387	ug/kg	64.1	26.7	1	12/17/12 09:51	12/17/12 23:34	108-88-3	
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/17/12 23:34	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	12/17/12 09:51	12/17/12 23:34	108-67-8	W
m&p-Xylene	160	ug/kg	128	53.4	1	12/17/12 09:51	12/17/12 23:34	179601-23-1	
o-Xylene	53.5J	ug/kg	64.1	26.7	1	12/17/12 09:51	12/17/12 23:34	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1	12/17/12 09:51	12/17/12 23:34	98-08-8	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	6.3	%	0.10	0.10	1		12/17/12 11:48		

### QUALITY CONTROL DATA

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

QC Batch: GCV/9502 Analysis Method: WI MOD GRO  
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV  
Associated Lab Samples: 4071903001, 4071903002, 4071903003, 4071903004, 4071903005, 4071903006, 4071903007, 4071903008, 4071903009, 4071903010, 4071903011, 4071903012, 4071903013, 4071903014, 4071903015, 4071903016, 4071903017, 4071903018

METHOD BLANK: 728098 Matrix: Solid  
Associated Lab Samples: 4071903001, 4071903002, 4071903003, 4071903004, 4071903005, 4071903006, 4071903007, 4071903008, 4071903009, 4071903010, 4071903011, 4071903012, 4071903013, 4071903014, 4071903015, 4071903016, 4071903017, 4071903018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	12/17/12 20:34	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	12/17/12 20:34	
Benzene	ug/kg	<25.0	60.0	12/17/12 20:34	
Ethylbenzene	ug/kg	<25.0	60.0	12/17/12 20:34	
Gasoline Range Organics	mg/kg	<2.5	2.5	12/17/12 20:34	
m&p-Xylene	ug/kg	<50.0	120	12/17/12 20:34	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	12/17/12 20:34	
Naphthalene	ug/kg	<25.0	60.0	12/17/12 20:34	
o-Xylene	ug/kg	<25.0	60.0	12/17/12 20:34	
Toluene	ug/kg	<25.0	60.0	12/17/12 20:34	
a,a,a-Trifluorotoluene (S)	%	103	80-120	12/17/12 20:34	

Parameter	Units	LABORATORY CONTROL SAMPLE & LCSD: 728099 728100								Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	
1,2,4-Trimethylbenzene	ug/kg	1000	914	989	91	99	80-120	8	20	
1,3,5-Trimethylbenzene	ug/kg	1000	955	1020	96	102	80-120	7	20	
Benzene	ug/kg	1000	1050	1110	105	111	80-120	6	20	
Ethylbenzene	ug/kg	1000	1030	1090	103	109	80-120	6	20	
Gasoline Range Organics	mg/kg	10	9.7	10.3	97	103	80-120	6	20	
m&p-Xylene	ug/kg	2000	2050	2170	103	109	80-120	6	20	
Methyl-tert-butyl ether	ug/kg	1000	961	984	96	98	80-120	2	20	
Naphthalene	ug/kg	1000	904	943	90	94	80-120	4	20	
o-Xylene	ug/kg	1000	1030	1080	103	108	80-120	5	20	
Toluene	ug/kg	1000	1030	1100	103	110	80-120	6	20	
a,a,a-Trifluorotoluene (S)	%				104	104	80-120			

**QUALITY CONTROL DATA**

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

QC Batch: OEXT/17204 Analysis Method: WI MOD DRO  
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS  
Associated Lab Samples: 4071903001, 4071903002, 4071903003, 4071903011, 4071903016, 4071903017

METHOD BLANK: 728406 Matrix: Solid  
Associated Lab Samples: 4071903001, 4071903002, 4071903003, 4071903011, 4071903016, 4071903017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<0.99	2.0	12/18/12 10:55	

Parameter	Units	LABORATORY CONTROL SAMPLE & LCSD: 728407 728408								
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	40	38.1	33.8	95	85	70-120	12	20	

**QUALITY CONTROL DATA**

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

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QC Batch:	PMST/8048	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	4071903001, 4071903002, 4071903003, 4071903004, 4071903005, 4071903006, 4071903007, 4071903008, 4071903009, 4071903010, 4071903011, 4071903012, 4071903013, 4071903014, 4071903015, 4071903016, 4071903017, 4071903018		

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SAMPLE DUPLICATE: 728230

Parameter	Units	4071899001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.8	5.8	0	10	



## QUALIFIERS

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

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### 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.

