

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

The Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web is a searchable database containing information on the investigation and cleanup of potential and confirmed contamination to soil and groundwater in Wisconsin.

02-16-558992 ENBRIDGE ENERGY - TANK 20 VALVE						
ERP - CLOSED						
Location Name (Click name to view details and other activities)				County	WDNR Region	
ENBRIDGE ENERGY CO				DOUGLAS	NORTHERN	
Address				Municipality		
2800 E 21ST ST				SUPERIOR		
Public Land Survey System			Latitude	Google Maps	RR Sites Map	
SE 1/4 of the NE 1/4 of Sec 36, T49N, R14W			46.6867058	CLICK TO VIEW	CLICK TO VIEW	
Additional Location Description			Longitude	Facility ID	Size (Acres)	
NONE			-92.0596491	816010580	UNKNOWN	
Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action	
DNR RR			2012-05-31	2012-09-04	2012-09-04	
Characteristics						
EPA NPL Site?	DSPS Tracked?	Eligible for PECFA Funds?	Above Ground Storage Tank?	Drycleaner?	Co-Contamination?	On GIS Registry?
No	No	No	No	No	No	No
Actions						
Place Cursor Over Code to View Description						
Date	Code	Name	Comment			
2012-05-31	1	Notification	-			
2012-05-31	33	Tank Closure Environmental Site Assessment Rpt Received	-			
2012-09-04	11	Activity Closed	-			
2012-09-04	83	Close-out Under NR708.09	-			
Impacts						
Type	Comment					
Free Product	-					
Soil Contamination	-					
Substances						
Substance	Type	Amount Released	Units			
Volatile Organic Compounds	VOC					
Crude Oil	Petroleum					
Who						
Click Project Manager Name to Compose Email						
Role	Name/Address					
RP Contact/Agent	KARL BEASTER 119 N 25TH ST SUPERIOR, WI 54880					
Project Manager	ERIN ENDSLEY 1701 N 4TH ST SUPERIOR, WI 54880					
Responsible Party	ENBRIDGE ENERGY 1320 GRAND AVE SUPERIOR, WI 54880					
Quick Response Codes						
Scan to Transfer Information to Your Wireless Device						
Page URL		Google Maps				

BRRTS data comes from various sources, both internal and external to DNR. There may be omissions and errors in the data and delays in updating new information. Please see

the [disclaimers page](#) for more information.

The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street, PO Box 7921 Madison, Wisconsin 53707-7921 608.266.2821

Release 2.12.5 | 08/01/2012

Sager, John E - DNR

frackled

From: Sager, John E - DNR
Sent: Friday, February 13, 2015 16:23
To: 'Alex Smith'
Subject: RE: Enbridge Superior Terminal BRRTS Memos

Alex,

I completed a review of the three technical memos. I agree that it appears the contamination documented in in these memos appears to be from releases previously reported to the WDNR. I will have these technical memos added to the closed files.

The January 7, 2014 Superior Terminal Line 14 Historical Crude Oil Impacts memo will be added to BRRTS# 02-16-558992
The September 25, 2014 Superior Terminal Manifold 211 Maintenance Excavation Memo will be added to BRRTS# 02-16-552700
The November 24, 2014 2014 Superior Terminal Hydrant Replacement Project memo will be added to BRRTS# 02-16-513788

Thanks.

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

John Sager
Phone: (715) 392-7822
John.sager@wisconsin.gov

From: Alex Smith [<mailto:alex.smith@enbridge.com>]
Sent: Friday, February 13, 2015 10:34
To: Sager, John E - DNR
Subject: Enbridge Superior Terminal BRRTS Memos

The following attachments have been sent to you using *Mail Express*®:

[Line 14 Historical Memo.pdf](#) (3.2 MB)
[Manifold 211 Memo.pdf](#) (12.2 MB)
[Tank 13 Hydrant Memo.pdf](#) (12.7 MB)

Click the links above or visit the [pick-up portal](#) for batch retrieval or to reply with your own attachments.
These links will expire in 1 months.

John,

We were completing some housekeeping and I don't believe I ever sent you a few technical memos for historically contaminated soil encountered at the Superior Terminal. Each report highlights when and where the contamination was located, Enbridge's actions for cleanup and supporting figures and data. Each memo also discusses these site justification to be linked to past BRRTS sites. If after review you have any questions, please let me know.

Thanks,

Alex Smith

Environmental Analyst, LP US Environment Operations

ENBRIDGE

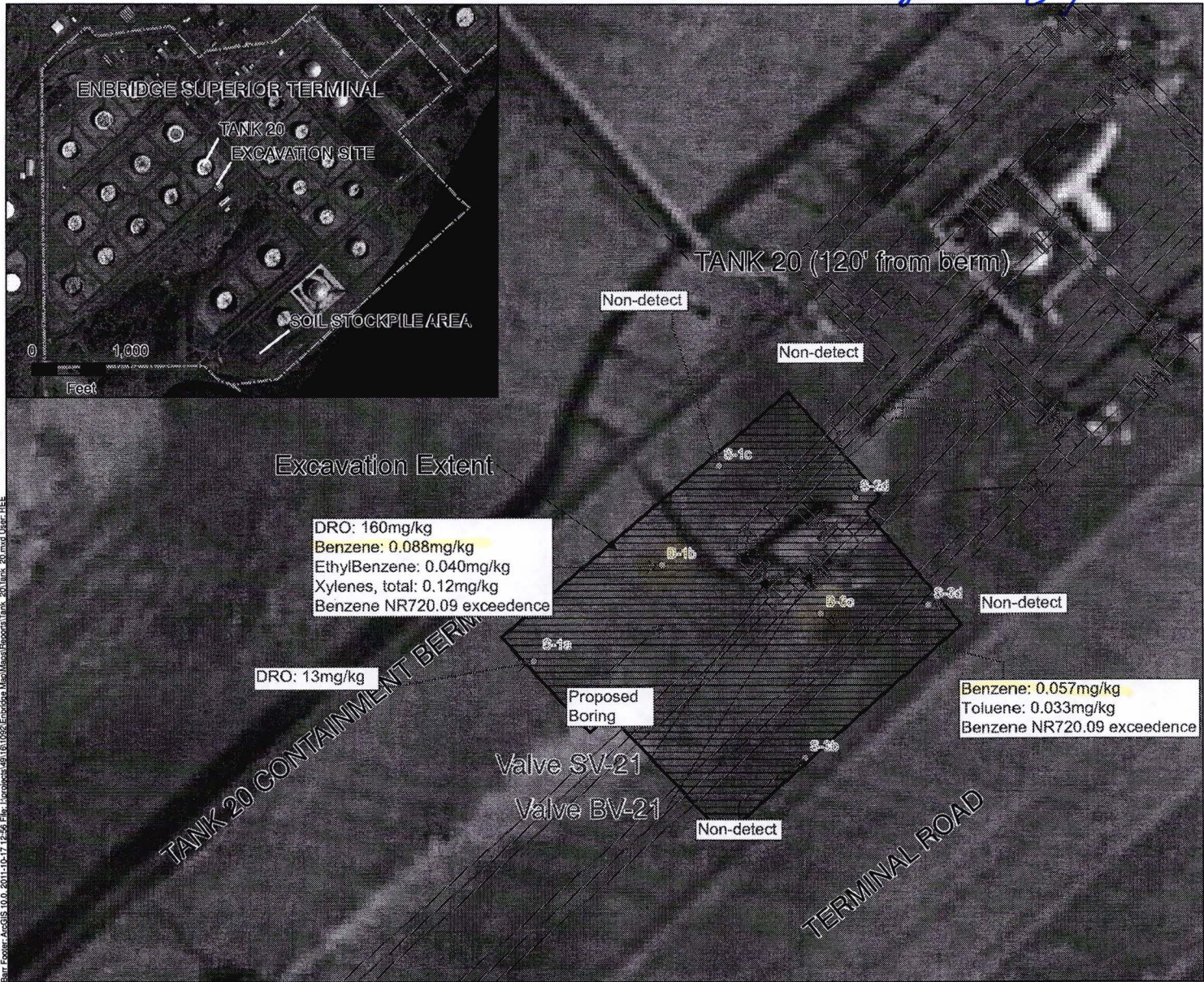
TEL: 715-398-4795 | FAX: 832-325-5511 | CELL: 715-817-8322
1320 Grand Avenue, Superior, WI 54880

enbridge.com
Integrity. Safety. Respect.

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02-16-558992 Enbridge Energy - Tank 20 Valve



- Soil Sample Locations
- ▨ Excavation Extent
- Terminal Pipeline Infrastructure
- ⋯ Terminal Property Boundary

→ DRO 28 ppm

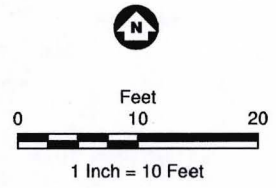


Figure 1

TANK 20 VALVE RELEASE EXCAVATION
Enbridge Superior Terminal
Superior, Wisconsin



Bnt_Eontr_AccGIS_10.0_2011-10-17_12:58:58;File:1:\accgis\491151092\Excavation\Map\Process\Tank_20\Tank_20_valv_Use1.BEE

Rec'd 2/13/15

02-16-558992

resourceful. naturally.
engineering and environmental consultants



Technical Memorandum

To: Alex Smith, Enbridge Energy
From: Ryan Erickson
Subject: Superior Terminal Line 14 Historical Crude Oil Impacts
Date: January 7, 2014
Project: 49161092

This memorandum summarizes the field screening, analytical sampling and waste management assistance conducted by Barr Engineering (Barr) at the request of Enbridge Energy (Enbridge) in response to the discovery of historical, crude oil impacted soil at the Enbridge Superior Terminal in Superior, Wisconsin (Figure 1) in October of 2013.

Background

Enbridge excavated a section of Line 14 for pipeline maintenance purposes at the Enbridge Superior Terminal in October of 2013 (Photo 1; Figure 2). The excavation was located southeast of the Tank 20 basin and was approximately six to ten feet deep. Soil was removed from the excavation with bucket excavators and hydro-vacuum (hydrovac) trucks.

Crude oil impacted soil and water with a petroleum sheen were encountered in the maintenance excavation (Figure 2) by Enbridge contractor's on October 24, 2012. Enbridge Environment was notified by the contractor when the impacts were discovered.