PRL - Pace Reporting Limit.

RL - Reporting 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.

SG - Silica Gel - Clean-Up

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

T4 Result reported for hydrocarbons within the method-specific range that do not match pattern of laboratory standard.

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

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6245 KEMP SERVICE  
Pace Project No.: 4071903

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4071903001	CSS #1	WI MOD DRO	OEXT/17204	WI MOD DRO	GCSV/8908
4071903002	CSS #2	WI MOD DRO	OEXT/17204	WI MOD DRO	GCSV/8908
4071903003	CSS #3	WI MOD DRO	OEXT/17204	WI MOD DRO	GCSV/8908
4071903011	CSS #11	WI MOD DRO	OEXT/17204	WI MOD DRO	GCSV/8908
4071903016	CSS #16	WI MOD DRO	OEXT/17204	WI MOD DRO	GCSV/8908
4071903017	CSS #17	WI MOD DRO	OEXT/17204	WI MOD DRO	GCSV/8908
4071903001	CSS #1	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903002	CSS #2	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903003	CSS #3	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903004	CSS #4	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903005	CSS #5	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903006	CSS #6	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903007	CSS #7	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903008	CSS #8	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903009	CSS #9	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903010	CSS #10	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903011	CSS #11	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903012	CSS #12	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903013	CSS #13	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903014	CSS #14	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903015	CSS #15	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903016	CSS #16	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903017	CSS #17	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903018	CSS #18	TPH GRO/PVOC WI ext.	GCV/9502	WI MOD GRO	GCV/9509
4071903001	CSS #1	ASTM D2974-87	PMST/8048		
4071903002	CSS #2	ASTM D2974-87	PMST/8048		
4071903003	CSS #3	ASTM D2974-87	PMST/8048		
4071903004	CSS #4	ASTM D2974-87	PMST/8048		
4071903005	CSS #5	ASTM D2974-87	PMST/8048		
4071903006	CSS #6	ASTM D2974-87	PMST/8048		
4071903007	CSS #7	ASTM D2974-87	PMST/8048		
4071903008	CSS #8	ASTM D2974-87	PMST/8048		
4071903009	CSS #9	ASTM D2974-87	PMST/8048		
4071903010	CSS #10	ASTM D2974-87	PMST/8048		
4071903011	CSS #11	ASTM D2974-87	PMST/8048		
4071903012	CSS #12	ASTM D2974-87	PMST/8048		
4071903013	CSS #13	ASTM D2974-87	PMST/8048		
4071903014	CSS #14	ASTM D2974-87	PMST/8048		
4071903015	CSS #15	ASTM D2974-87	PMST/8048		
4071903016	CSS #16	ASTM D2974-87	PMST/8048		
4071903017	CSS #17	ASTM D2974-87	PMST/8048		
4071903018	CSS #18	ASTM D2974-87	PMST/8048		



(Please Print Clearly)

Company Name: PEI  
 Branch/Location:  
 Project Contact: D. LARSEN  
 Phone: 715 675-9784  
 Project Number: 6245  
 Project Name: KEMP SERVICE  
 Project State: WI  
 Sampled By (Print): D. LARSEN  
 Sampled By (Sign): [Signature]  
 PO #:  
 Regulatory Program:



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

Page 1 of 1  
 4071903  
 2/2

### CHAIN OF CUSTODY

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

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

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

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

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

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX	Analysis Requested	Preservation Codes			
		DATE	TIME			A	B	C	D
014	CSS#14	12-11-12	1:10	Soil	PMU/NO	X	X		X
015	CSS#15	12-12-12	10:20	I	CRD	X	X		X
016	CSS#16	I	10:10	I	DEO	X		X	X
017	CSS#17	I	10:20	I	Soils	X		X	X
018	CSS#18	I	10:30	I		X	X		X

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

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

Email #1: \_\_\_\_\_  
 Email #2: \_\_\_\_\_  
 Telephone: \_\_\_\_\_  
 Fax: \_\_\_\_\_

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

Relinquished By: [Signature] Date/Time: 12-13-12 @ 10:40  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished By: CS Logistics Date/Time: 12/14/12 0950  
 Received By: E. Nelson Pace GB Date/Time: 12/14/12 0950

Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

PACE Project No. \_\_\_\_\_  
 Receipt Temp = RAJ °C  
 Sample Receipt pH OK / Adjusted  
 Cooler Custody Seal Present / Not Present  
 Intact / Not Intact



**Sample Condition Upon Receipt**

Client Name: REI Project # 4071903

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other Waltco  
 Tracking #: 277720

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 N/A Type of Ice:  Wet  Blue  Dry  None  Samples on ice, cooling process has begun.  
 Cooler Temperature ROT Biological Tissue is Frozen:  yes  no

Temp Blank Present:  yes  no

Person examining contents:  
 Date: 12/14/12  
 Initials: EMH

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

Client Notification/ Resolution: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Field Data Required? Y / N  
 Person Contacted: \_\_\_\_\_  
 Comments/ Resolution: \_\_\_\_\_

Project Manager Review: [Signature] Date: 12-14-12

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)

## **APPENDIX C**

# **UNDERGROUND PETROLEUM PRODUCT TANK INVENTORY SHEETS AND DISPOSAL DOCUMENTATION**

**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: Kemp Service

Address: 2202 N 6th Street, Wausau, WI

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 # 54401-3305-02, or DNR BRRT's # 03-37-000091

b. Number of active tanks<sup>1</sup> at facility prior to completion of current services USTs 0 ASTs 0

(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
1	50'	20'	13'

**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 \_\_\_\_\_ feet b. Indicate type of geology<sup>2</sup> Sand and gravel

(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 None known

b. Surface water(s) within 1000 feet of the facility?  Y  N If yes, specify \_\_\_\_\_

**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**

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

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method				Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
		Grab	Shelby Tube	Direct Push	Split Spoon				
CSS#1	Bottom of 4,000 diesel UST, sand	✓	☐	☐	☐	3' below tank level	0.9		3.4
CSS#2	North sidewall 4,000 diesel UST, sand	✓	☐	☐	☐	5' below surface	0.2		1.1
CSS#3	West sidewall 4,000 diesel UST, sand	✓	☐	☐	☐	5' below surface	0.4		< 0.92
CSS#4	West sidewall 4,000 unleaded UST, sand	✓	☐	☐	☐	5' below surface	0.4	< 2.7	
CSS#5	Bottom of 4,000 unleaded UST, sand	✓	☐	☐	☐	3' below tank level	1.8	< 2.6	
CSS#6	South sidewall 4,000 unleaded UST, sand	✓	☐	☐	☐	5' below surface	0.2	< 2.6	
CSS#7	South sidewall of 8,000 gallon UST, sand	✓	☐	☐	☐	5' below surface	0.2	< 2.6	
CSS#8	South sidewall of 8,000 gallon UST, sand	✓	☐	☐	☐	5' below surface	0.3	< 2.7	
CSS#9	Between 8,000 and 10,000 gallon UST, sand	✓	☐	☐	☐	3' below tank level	1.2	< 2.6	
CSS#10	Between 8,000 and 10,000 gallon UST, sand	✓	☐	☐	☐	3' below tank level	138	< 2.8	
CSS#11	Between 8,000 and 10,000 gallon UST, sand	✓	☐	☐	☐	3' below tank level	208		< 0.75
CSS#12	North sidewall 10,000 unleaded UST, sand	✓	☐	☐	☐	5' below surface	0.7	< 2.6	
CSS#13	North sidewall 10,000 unleaded UST, sand	✓	☐	☐	☐	5' below surface	0.9	< 2.7	
CSS#14	North sidewall 10,000 unleaded UST, sand	✓	☐	☐	☐	5' below surface	0.4	< 2.6	

**TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS**

Sample ID #	BENZENE	TOLUENE	ETHYLBENZENE	MTBE	TRIMETHYL - BENZENES (TOTAL)	XYLENES (TOTAL)	NAPHTHALENE
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
CSS#1	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#2	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#3	< 26.3	< 26.3	< 26.3	< 26.3	< 26.3	< 52.6	< 26.3
CSS#4	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#5	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#6	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#7	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#8	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#9	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#10	36.2	55	< 25	< 25	< 25	< 50	< 25
CSS#11	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#12	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#13	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#14	< 25	< 25	< 25	< 25	< 25	< 50	< 25

**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.

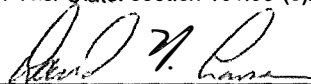
Sampling at the site indicates there has been a release to the environment. Pursuant to Wis. Admin. Code section Comm 10.585 (2) (a) and Wis. Stats. section 292.11 (2) (a), the owner or operator or contractor performing work under chapter Comm 10 shall immediately report any release of a regulated substance 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.

**David N. Larsen**

Tank-System Site Assessor Name (print)

**715-675-9784**

Tank-System Site Assessor Telephone Number



Tank-System Site Assessor Signature

*12-13-12*

Date Signed

**252441**

Certification Number #

**REI Engineering, Inc.**

Company Name



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

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method				Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
		Grab	Shelby Tube	Direct Push	Split Spoon				
CSS#15	3' below gasoline dispenser / sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3' below surface	32.7	< 2.6	
CSS#16	3' below diesel dispenser / sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3' below surface	0.4		98.2
CSS#17	3' below diesel dispenser / sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3' below surface	0.2		186
CSS#18	3' below gasoline dispenser / sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3' below surface	56.7	< 2.7	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

**TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS**

Sample ID #	BENZENE	TOLUENE	ETHYLBENZENE	MTBE	TRIMETHYL - BENZENES (TOTAL)	XYLENES (TOTAL)	NAPHTHALENE
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
CSS#15	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#16	< 25	< 25	< 25	< 25	< 25	< 50	< 25
CSS#17	< 25.3	< 25.3	< 25.3	< 25.3	< 25.3	< 50.5	< 25.3
CSS#18	49.1	387	48.1	< 25	< 25	213.5	< 25

**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.

**David N. Larsen**  
 Tank-System Site Assessor Name (print)  
**715-675-9784**  
 Tank-System Site Assessor Telephone Number

\_\_\_\_\_  
 Tank-System Site Assessor Signature  
 \_\_\_\_\_  
 Date Signed

**252441**  
 Certification Number #  
**REI Engineering, Inc.**  
 Company Name

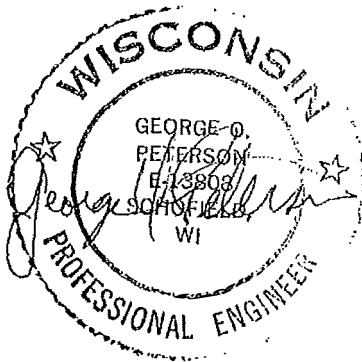
## **APPENDIX D**

### **SITE PHOTOGRAPHS**



Site Assessment  
Kemp Service Center  
Tank Removal

October 1989



Prepared by:

Central Wisconsin Engineers, Inc.  
903 Grand Avenue  
Rothschild, WI 54474  
Phone: (715) 359-9400

## INTRODUCTION

Central Wisconsin Engineers, Inc. was retained by Kemp Service Center, Wausau, Wisconsin to prepare a site assessment report for removal of seven underground storage tanks at 2202 6th Street, Wausau.