Enbridge requested that Barr complete the following activities during the Line 14 maintenance excavation project:

- assess the environmental site conditions
- review historical release information in this location
- identify and segregate excavated crude oil impacted soil from unimpacted soil
- assist with the off-site disposal coordination and documentation of contaminated soil

Enbridge indicated that the crude oil impacts discovered during the maintenance excavation were likely historical based on the location and characteristics of the contaminated soil. Barr checked the Wisconsin Department of Natural Resources (WDNR) Bureau for Remediation and Redevelopment Tracking

System (BRRTS) database. A 2011 historical crude oil pipeline valve release (three to four gallons) (BRRTS #0216558992) was identified in the same location as the newly encountered impacts (Figure 2). The site was closed by the WDNR on September 4, 2012 under NR 708.09 and it was added to the WDNR BRRTS online database.

Field Methods and Results

Barr was onsite multiple times during the maintenance activities to assist with field screening, soil sampling and soil disposal coordination. Barr observed a crude oil sheen and trace amount of product in the maintenance excavation near the valves where the 2011 historical release occurred (Photo 2). Additional field screening of the excavation extents could not be completed due to excavation access safety limitations. Approximately twelve cubic yards of crude oil impacted soil was excavated with a hydrovac truck from near the historical release location and stockpiled at the Superior Terminal Soil Management Area (Figure 2) for storage until it could be characterized and approved for off-site disposal.

Additional, apparently unimpacted soil was segregated from the Line 14 maintenance excavation for field screening and potential reuse. Barr returned to the site on November 13, 2013 to field screen the Line 14 maintenance excavation clean soil stockpile for potential crude oil impacts. Fourteen soil stockpile samples were field screened for the presence of organic vapors using a photoionization detector (PID), and other potential indicators of crude oil impacts were documented, if present, such as odor, discoloration and sheen. No headspace readings were above background levels (0.0 parts per million) and no other evidence of contamination was observed in the stockpile (Attachment A). The majority of the clean soil stockpile was used to backfill the Line 14 excavation after maintenance activities were completed. The remaining clean soil was hauled to Udeen gravel pits located south of Superior, Wisconsin.

A new crude oil release source was not identified by Enbridge during the 2013 maintenance activities. No additional residual crude oil impacts were observed away from the historical release location by Barr or the maintenance contractors (Photo 1; Figure 2).

Discussion

No new analytical samples were collected from the 2013 excavation because the crude oil impacts were encountered within the footprint of the closed BRRTS site (#0216558992) and no residual impacts were observed in the final excavation extents. The excavation was backfilled with clean fill following the completion of the Line 14 maintenance activities.

Analyte concentrations in soil samples collected during the 2011 response activities and the associated 2012 Geoprobe borings (Figure 2) were below the WDNR Industrial Direct Contact Residual Contaminant Level (RCL) and the Cumulative Hazard Index criteria (Table 1), which is described in WDNR guidance document PUB-RR-890. Benzene concentrations in samples B-1b (0.088 mg/kg) and B-3c (0.057 mg/kg) collected 12 feet below ground surface, exceeded the WDNR groundwater RCL. Additional excavation of crude oil impacted soil during the 2011 remedial activities was limited due to the presence of terminal pipeline infrastructure.

Waste Disposal Coordination and Documentation

Barr collected an analytical waste characterization sample from the crude oil impacted soil stockpile (Line 14 Historical-Stockpile-1) on October 24, 2013 for laboratory analysis at Legend Technical Services. The stockpile sample was analyzed for diesel range organics (DRO) and benzene, toluene, ethylbenzene, and xylenes (BTEX). A waste profile application with the laboratory results was submitted to the Shamrock Landfill near Cloquet, Minnesota and the soil was accepted under waste profile #CL13-0058 (Attachment B). A total of 17.96 tons of crude oil impacted soil was hauled to the landfill on November 6, 2013. The waste characterization laboratory report, the Shamrock Landfill waste profile documentation and the landfill hauling summary are included in Attachment B.

Conclusions and Recommendations

The crude oil impacts that were encountered during the Line 14 maintenance excavation were limited to sheen and a trace amount of product near the closed BRRTS #0216558992 release site. No new crude oil source was identified. No residual crude oil impacts were observed at the excavation extents. The impacted material encountered in the 2013 excavation was removed and properly disposed of. The excavation has been backfilled with clean fill.

Analyte concentrations in the soil samples collected during the 2011 remedial activities did not exceed the industrial direct contact RCL and passed the Cumulative Hazard Index criteria. Two 2011 soil samples exceeded the groundwater RCL concentrations for benzene. The groundwater pathway for the Superior Terminal is currently being reviewed by the WDNR on a case by case site-wide basis. If the WDNR agrees that the risk to the groundwater pathway associated with this historical release can continue to be addressed using the site-wide approach, no further response action for groundwater or documentation for the WDNR will be required. The figures and tables attached to this memo can be used to update the existing BRRTS file.

Attachments:

Photos	1 and 2
Figure 1	Site Location
Figure 2	Site Layout Map
Table 1	Soil Analytical Data Summary
Attachment A	Enbridge Site Investigation Field Sampling and Screening Log
Attachment B	Waste Disposal Documentation

Photos:

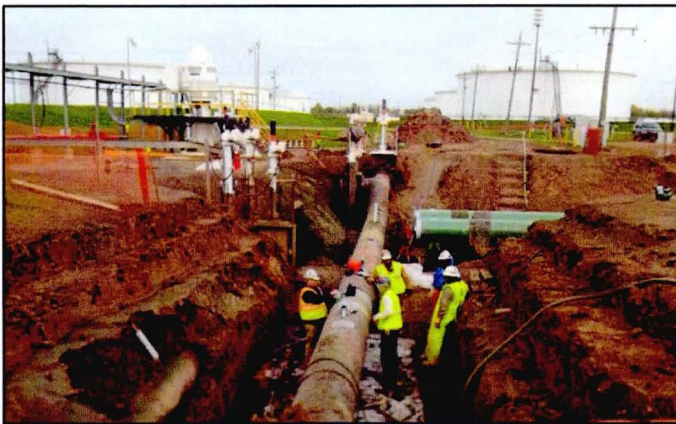
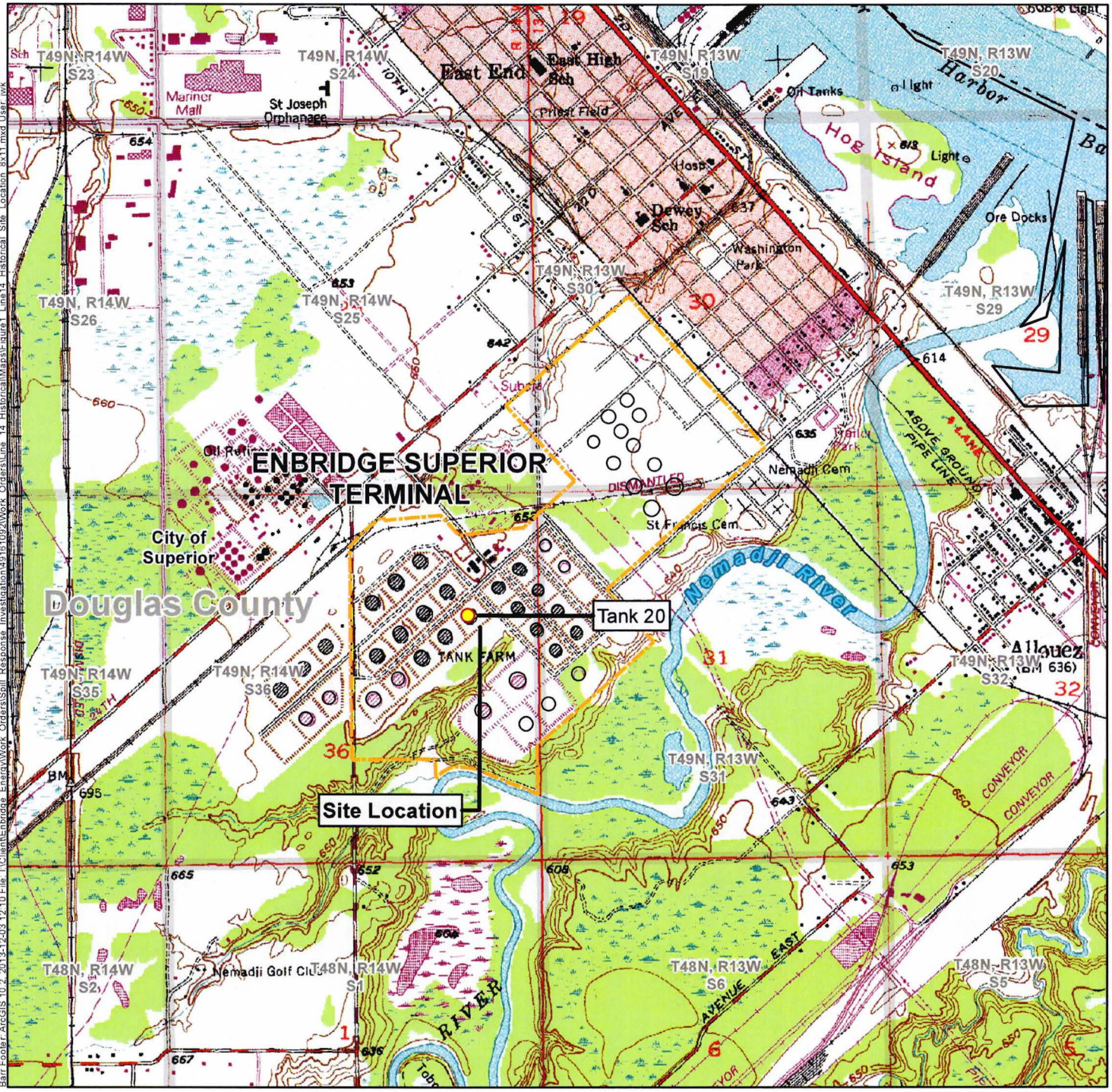


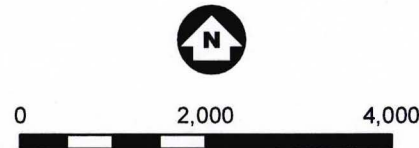
Photo 1: Line 14 (center of photo) maintenance excavation, facing northeast. The valves with historical crude oil impacts soil are shown on the left side of Line 14. Photo taken on October 28, 2013.



Photo 2: Water with sheen encountered in excavation during hydrovac excavation activities. These valves were the location of the 2011 crude oil release (BRRTS #0216558992) that was closed by the WDNR in 2012. Photo taken on October 23, 2013.



--- Terminal Property Boundary



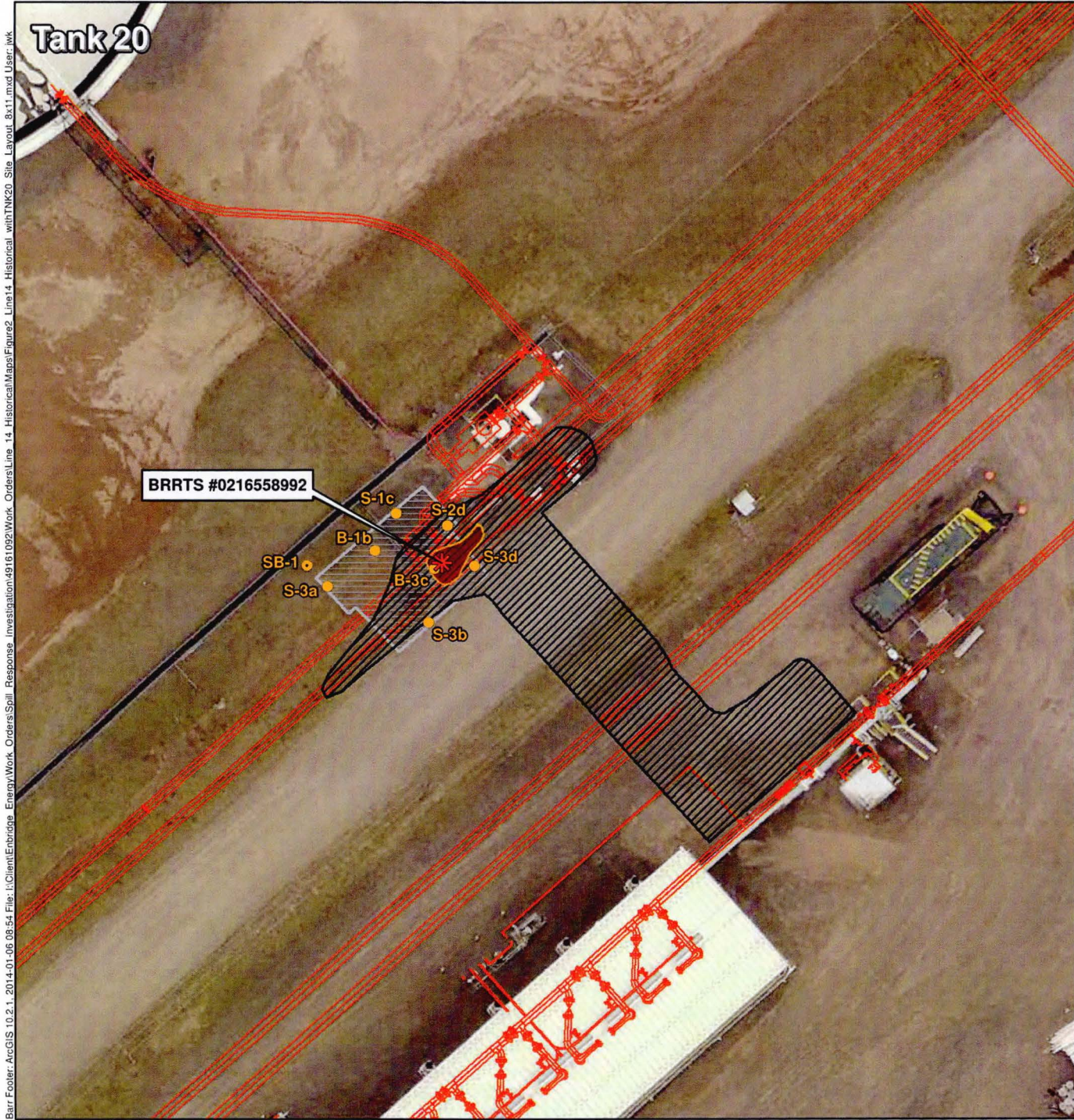
Feet
1 Inch = 2,000 Feet

Figure 1

SITE LOCATION
Line 14 Historical Impacted Soil
Superior Terminal
Enbridge Energy, L.P.
Superior, Wisconsin



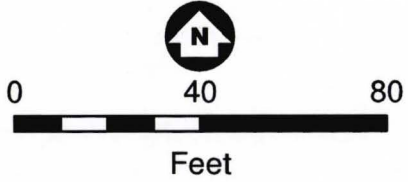
Barr Footer: ArcGIS 10.2, 2013-12-03 12:10 File: I:\Client\Enbridge_Energy\Work_Orders\Spill_Response_Investigation\49161092\Work_Orders\Line_14_Historical\Map\Figure1_Line14_Historical_Site_Location_8x11.mxd User: iwk



Barr Footer: ArcGIS 10.2.1, 2014.01.06 08:54 File: I:\Client\Enbridge_Energy\Work_Orders\Spill_Response_Investigation\49161092\Work_Orders\Line_14_Historical\Map\Figure2_Line14_Historical_withTNK20_Site_Layout_8x11.mxd User: iwk



- Pipeline Infrastructure
- Terminal Property Boundary
- Historical Release Location
- 2013 Line 14 Maintenance Excavation**
- Maintenance Excavation
- Excavated Impacted Soil
- 2011 Remedial Activities**
- Remedial Excavation
- Excavation Sample Locations
- Geoprobe Boring Location



Douglas County Imagery Circa May, 2013
Figure 2

SITE LAYOUT MAP
Line 14 Historical Impacted Soil
Superior Terminal
Enbridge Energy, L.P.
Superior, Wisconsin



Table 1
Soil Analytical Data Summary
Tank 20 Crude Oil Valve Release
(WDNR BRRTS #0216558992)
Enbridge Energy Terminal - Superior, Wisconsin
Units, mg/kg (unless otherwise noted)

Parameter	Moisture	Solids, percent	Benzene	Ethyl benzene	Toluene	Xylene, total	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Diesel Range Organics	WDNR RCL Determinations ¹					
										Exceedance Count	Hazard Index	Cumulative Cancer Risk	Pass or Fail		
Groundwater RCL			0.0051	0.785	0.5536	1.97 XYL	1.3793 TR	1.3793 TR							
Industrial Direct Contact RCL	05/01/2012	No Exceed	7.41	37	818	258	219	182		0	1.0	0.00001	Pass		
Location	Date	Depth													
B-1b	9/01/2011	12 ft	--	75 %	0.088	0.040	< 0.031	0.12	--	--	160	0	0.0002	1.3E-08	Pass
B-3c	9/01/2011	12 ft	--	75 %	0.057	< 0.033	0.033	< 0.10	--	--	< 8.7	0	0.0001	8.6E-09	Pass
S-1a	9/01/2011	8 ft	--	84 %	< 0.030	< 0.030	< 0.030	< 0.089	--	--	13	0	0.0001	4.9E-09	Pass
S-1c	9/01/2011	6 ft	--	78 %	< 0.032	< 0.032	< 0.032	< 0.096	--	--	< 8.2	0	0.0001	5.2E-09	Pass
S-1d	9/01/2011	2 ft	--	81 %	< 0.031	< 0.031	< 0.031	< 0.093	--	--	< 8.1	0	0.0001	5.0E-09	Pass
S-2d	9/01/2011	6 ft	--	83 %	< 0.030	0.033	0.030	0.10	--	--	28	0	0.0001	4.9E-09	Pass
S-3b	9/01/2011	10 ft	--	73 %	< 0.032	< 0.032	< 0.032	< 0.097	--	--	< 9.1	0	0.0001	5.2E-09	Pass
S-3d	9/01/2011	2 ft	--	78 %	< 0.032	< 0.032	< 0.032	< 0.096	--	--	< 8.0	0	0.0001	5.2E-09	Pass
TK20-SB-1	6/15/2012	3 - 4 ft	22.0 %	--	< 0.065	< 0.065	< 0.065	< 0.20	< 0.065	< 0.065	< 10.5	0	0.0003	1.1E-08	Pass
TK20-SB-1	6/15/2012	13 - 15 ft	27.0 %	--	< 0.070	< 0.070	< 0.070	< 0.21	< 0.070	< 0.070	< 11.1	0	0.0004	1.1E-08	Pass

¹WDNR RCL Determinations based on guidance criteria described in WDNR document PUB-RR-890. Hazard index is based a cumulative direct contact standard.

XYL - Based on Xylenes (m-, o-, p- combined).

TR - Based on Trimethylbenzenes (1,2,4 - and 1,3,5- combined).

Attachment A

Enbridge Site Investigation Field Sampling and Screening Logs

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: Milepost or Facility: ~~STEP Slurry Pit~~ Line 14 Excavation Stockpile Screening

Date: 11/13/13

Equipment used: PID - Ionization detector with 10.6 eV lamp

Background Headspace: 0.0 ppm

Sampler: RBE

Calibration Time: 1700

Sample Nomenclature (Location - sample type - #): STEP Slurry Stockpile

Soil Sample Types: R = Removed Sample ; S = Sidewall Sample ; B = Bottom Sample ; Stockpile = Stockpile Sample

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/Rainbow	275
R-1	-	1400	CLGP	Red brown	N/N	0.0
R-2	-					0.0
R-3	-					0.0
R-4	-					0.0
R-5	-					0.0
R-6	-					0.0
R-7	-					0.0
R-8	-					0.0
R-9	-					0.0
R-10	-					0.0
R-11	-					0.0
R-12	-					0.0
R-13	-	↓				0.0
R-14	-	1430	↓	↓	↓	0.0
R-15	-					
R-16	-					
R-17	-					
R-18	-					
R-19	-					
R-20	-					

SITE SKETCH: north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features... 1 inch/grid = 20 FEET

*North - South - Stockpile (L' 45 x W' 40 x H' 10) / 27 = 666 CY
 Soil from: Line 14 excavation Soil going to: School Forest Rd Pit - / - Pattison Park, CO Rd B Pit
 / - Glacier Hill Pit

- Pile Total is 650 cubic yards
 - UPI wants most for backfill, in 100 cubic yards will be left and will go to Udeens
 - Gave inspector approval for Udeens disposal based on screenings

Attachment B

Waste Disposal Documentation

P.O. Number	Customer Code	SKB Representative	CL
I. Generator Information			
Generator Name: Enbridge Pipelines Limited Partnership, LLC		Generator EPA ID Number	
Generator Location: Enbridge Superior Terminal - Line 14 Historically impacted soil		Generator Contact: Alex Smith	
Generator Mailing Address (if different): 1320 Grand Ave, Superior, WI 54880		Generator Email Address: alex.smith@enbridge.com	
Bill To Name & Address: Enbridge Energy, 1100 Louisiana Ave, STE. 3300, Houston, TX 77002		Billing Contact: Alex Smith	
Invoice Contact:		Billing Email Address: alex.smith@enbridge.com	