## BACKGROUND INFORMATION

### Owner

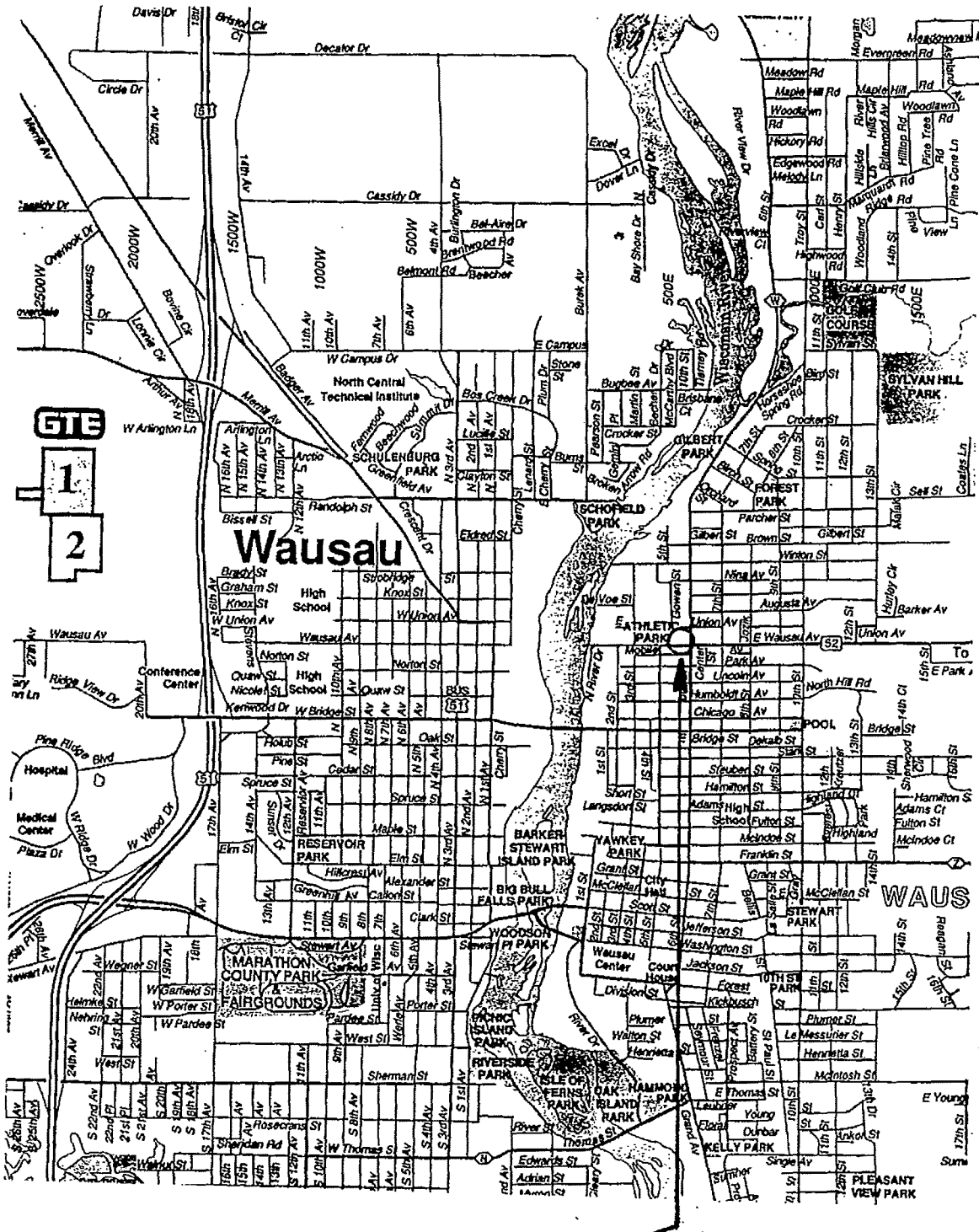
Kemp Service Center  
2202 6th Street  
Wausau, WI 54401  
Attn: Roger Kemp, Owner  
Phone: (715) 842-2129

### PETROLEUM SERVICES CONTRACTOR


Northwest Petroleum Service, Inc.  
2276 Circle Drive  
Wausau, WI 54401  
Attn: Jay Nieuwenhuis  
Phone: (715) 675-2084

## SITE INVESTIGATION

Seven tanks were removed from this site, containing a variety of petroleum products. Three tanks were removed from the south side of the station. The tanks held unleaded gasoline and diesel fuel (see Figure 2). Four tanks were removed from the east side of the station. These tanks contained gasoline, fuel oil, kerosene, and one contained water (see Figure 2). The six tanks containing petroleum products were installed sometime around 1967. There have been no known instances of leaking tanks. This site has been a gas station since the 1930's.