II. Waste Generation Information			
Waste Name: Crude contaminated soil - Line 14 Historically impacted soil	Estimated rate of waste generation: 10	<input checked="" type="checkbox"/> one time	<input type="checkbox"/> yearly
Generator Facility Operations and/or Site History: Enbridge Pipeline Terminal			
Describe the generating process or source of contaminated solutions and/or waste: Historical crude oil release			

III. Waste Composition and Constituents (list all known)		Actual Range
Crude oil impacted soil		100

IV. Waste Properties			
Physical state: <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge	Free Liquids: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	pH Range: <input type="checkbox"/> <2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-8 <input type="checkbox"/> 8-12 <input type="checkbox"/> >12.6	Flash point: <input type="checkbox"/> ≤ 140°F <input type="checkbox"/> > 140°F to < 200°F <input type="checkbox"/> > 200°F
Color: Brown		Odor (describe):	

V. Waste Classification			
Waste stream properties (answer ALL questions)		Does this waste contain absorbents? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does this waste stream contain any D, F, K, U or P listed as hazardous waste, either in pure form, as a mixture, or treatment residue? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Is this waste lethal (by Minn. Rules 7045.0131 Subp. 6)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does this waste stream contain PCB material? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Is this waste recyclable? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If yes, concentration: ppm		Is this waste explosive? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does this waste stream contain flammable acids? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Is this waste infectious? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does this waste contain asbestos? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Is this waste putrescible waste? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does this waste contain oxidizers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Is this waste demolition debris? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Does this waste contain radioactive material? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Is this waste sewer sludge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Please attach any available information or analytical test results that have previously been performed on this waste that substantiates these determinations. Include MSDS's and any information from other agencies (i.e., MPCA, USEPA)			

VI. Shipping Information			
Proper DOT Shipping Name (per CFR 172.101) where applicable			
Reportable Quantity	DOT Hazard Class	UN/NA Number	Packing Group
Method of packaging: <input type="checkbox"/> drums (size) <input checked="" type="checkbox"/> Bulk Solids <input type="checkbox"/> boxes (size)	Method of shipment: <input type="checkbox"/> Roll-off <input type="checkbox"/> End dump <input type="checkbox"/> Rail <input type="checkbox"/> Other (Specify)		

VII. Certification of Non-Hazardous Waste & Approval Conditions			
I hereby certify and warrant, on behalf of the generator and myself that, to the best of my knowledge and belief, the information contained herein is accurate, and true and that the waste is non-hazardous as defined in Title 42, United States Code Section 6903, Minnesota Statute Section 118.06, Subdivision 13, and/or any rules adopted by the Minnesota Pollution Control Agency under Minnesota Statute Section 118.07.			
I understand that any approval is no longer valid if there are any changes in the process generating the waste or there have been changes in the composition of the waste. Therefore, if the composition of the waste stream changes or potentially changes, I or someone representing the generator, will immediately notify SKB Environmental, Inc. on behalf of the generator, hereby agree to fully indemnify SKB Environmental for any damages and/or costs incurred as a result of this certification being inaccurate or untrue.			
Signature:	Alex Smith	Environmental Analyst	11/4/2014
Printed Name		Title	Date

Bar Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161082 Project Number: 49161082 Project Manager: Ms. Andrea Nord	Work Order #: 1305313 Date Reported: 10/29/13
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Line 14 Historical-Stockpile-1	1305313-01	Soil	10/24/13 10:45	10/25/13 09:55

Shipping Container Information	
Default Cooler	Temperature (°C): 4.7
Received on ice: Yes	Temperature blank was present
Received on melt water: No	Ambient: No
Custody seals: No	Received on ice pack: No
	Acceptable (IH/ISO only): No

Case Narrative:
The dry weight correction and dilution applies to the sample result, MDL, and RL.
Ethylbenzene was present in the method blank between the MDL and RL for the BTEX analysis.
The DRO chromatogram for the sample is attached.

October 29, 2013

Ms. Andrea Nord
Bar Engineering Co.
4700 W 77th St
Minneapolis, MN 55435

Work Order Number: 1305313
RE: 49161082

Enclosed are the results of analyses for samples received by the laboratory on 10/25/13. If you have any questions concerning this report, please feel free to contact me.

Results are not blank corrected unless noted within the report. Additionally, all QC results meet requirements unless noted.

All samples will be retained by Legend Technical Services, Inc., unless consumed in the analysis, at ambient conditions for 30 days from the date of this report and then discarded unless other arrangements are made. All samples were received in acceptable condition unless otherwise noted.

WI Accreditation #568022410

Prepared by:
LEGEND TECHNICAL SERVICES, INC.

Bach Pham
Client Manager II
bpham@legend-group.com

Samantha Jaworski
Manager, Organics
sjaworski@legend-group.com

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bar Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161082 Project Number: 49161082 Project Manager: Ms. Andrea Nord	Work Order #: 1305313 Date Reported: 10/29/13
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DRO/8015D

Analysis	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Line 14 Historical-Stockpile-1 (1305313-01) Soil Sampled: 10/24/13 10:45 Received: 10/25/13 9:55										
Diesel Range Organics	300	11	1.3	mg/kg dry	1	83/2505	10/25/13	10/25/13	Wt(85)DRO	L1
Surrogate: Tricortane (C-30)	83.3			70-150 %						

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1305313
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 10/29/13

WI(95) GRO/8015D
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Line 14 Historical-Stockpile-1 (1305313-01) Soil Sampled: 10/24/13 10:46 Received: 10/25/13 9:55										
Benzene	<0.0041	0.033	0.0041	mg/kg dry	1	B3J2506	10/25/13	10/25/13	WI(95) GRO	
Ethylbenzene	0.019	0.033	0.0029	mg/kg dry	1	-	-	-	-	J
Toluene	0.0080	0.033	0.0036	mg/kg dry	1	-	-	-	-	J
Xylenes (total)	<0.011	0.10	0.011	mg/kg dry	1	-	-	-	-	
Surrogate: 4-Fluorochlorobenzene	00.8			80-160 %		-	-	-	-	

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1305313
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 10/29/13

DRO/8015D - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3J2505 - Sonication (Wisc DRO)											
Blank (B3J2505-BLK1) Prepared & Analyzed: 10/25/13											
Diesel Range Organics	< 0.99	8.0	0.99	mg/kg wet				84.1		70-130	
Surrogate: Triacetylene (C-30)	13.6			mg/kg wet	16.0						
LCS (B3J2505-B51) Prepared & Analyzed: 10/25/13											
Diesel Range Organics	65.9	8.0	0.99	mg/kg wet	64.0			99.9		70-120	
Surrogate: Triacetylene (C-30)	14.8			mg/kg wet	16.0			92.8		70-130	
LCS Dup (B3J2505-B5D1) Prepared: 10/25/13 Analyzed: 10/26/13											
Diesel Range Organics	70.8	8.0	0.99	mg/kg wet	64.0			111		70-120	10.2 20
Surrogate: Triacetylene (C-30)	18.4			mg/kg wet	16.0			102		70-130	

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1305313
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 10/29/13

PERCENT SOLIDS
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Line 14 Historical-Stockpile-1 (1305313-01) Soil Sampled: 10/24/13 10:46 Received: 10/25/13 9:55										
% Solids	75			%	1	B3J2506	10/29/13	10/29/13	% calculation	

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1305313
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 10/29/13

WI(95) GRO/8015D - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3J2508 - EPA 5035 Soil (Purge and Trap)											
Blank (B3J2508-BLK1) Prepared & Analyzed: 10/25/13											
Benzene	< 0.0031	0.025	0.0031	mg/kg wet							
Ethylbenzene	0.0132	0.025	0.0022	mg/kg wet							B-02, J
Toluene	< 0.0027	0.025	0.0027	mg/kg wet							
Xylenes (total)	< 0.0080	0.075	0.0080	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	22.9			ug/L	25.0			91.8		80-160	
LCS (B3J2508-B51) Prepared & Analyzed: 10/25/13											
Benzene	97.9			ug/L	100			97.9		80-120	
Ethylbenzene	100			ug/L	100			100		80-120	
Toluene	100			ug/L	100			100		80-120	
Xylenes (total)	298			ug/L	300			99.2		80-120	
Surrogate: 4-Fluorochlorobenzene	24.4			ug/L	25.0			97.7		80-160	
LCS Dup (B3J2508-B5D1) Prepared & Analyzed: 10/25/13											
Benzene	96.7			ug/L	100			96.7		80-120	1.23 20
Ethylbenzene	95.5			ug/L	100			95.5		80-120	4.89 20
Toluene	97.8			ug/L	100			97.8		80-120	2.37 20
Xylenes (total)	284			ug/L	300			94.6		80-120	4.78 20
Surrogate: 4-Fluorochlorobenzene	22.2			ug/L	25.0			88.9		80-160	
Matrix Spike (B3J2508-M51) Source: 1305313-01 Prepared & Analyzed: 10/25/13											
Benzene	97.4			ug/L	100			97.4		80-120	
Ethylbenzene	101			ug/L	100			101		80-120	
Toluene	101			ug/L	100			100		80-120	
Xylenes (total)	300			ug/L	300			100		80-120	
Surrogate: 4-Fluorochlorobenzene	22.8			ug/L	25.0			90.4		80-160	

Barr Engineering Co. Project: 49161092
4700 W 77th St Project Number: 49161092 Work Order #: 1305313
Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 10/29/13

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3J2906 - General Preparation											
Duplicate (B3J2906-DUP1)	Source: 1305312-01		Prepared & Analyzed: 10/29/13								
% Solids	66.0		%			64.0		6.08	20		
Duplicate (B3J2906-DUP2)	Source: 1305323-03		Prepared & Analyzed: 10/29/13								
% Solids	95.0		%			95.0		0.00	20		

Barr Engineering Co. Project: 49161092
4700 W 77th St Project Number: 49161092 Work Order #: 1305313
Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 10/29/13

Notes and Definitions

- L1 Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
- J Parameter was present between the MDL and RL and should be considered an estimated value
- B-02 Target analyte was present in the method blank between the MDL and RL.
- < Less than value listed
- dry Sample results reported on a dry weight basis
- NA Not applicable. The %RPD is not calculated from values less than the reporting limit.
- MDL Method Detection Limit
- RL Reporting Limit
- RPD Relative Percent Difference
- LCS Laboratory Control Spike + Blank Spike (BS) = Laboratory Fortified Blank (LFB)
- MS Matrix Spike = Laboratory Fortified Matrix (LFM)

Chain of Custody

BARR
1305313

Project Name: **W161092**
Sample Name: **Emb. by Super Intersect Line 14, Station**
Sample ID: **NE 40624**

Client: **ASB 102RN**

Analyst: **REG/RAW**
Checked by: **CSG**
Date: **10/29/13**

Location	Lot	Sample Type	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													

Legend Technical Services, Inc. logo and contact info on the right side of the form.

LEGEND
Technical Services, Inc.
www.legend-group.com

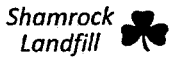
Sample Name: **Emb. by Super Intersect Line 14, Station**

Instrument: **F200**

Sample ID: **NE 40624**

Station: **ASB 102RN**

Legend Technical Services, Inc. logo and contact info on the right side of the chromatogram.



November 05, 2013

Karl Beaster
Enbridge Pipelines Limited Partnership, LLC
Accounts Payable
1100 Louisiana Ave, Ste 3300
Houston, TX 77002

RE: CL13-0058 Crude Contaminated Soil - Line 14 Historically Impacted

Dear Mr. Beaster,

This agreement will confirm the price and length of service for disposal and/or transportation of your non-hazardous industrial material at our facility. This agreement is for the term of the Waste Approval granted by Shamrock Landfill and is for all services ordered and performance initiated within such period and does include the disposal surcharge fees which you are obligated to pay as of the date of this agreement.

Payment and terms are net thirty (30) days. Interest will be charged at a rate of 1 1/2% per month (18% annually) on any unpaid balance 30 days after the date of the invoice. In the event Customer terminates this Agreement prior to its expiration other than as a result of a breach by Shamrock Landfill or Shamrock Landfill terminates this agreement for Customer's breach (including nonpayment) Customer agrees to pay to Shamrock Landfill as liquidated damages a sum calculated as follows: (1) if the remaining term under this agreement is six or more months Customer shall pay its average monthly charges multiplied by six; or (2) if the remaining term under this agreement is less than six months Customer shall pay its average monthly charge multiplied by the number of months remaining in the term.

These prices are based on an approved waste stream composition. In the event that a non-conforming waste is received, you will be notified of additional charges, when applicable.

To accept this agreement, please sign one copy and return it to our St. Paul, MN office at Shamrock Landfill, 251 Starkey St., St. Paul, MN 55107 or Via Fax at 651-223-8197 or email to supstad@skhinc.com.

Shamrock Landfill

Signature of Steve Opsstad

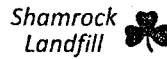
Steve Opsstad

Customer ACCEPTED BY: (name, position)

DATE: 11-5-2013

WASTE APPROVAL Period: 11/5/2013 to 10/28/2015

P.O. Box 338 • Esko, MN 55733-0338
Main: 218.878.0112 • Fax: 218.879.2120



Bill To Customer

Enbridge Pipelines Limited Partnership, LLC
Accounts Payable
1100 Louisiana Ave, Ste 3300
Houston, TX 77002

Service For Generator

Enbridge Pipelines Limited Partnership, LLC
2800 East 21st St
Superior, WI 54880

Disposal

Waste Description: Crude Contaminated Soil - Line 14 Historically Impacted

Estimated Volume: 10 YARDS / ONE TIME ONLY

Disposal Method: Secure Non-Hazardous Landfill

Treatment Method: None Expected For Conforming Waste

Pricing

Disposal \$16.00 Per Ton Crude Contaminated Soil - Line 14



Notification of Waste Acceptance

PAGE 1 of 2
11/05/2013

CUSTOMER INFORMATION

EPA ID#: WID981092133
Enbridge Pipelines Limited Partnership,
Enbridge Superior Terminal

2800 East 21st St
Superior, WI 54880
Contact: Karl Beaster
Phone: (715) 398-4795

Profile Sheet #:

Waste Stream #: CL13-0058

Waste Name: Crude Contaminated Soil - Line 14 Historically Impacted

INVOICE INFORMATION

Bill #: 2133
Enbridge Pipelines Limited Partnership,
Accounts Payable

1100 Louisiana Ave, Ste 3300
Houston, TX 77002
Contact: Karl Beaster
Phone: (715) 398-4795

Thank you for selecting SHAMROCK LANDFILL for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided in the profile sheet number listed above and conditions below.

To schedule a shipment, or should you have any questions, please contact the facility at (218) 878-0112.

ACCEPTANCE INFORMATION

The waste stream identified by the reference above is acceptable for disposal.
The anticipated frequency of shipment is 10 YARDS / ONE TIME ONLY

This waste is acceptable for delivery beginning on 11/5/2013 thru 10/28/2015 at which time the material will need to be reanalyzed and recertified.

PCB Statement: The Minnesota Pollution Control Agency encourages generators of non-hazardous PCB waste to voluntarily manage the waste as hazardous waste or to seek an alternative to land disposal such as incineration.

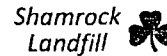
Spill Reporting Reminder: Proper County and MPCA spill reporting procedures must be followed.

Empty Container Statement: Each shipment containing empty containers must be accompanied with a completed EMPTY CONTAINER CERTIFICATION FORM.

Free Liquid Statement: Free liquids will not be placed in cells at Shamrock Landfill. Free liquids must be solidified either prior to shipment to Shamrock Landfill or at Shamrock Landfill.

Shipping Requirements: A NON-HAZARDOUS certificate is required to be on file, certifying the waste is non-hazardous as specified per 40 CFR 261.4. The shipment must be accompanied with an Shamrock Landfill manifest.

P.O. Box 338 • Esko, MN 55733-0338
Main: 218.878.0112 • Fax: 218.879.2120



WASTE STREAM ANALYSIS INFORMATION

Waste Name: Crude Contaminated Soil - Line 14 Historically Impacted
Physical State: Solid
Process Producing Waste: Tank 18 mixer release

PRE-ACCEPTANCE SAMPLE RESULTS

Color: Physical State:
Dust Present: 0 Free Liquids: 0
Paint Filter Test: 0 Odor:
Flash Point Range: Density:
Radioactive?: 0 Water Reactivity: 0
pH Range: React to Acid: 0
React to Base: 0 % Moisture:
OVM Sniff: Sulfide:
Oxidizers: 0 Cyanide:
Reacts with Air: 0

This analysis is solely for use by Shamrock Landfill employees for the purpose of determining waste acceptability. No other claims are made or implied.

COMMENTS

AUTHORIZATION

Approval:

Signature of Steve Opsstad

Date: 11/5/13

P.O. Box 338 • Esko, MN 55733-0338
Main: 218.878.0112 • Fax: 218.879.2120

PAGE 2 of 2
11/05/2013



REPORT NAME: Tons Each Load By WSD
DESCRIPTION: Tonnage for EACH LOAD, grouped by customer
DATE RANGE: 01/01/2013 to 11/22/2013
PRINTED ON (DATE): Tuesday, November 12, 2013

ENBS1
Enbridge Pipelines Limited Partnership,
2800 East 21st St
Superior WI 54680

LOAD#	MANDIST	ARRIVED	WASTE STREAM	WASTE NAME	PILE	SQFT	WT	TONS
15419 (A)	16969	11/6/2013	CL13-0058	Crude Contaminated Sol-Line 14	2A	Z38	1175	17.96
Total # of Loads: 1					Total Tons:		17.96	
Grand Total (Tons):					Grand Total (Loads):		1	



88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239



88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1104258 Date Reported: 09/19/11
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September 19, 2011

Ms. Andrea Nord
Barr Engineering Co.
4700 W 77th St
Minneapolis, MN 55435

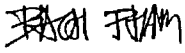
Work Order Number: 1104258
RE: 49161092

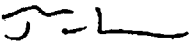
Enclosed are the results of analyses for samples received by the laboratory on 09/08/11. If you have any questions concerning this report, please feel free to contact me.

All samples will be retained by LEGEND, unless consumed in the analysis, for 30 days from the date of this report and then discarded unless other arrangements are made.

WI Certification #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC


Bach Pham
Client Manager I
bpham@legend-group.com


Triet Le
Chemist II
triette@legend-group.com

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1b_12-12	1104258-01	Soil	09/01/11 16:15	09/08/11 08:40
B-3c_12-12	1104258-02	Soil	09/01/11 15:10	09/08/11 08:40
S-1a_8-8	1104258-03	Soil	09/01/11 10:35	09/08/11 08:40
S-1c_6-6	1104258-04	Soil	09/01/11 16:30	09/08/11 08:40
S-1d_2-2	1104258-05	Soil	09/01/11 15:55	09/08/11 08:40
S-2d_6-6	1104258-06	Soil	09/01/11 15:35	09/08/11 08:40
S-3b_10-10	1104258-07	Soil	09/01/11 14:50	09/08/11 08:40
S-3d_2-2	1104258-08	Soil	09/01/11 14:30	09/08/11 08:40

Shipping Container Information

Default Cooler Temperature (°C): 4.4
 Received on ice: Yes Temperature blank was present Received on ice pack: No
 Received on melt water: No Ambient: No Acceptable (IHL/ISO only): No
 Custody seals: No

Case Narrative:

Recovery of the DRO surrogate in sample B-1b_12-12 was slightly below laboratory limits due to sample matrix interference. The DRO chromatograms are attached for samples B-1b_12-12, S-1a_8-8, and S-2d_6-6.