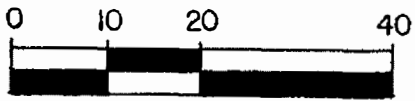


SITE LOCATION

SITE LOCATION		
<b>KEMP SERVICE CENTER TANK CLOSURE / SITE ASSESSMENT WAUSAU, WISCONSIN</b>		
CENTRAL WISCONSIN ENGINEERS, INC. 	Scale: Drawn: A.S. Approved: H.Z., G.R. Date: 10/89	<b>FIGURE 1</b>
	PROJECT 82389	

N. SIXTH ST.

SCALE, FT.



KEMP SERVICE CENTER

300 GAL. TANKS

110 GAL. TANKS

SIGN

1 2

3

4

4" SUMPS

NEW TANK  
4,000 GAL.

NEW 10,000  
GALLON TANK

NEW TANK  
4,000 GAL.

NEW 10,000  
GALLON TANK

PUMP ISLANDS

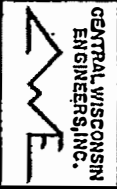
CANOPY

1,000 GAL. DIESEL TANK

E. WAUSAU AVE.

SITE PLAN

KEMP SERVICE CENTER  
TANK CLOSURE / SITE ASSESSMENT  
WAUSAU, WISCONSIN



Scale: 1" = 20'  
Drawn: J.L.  
Approved: H.Z., G.P.  
Date: 9/89

FIGURE 2  
PROJECT 82389

## FIELD INVESTIGATION

The tank removal was initiated July 20, 1989 by Northwest Petroleum Service, Inc. Northwest Petroleum personnel supervised the excavation, conducted field testing, and collected the verification laboratory samples.

Tanks one and two, as labeled on Figure 2, had a capacity of 300 gallons and contained unleaded premiums gas and kerosene respectively. Tank three contained fuel oil and had a capacity of 110 gallons. The existence of tank four was not known prior to this project. It had a capacity of 110 gallons and was full of water. Its previous usage is unknown.

On the south side of the building were three tanks, all having a 10,000 gallon capacity. These tanks contained diesel fuel or unleaded gasoline.

## TANK REMOVAL

The tanks were removed by Schroeder Excavating using a backhoe. The appropriate guidelines were following in the removals including field testing of the soils and purging of the tanks with dry ice.

During the removal of the tanks, soil samples were collected for field analysis. These samples were analyzed using an HNu photoionization meter. All soils having a concentration of 10 ppm and higher were removed for proper disposal. As a result, approximately 25 yards of soil from around the seven tanks was stockpiled on site.



## SOIL SAMPLES FOR LABORATORY ANALYSIS

Soil samples were collected by Northwest Petroleum personnel for laboratory analysis using accepted procedures. The samples were collected and preserved in laboratory specified clean clear glass jars with air tight screw-on teflon lined lids. The samples were preserved and forwarded to the laboratory for analysis.

All soil samples were analyzed by Robert E. Lee & Associates Laboratory Services, Green Bay, Wisconsin (Wisconsin Certification Number 405043870).

All samples collected were analyzed for total petroleum hydrocarbons (TPH) according to the California Method and BTEX (benzene, toluene, ethylbenzene and xylenes). The results are listed below:

<u>Sample</u>	<u>TPH</u>	<u>Result (ppm dry weight)</u>			
		<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
1. North	<.5				
2. South	0.8				
3. East	<0.5				
4. West	<0.5				
5. Northwest	2.6				
6. Southwest	3.7				
A1. North above ground	23	<.050	<.050	.094	.305
A2. South above ground	16	<.050	<.050	<.025	.117
A3. East above ground	27	<.050	<.050	.115	.209
A4. West above ground	32	<.050	<.050	.065	.226

Samples one, three, and six collected below the tanks after contaminated soils as recorded with the HNu meter, were removed. Samples designated A1 through A4 were taken of the soils removed and set aside for disposal at Pitlick and Wick.

### SOILS DISPOSAL

All soils determined to be contaminated as a result of spills or overfills, etc., were transported to the Pitlick and Wick asphalt plant in Eagle River.

The excavation on the east side of the building was filled with clean fill brought to the site. The excavation to the south was enlarged to accommodate the new and larger tanks.

### CONCLUSIONS AND RECOMMENDATIONS

Laboratory test results and field investigations indicated the soils contaminated as a result of overfills or spillage during tank filling have been removed.

The soils below the former tanks are free of contamination, therefore no further remedial action is necessary.