8 confirmation samples (ppm)

	DRO	Benz
1a (8')	13	
1b (12')	160	88
2d (6')	28	
3c (12')	ND	57

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

DRO/8015B
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1b_12-12 (1104258-01) Soil Sampled: 09/01/11 16:15 Received: 09/08/11 8:40										
Diesel Range Organics	160	8.6	1.4	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	L1
Surrogate: C-30	67.0			70-130 %						S-04
B-3c_12-12 (1104258-02) Soil Sampled: 09/01/11 15:10 Received: 09/08/11 8:40										
Diesel Range Organics	<8.7	8.7	1.4	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	
Surrogate: C-30	73.2			70-130 %						
S-1a_8-8 (1104258-03) Soil Sampled: 09/01/11 10:35 Received: 09/08/11 8:40										
Diesel Range Organics	13	7.8	1.3	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	L1
Surrogate: C-30	73.8			70-130 %						
S-1c_6-6 (1104258-04) Soil Sampled: 09/01/11 16:30 Received: 09/08/11 8:40										
Diesel Range Organics	<8.2	8.2	1.3	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	
Surrogate: C-30	76.5			70-130 %						
S-1d_2-2 (1104258-05) Soil Sampled: 09/01/11 15:55 Received: 09/08/11 8:40										
Diesel Range Organics	<8.1	8.1	1.3	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	
Surrogate: C-30	77.8			70-130 %						
S-2d_6-6 (1104258-06) Soil Sampled: 09/01/11 15:35 Received: 09/08/11 8:40										
Diesel Range Organics	28	7.9	1.3	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	L1
Surrogate: C-30	71.7			70-130 %						
S-3b_10-10 (1104258-07) Soil Sampled: 09/01/11 14:50 Received: 09/08/11 8:40										
Diesel Range Organics	<9.1	9.1	1.5	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	
Surrogate: C-30	73.7			70-130 %						
S-3d_2-2 (1104258-08) Soil Sampled: 09/01/11 14:30 Received: 09/08/11 8:40										
Diesel Range Organics	<8.0	8.0	1.3	mg/kg dry	1	B110901	09/09/11	09/10/11	WI(95) DRO	
Surrogate: C-30	74.0			70-130 %						

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

WI(95) GRO/8015B
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1b_12-12 (1104258-01) Soil Sampled: 09/01/11 16:15 Received: 09/08/11 8:40										
Benzene	0.088	0.031	0.0046	mg/kg dry	1	B110902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	0.040	0.031	0.0057	mg/kg dry	1					
Toluene	<0.031	0.031	0.0029	mg/kg dry	1					
Xylenes (total)	0.12	0.092	0.015	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	112			80-150 %						
B-3c_12-12 (1104258-02) Soil Sampled: 09/01/11 15:10 Received: 09/08/11 8:40										
Benzene	0.057	0.033	0.0051	mg/kg dry	1	B110902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	<0.033	0.033	0.0063	mg/kg dry	1					
Toluene	0.033	0.033	0.0032	mg/kg dry	1					
Xylenes (total)	<-0.10	0.10	0.016	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	105			80-150 %						
S-1a_8-8 (1104258-03) Soil Sampled: 09/01/11 10:35 Received: 09/08/11 8:40										
Benzene	<0.030	0.030	0.0045	mg/kg dry	1	B110902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	<0.030	0.030	0.0056	mg/kg dry	1					
Toluene	<0.030	0.030	0.0029	mg/kg dry	1					
Xylenes (total)	<0.089	0.089	0.014	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	105			80-150 %						
S-1c_6-6 (1104258-04) Soil Sampled: 09/01/11 16:30 Received: 09/08/11 8:40										
Benzene	<0.032	0.032	0.0049	mg/kg dry	1	B110902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	<0.032	0.032	0.0060	mg/kg dry	1					
Toluene	<0.032	0.032	0.0031	mg/kg dry	1					
Xylenes (total)	<0.096	0.096	0.015	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	101			80-150 %						
S-1d_2-2 (1104258-05) Soil Sampled: 09/01/11 15:55 Received: 09/08/11 8:40										
Benzene	<0.031	0.031	0.0047	mg/kg dry	1	B110902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	<0.031	0.031	0.0058	mg/kg dry	1					
Toluene	<0.031	0.031	0.0030	mg/kg dry	1					
Xylenes (total)	<0.093	0.093	0.015	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	113			80-150 %						
S-2d_6-6 (1104258-06) Soil Sampled: 09/01/11 15:35 Received: 09/08/11 8:40										
Benzene	<0.030	0.030	0.0046	mg/kg dry	1	B110902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	0.033	0.030	0.0057	mg/kg dry	1					
Toluene	0.030	0.030	0.0029	mg/kg dry	1					
Xylenes (total)	0.10	0.090	0.014	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	104			80-150 %						



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

WI(95) GRO/8015B
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-3b_10-10 (1104258-07) Soil Sampled: 09/01/11 14:50 Received: 09/08/11 8:40										
Benzene	<0.032	0.032	0.0049	mg/kg dry	1	B10902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	<0.032	0.032	0.0061	mg/kg dry	1	"	"	"	"	
Toluene	<0.032	0.032	0.0031	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.097	0.097	0.015	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	109			80-150 %		"	"	"	"	
S-3d_2-2 (1104258-08) Soil Sampled: 09/01/11 14:30 Received: 09/08/11 8:40										
Benzene	<0.032	0.032	0.0049	mg/kg dry	1	B10902	09/09/11	09/09/11	WI(95) GRO	
Ethylbenzene	<0.032	0.032	0.0060	mg/kg dry	1	"	"	"	"	
Toluene	<0.032	0.032	0.0031	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.096	0.096	0.015	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	109			80-150 %		"	"	"	"	

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

PERCENT SOLIDS
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1b_12-12 (1104258-01) Soil Sampled: 09/01/11 18:15 Received: 09/08/11 8:40										
% Solids	75			%	1	B10818	09/08/11	09/08/11	% calculation	
B-3c_12-12 (1104258-02) Soil Sampled: 09/01/11 15:10 Received: 09/08/11 8:40										
% Solids	75			%	1	B10818	09/08/11	09/08/11	% calculation	
S-1a_8-8 (1104258-03) Soil Sampled: 09/01/11 10:35 Received: 09/08/11 8:40										
% Solids	84			%	1	B10818	09/08/11	09/08/11	% calculation	
S-1c_6-6 (1104258-04) Soil Sampled: 09/01/11 16:30 Received: 09/08/11 8:40										
% Solids	78			%	1	B10818	09/08/11	09/08/11	% calculation	
S-1d_2-2 (1104258-05) Soil Sampled: 09/01/11 15:55 Received: 09/08/11 8:40										
% Solids	81			%	1	B10818	09/08/11	09/08/11	% calculation	
S-2d_6-6 (1104258-06) Soil Sampled: 09/01/11 15:35 Received: 09/08/11 8:40										
% Solids	83			%	1	B10818	09/08/11	09/08/11	% calculation	
S-3b_10-10 (1104258-07) Soil Sampled: 09/01/11 14:50 Received: 09/08/11 8:40										
% Solids	73			%	1	B10818	09/08/11	09/08/11	% calculation	
S-3d_2-2 (1104258-08) Soil Sampled: 09/01/11 14:30 Received: 09/08/11 8:40										
% Solids	78			%	1	B10818	09/08/11	09/08/11	% calculation	

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

DRO/8015B - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B110901 - Sonication (Wisc DRO)											
Blank (B110901-BLK1) Prepared & Analyzed: 09/09/11											
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: C-30	11.4			mg/kg wet	16.0		71.0	70-130			
LCS (B110901-BS1) Prepared & Analyzed: 09/09/11											
Diesel Range Organics	49.4	8.0	1.3	mg/kg wet	64.0		77.2	70-120			
Surrogate: C-30	11.7			mg/kg wet	16.0		73.1	70-130			
LCS Dup (B110901-BSD1) Prepared: 09/09/11 Analyzed: 09/10/11											
Diesel Range Organics	48.3	8.0	1.3	mg/kg wet	64.0		75.5	70-120	2.20	20	
Surrogate: C-30	11.9			mg/kg wet	16.0		74.6	70-130			

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

WI(95) GRO/8015B - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B110902 - EPA 5035 Soil (Purge and Trap)											
Blank (B110902-BLK1) Prepared & Analyzed: 09/09/11											
Benzene	< 0.025	0.025	0.0038	mg/kg wet							
Ethylbenzene	< 0.025	0.025	0.0047	mg/kg wet							
Toluene	< 0.025	0.025	0.0024	mg/kg wet							
Xylenes (total)	< 0.075	0.075	0.012	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	26.8			ug/L	25.0		107	80-150			
LCS (B110902-BS1) Prepared & Analyzed: 09/09/11											
Benzene	110			ug/L	100		110	80-120			
Ethylbenzene	111			ug/L	100		111	80-120			
Toluene	109			ug/L	100		109	80-120			
Xylenes (total)	331			ug/L	300		110	80-120			
Surrogate: 4-Fluorochlorobenzene	27.0			ug/L	25.0		108	80-150			
LCS Dup (B110902-BSD1) Prepared & Analyzed: 09/09/11											
Benzene	112			ug/L	100		112	80-120	1.73	20	
Ethylbenzene	111			ug/L	100		111	80-120	0.172	20	
Toluene	111			ug/L	100		111	80-120	1.06	20	
Xylenes (total)	332			ug/L	300		111	80-120	0.0733	20	
Surrogate: 4-Fluorochlorobenzene	28.2			ug/L	25.0		113	80-150			
Matrix Spike (B110902-MS1) Source: 1104258-03 Prepared & Analyzed: 09/09/11											
Benzene	110			ug/L	100	<	110	80-120			
Ethylbenzene	112			ug/L	100	0.332	112	80-120			
Toluene	110			ug/L	100	0.123	110	80-120			
Xylenes (total)	334			ug/L	300	0.128	111	80-120			
Surrogate: 4-Fluorochlorobenzene	29.4			ug/L	25.0		118	80-150			

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1104258
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/19/11

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	Limits	%RPD	Limit	Notes
Batch B110818 - General Preparation											
Duplicate (B110818-DUP1)	Source: 1104258-02		Prepared & Analyzed: 09/08/11								
% Solids	76.0		%			75.0			1.32	20	
Duplicate (B110818-DUP2)	Source: 1104265-04		Prepared & Analyzed: 09/08/11								
% Solids	91.0		%			91.0			0.00	20	
Duplicate (B110818-DUP3)	Source: 1104265-10		Prepared & Analyzed: 09/08/11								
% Solids	78.0		%			78.0			0.00	20	

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
 L1 Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
 < Less than value listed
 dry Sample results reported on a dry weight basis
 NA Not applicable. The %RPD is not calculated from values less than the reporting limit.
 MDL Method Detection Limit
 RL Reporting Limit
 RPD Relative Percent Difference
 LCS Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
 MS Matrix Spike = Laboratory Fortified Matrix (LFM)

LEGEND

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Chain of Custody
790 West 77th Street
BARR
Minneapolis, MN 55410-4453
(952) 835-3888

Project Number: 49161092
Project Name: Tank 20
Sample Origin: State of MN (see last page for abbreviations)

CDC Number: NO 31543

Location	Start Depth (Depth)	Depth (ft)	Collection Date (mm/dd/yyyy)	Collection Time (AM/PM)	Matrix	Type	Number of Containers/Preservative		Year	Soil	VOC (total MCHC) #	Semi-VOC (total MCHC) #	VOC (total MCHC) #	Semi-VOC (total MCHC) #	Pesticides (total MCHC) #	Metals (approved) #	BTEX (approved) #	BTEX (total MCHC) #	Total Number of Containers	
							Year	Soil												
01 B-1b	- 12	ft	01/16/2010	16:15	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
02 B-3c	- 12	ft		15:10	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
03 S-2a	- 8			10:35	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
04 S-1c	- 6			16:30	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
05 S-1d	- 2			15:55	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
06 S-2b	- 6			15:35	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
07 S-3b	- 10			14:50	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
08 S-3d	- 2			14:30	X	X	1	1	1	1	1	1	1	1	1	1	1	1	1	3
09																				
10																				

Analyst: *[Signature]*
Reviewed By: *[Signature]*
Date: 9/18/11
Time: 8:40

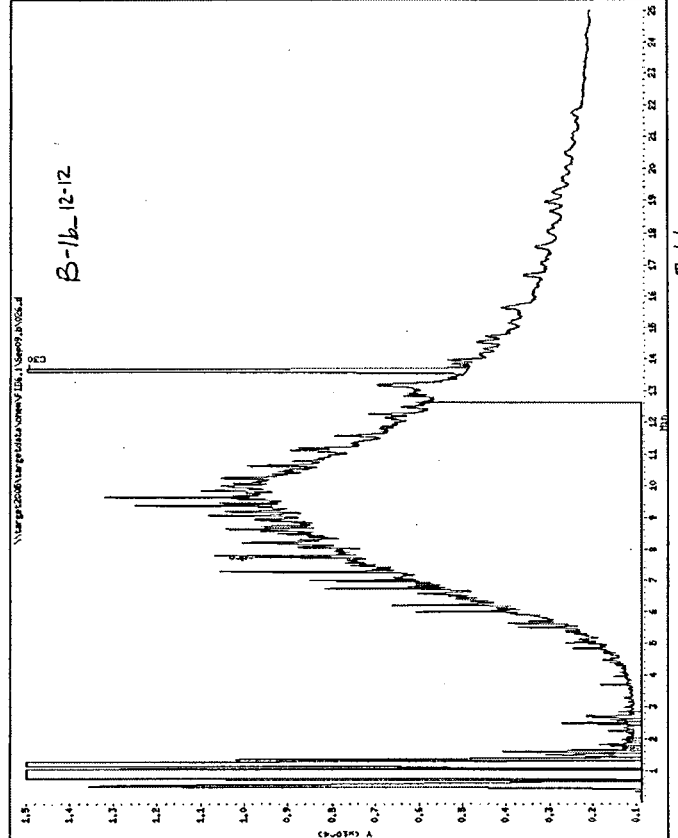
Method: EPA 8160
Instrument: FID/MS
Operator: T.L.
Column: DBPLOT 0.25

Sample Shipped Via: Air Parcel Express Overnight

Notes: *[Handwritten notes]*

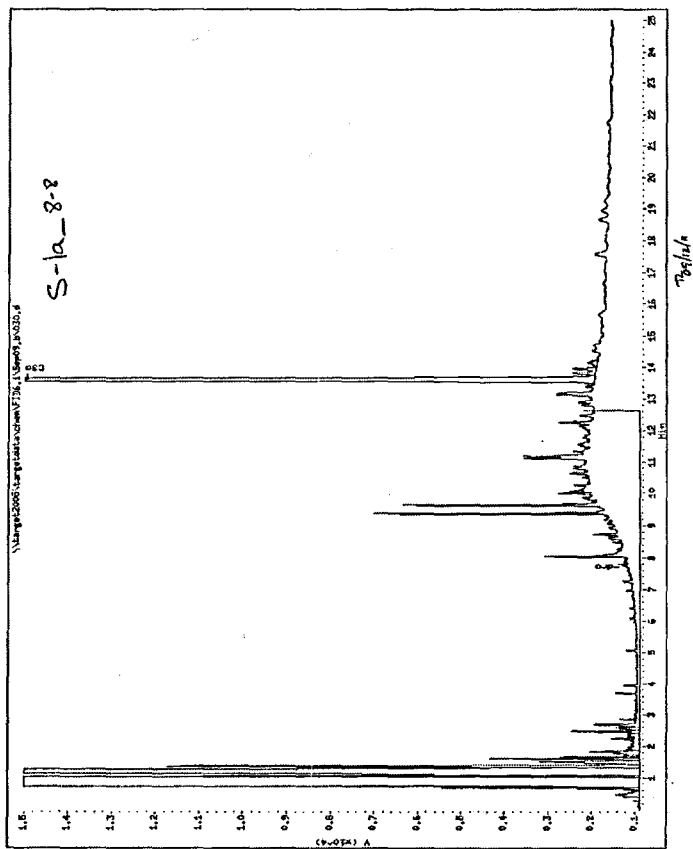
Page 1

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Client: DL
Sample Info: 104289-01
Column Name: DBPLOT



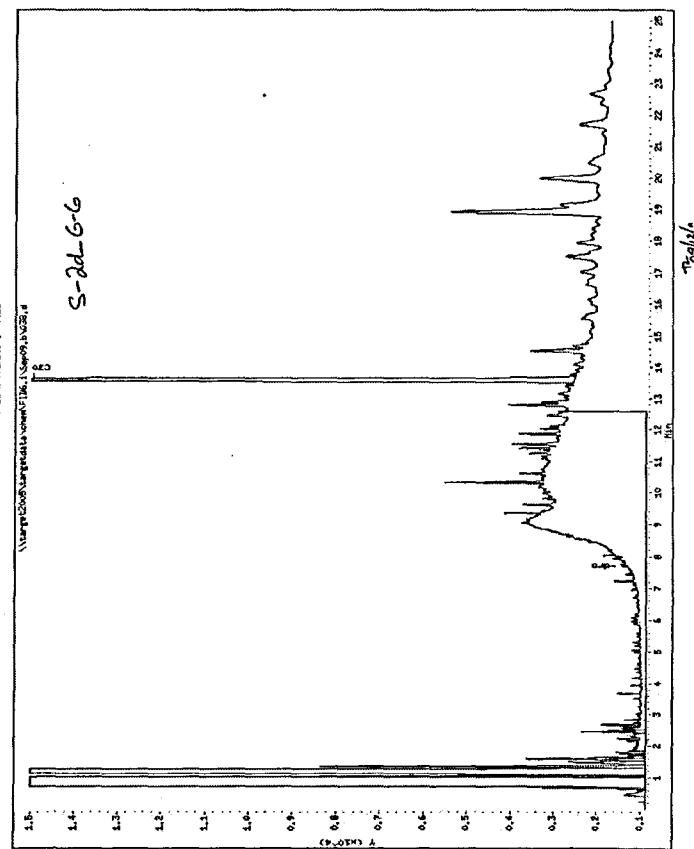
Page 1

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 Date: 10-07-2011 02:18
 Client: IBI
 Sample Info: 110428-43
 Column Phase:
 Instrument: F16_1
 Operator: TL
 Column diameter: 0.32



Page 1

Data File: \\smp12008\Targetdata\chem\F16_1\Spec9_8.V08.d
 Date: 10-07-2011 02:14
 Client: IBI
 Sample Info: 110428-36
 Column Phase:
 Instrument: F16_1
 Operator: TL
 Column diameter: 0.32





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Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1103855 Date Reported: 09/02/11
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile 2	1103855-01	Soil	08/15/11 16:00	08/17/11 10:55
Stockpile 3	1103855-02	Soil	08/15/11 15:50	08/17/11 10:55

Shipping Container Information		
Default Cooler	Temperature (°C): 8.9	
Received on ice: Yes	Temperature blank was present	Received on ice pack: No
Received on melt water: No	Ambient: No	Acceptable (IHLISO only): No
Custody seals: No		

Case Narrative:
 This report was revised on September 2, 2011 to correct the stale certification reference.

2 stock pile samples

September 02, 2011

REVISION

Ms. Andrea Nord
 Barr Engineering Co.
 4700 W 77th St
 Minneapolis, MN 55435

Work Order Number: 1103855
 RE: 49161092

This is a revised report. The details of the revision are listed in the case narrative on the following page.

Enclosed are the results of analyses for samples received by the laboratory on 08/17/11. If you have any questions concerning this report, please feel free to contact me.

All samples will be retained by LEGEND, unless consumed in the analysis, for 30 days from the date of the original report and then discarded unless other arrangements are made.

WI Certification #998022410

Prepared by:
 LEGEND TECHNICAL SERVICES, INC

Bach Pham

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 Client Manager I
 bpham@legend-group.com

Triet Le
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Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1103855
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/02/11

DRO/8015B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile 2 (1103855-01) Soil Sampled: 08/15/11 16:00 Received: 08/17/11 10:55										
Diesel Range Organics	160	8.1	1.3	mg/kg dry	1	B1H1804	08/18/11	08/18/11	WI(95) DRO	
Surrogate: C-30	89.8		70-130 %							
Stockpile 3 (1103855-02) Soil Sampled: 08/15/11 15:50 Received: 08/17/11 10:55										
Diesel Range Organics	520	8.8	1.4	mg/kg dry	1	B1H1804	08/18/11	08/18/11	WI(95) DRO	
Surrogate: C-30	87.7		70-130 %							

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1103855
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/02/11

WI(95) GRO/8015B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile 2 (1103855-01) Soil Sampled: 08/15/11 16:00 Received: 08/17/11 10:55										
Benzene	0.25	0.029	0.0044	mg/kg dry	1	B1H1805	08/18/11	08/18/11	WI(95) GRO	
Ethylbenzene	0.22	0.029	0.0055	mg/kg dry	1					
Toluene	0.12	0.029	0.0028	mg/kg dry	1					
Xylenes (total)	1.2	0.087	0.014	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	100		80-150 %							
Stockpile 3 (1103855-02) Soil Sampled: 08/15/11 15:50 Received: 08/17/11 10:55										
Benzene	0.21	0.034	0.0052	mg/kg dry	1	B1H1805	08/18/11	08/18/11	WI(95) GRO	
Ethylbenzene	0.18	0.034	0.0064	mg/kg dry	1					
Toluene	0.36	0.034	0.0033	mg/kg dry	1					
Xylenes (total)	1.1	0.10	0.016	mg/kg dry	1					
Surrogate: 4-Fluorochlorobenzene	105		80-150 %							

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1103855
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/02/11

PERCENT SOLIDS
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile 2 (1103855-01) Soil Sampled: 08/15/11 16:00 Received: 08/17/11 10:55										
% Solids	86			%	1	B1H1713	08/17/11	08/18/11	% calculation	
Stockpile 3 (1103855-02) Soil Sampled: 08/15/11 15:50 Received: 08/17/11 10:55										
% Solids	78			%	1	B1H1713	08/17/11	08/18/11	% calculation	

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1103855
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/02/11

DRO/8015B - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1H1804 - Sonication (Wisc DRO)											
Blank (B1H1804-BLK1) Prepared & Analyzed: 08/18/11											
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: C-30	14.4			mg/kg wet	16.0		90.1	70-130			
LCS (B1H1804-BS1) Prepared & Analyzed: 08/18/11											
Diesel Range Organics	60.6	8.0	1.3	mg/kg wet	64.0		94.7	70-120			
Surrogate: C-30	14.0			mg/kg wet	16.0		87.4	70-130			
LCS Dup (B1H1804-BSD1) Prepared: 08/18/11 Analyzed: 08/19/11											
Diesel Range Organics	62.9	8.0	1.3	mg/kg wet	64.0		98.3	70-120	3.73	20	
Surrogate: C-30	14.8			mg/kg wet	16.0		92.2	70-130			

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1103855
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/02/11

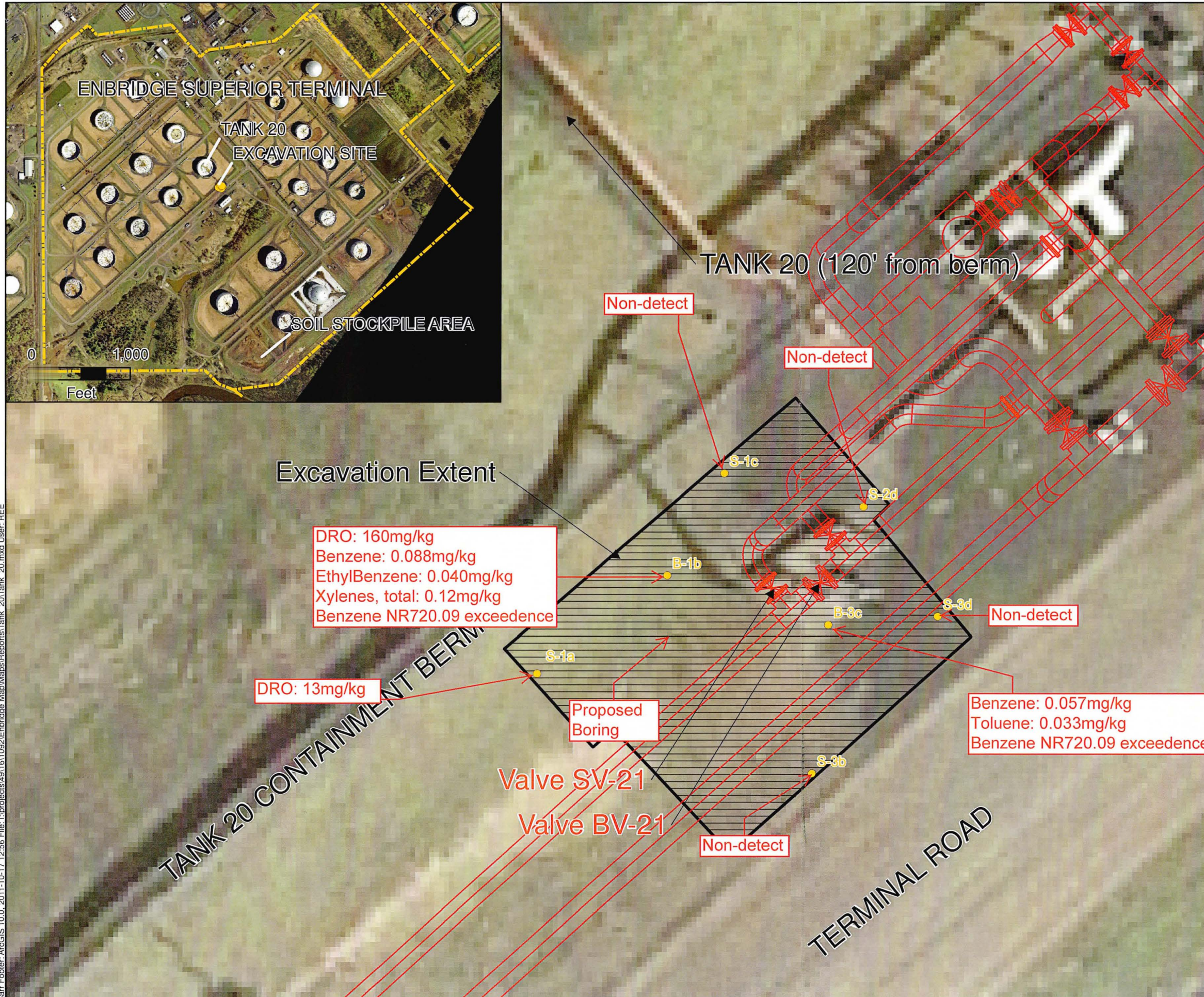
WI(95) GRO/8015B - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1H1805 - EPA 5035 Soil (Purge and Trap)											
Blank (B1H1805-BLK1) Prepared & Analyzed: 08/18/11											
Benzene	< 0.025	0.025	0.0038	mg/kg wet							
Ethylbenzene	< 0.025	0.025	0.0047	mg/kg wet							
Toluene	< 0.025	0.025	0.0024	mg/kg wet							
Xylenes (total)	< 0.075	0.075	0.012	mg/kg wet							
LCS (B1H1805-B51) Prepared & Analyzed: 08/18/11											
Benzene	89.3			ug/L	100	89.3	80-120				
Ethylbenzene	96.9			ug/L	100	96.9	80-120				
Toluene	96.9			ug/L	100	96.9	80-120				
Xylenes (total)	292			ug/L	300	97.4	80-120				
LCS Dup (B1H1805-BSD1) Prepared: 08/18/11 Analyzed: 08/19/11											
Benzene	91.8			ug/L	100	91.8	80-120	2.67	20		
Ethylbenzene	95.7			ug/L	100	95.7	80-120	1.19	20		
Toluene	98.3			ug/L	100	98.3	80-120	1.49	20		
Xylenes (total)	289			ug/L	300	96.2	80-120	1.21	20		
Matrix Spike (B1H1805-MS1) Source: 1103855-02 Prepared & Analyzed: 08/18/11											
Benzene	91.9			ug/L	100	3.07	88.8	80-120			
Ethylbenzene	101			ug/L	100	2.70	98.8	80-120			
Toluene	98.8			ug/L	100	5.28	93.5	80-120			
Xylenes (total)	312			ug/L	300	15.6	98.7	80-120			
Surrogate: 4-Fluorochlorobenzene	27.6			ug/L	25.0	110	80-150				

Barr Engineering Co. Project: 49161092
 4700 W 77th St Project Number: 49161092 Work Order #: 1103855
 Minneapolis, MN 55435 Project Manager: Ms. Andrea Nord Date Reported: 09/02/11

PERCENT SOLIDS - Quality Control
 Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1H1713 - General Preparation											
Duplicate (B1H1713-DUP1) Source: 1103754-10 Prepared: 08/17/11 Analyzed: 08/18/11											
% Solids	77.0			%		77.0	0.00	20			
Duplicate (B1H1713-DUP2) Source: 1103816-05 Prepared: 08/17/11 Analyzed: 08/18/11											
% Solids	97.0			%		97.0	0.00	20			
Duplicate (B1H1713-DUP3) Source: 1103855-02 Prepared: 08/17/11 Analyzed: 08/18/11											
% Solids	81.0			%		78.0	3.77	20			



- Soil Sample Locations
- ▨ Excavation Extent
- ══ Terminal Pipeline Infrastructure
- Terminal Property Boundary

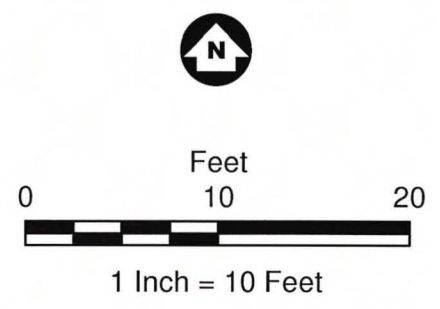


Figure 1
TANK 20 VALVE RELEASE EXCAVATION
 Enbridge Superior Terminal
 Superior, Wisconsin

Barr Footer: ArcGIS 10.0, 2011-10-17 12:56 File: L:\projects\491611092\Enbridge Map\Reports\Tank_20\Tank_20.mxd User: REE



RECEIVED

report as spill?
have map? 02-16-558992
closed 7/4/12 NA

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

JUN 18 2012

Notification For Hazardous Substance Discharge
(Non-Emergency Only)

Form 4400-225 (05/12) Page 1 of 2

DNR - SUPERIOR
Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003

Notice: Hazardous substance discharges must be reported immediately according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting 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: Enbridge Superior Terminal - Tank 20 valve release

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

Date DNR Notified: 05/31/2012

1. Discharge Reported By

Name Karl Beaster	Firm Enbridge Energy	Phone No. (include area code) (715) 398-4754
Mailing Address 1320 Grand Ave., Superior, WI 54880		Email Address karl.beaster@enbridge.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. Enbridge Superior Terminal - Tank 20 Valve

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. 2800 East 21st Street, Superior, WI 54880

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

Superior

County: Douglas	Legal Description: SE 1/4 NE 1/4 Sec 36 Tn 49N Range 14 C E <input checked="" type="radio"/> W	WTM: X 362548 Y 692367
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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.

Enbridge Energy

- 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/aw/rr/lgu/liability.htm>.

Contact Person Name (if different) Karl Beaster	Phone Number (715) 398-4757	Email Address karl.beaster@enbridge.com	
Mailing Address 1320 Grand Ave., Superior, WI 54880	City Superior	State WI	ZIP Code 54880

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 checked="" type="checkbox"/> VOC's | <input type="checkbox"/> Diesel | <input type="checkbox"/> PERC (Dry Cleaners) |
| <input 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 checked="" type="checkbox"/> Other (specify): <u>Crude oil</u> |
| <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 checked="" type="checkbox"/> Free Product | <input type="checkbox"/> Within 100 ft of Private Well |
| <input type="checkbox"/> Contaminated Public Well | <input checked="" type="checkbox"/> Groundwater Contamination | <input type="checkbox"/> Within 1000 ft of Public Well |
| <input type="checkbox"/> Contamination in Fractured Bedrock | <input type="checkbox"/> Off-Site Contamination | |
| | <input type="checkbox"/> Other (specify): _____ | |

Contamination was discovered as a result of:

- | | | |
|--|--|--|
| <input type="checkbox"/> Tank closure assessment | <input type="checkbox"/> Site assessment | <input checked="" type="checkbox"/> Other - Describe: <u>Terminal Monitoring</u> |
| Date <input type="text"/> | Date <input type="text"/> | Date <input type="text" value="08/11/2012"/> |

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.

Free product was removed from the ground surface with a vacuum truck and oil absorbent pads. Contaminated soil was excavated for repair and remediation purposes was handled in accordance with WDNR regulations.

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:

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