

Technical Memorandum

To: Karl Beaster, Enbridge Energy Limited Partnership
From: Ryan Erickson, Alex Puetz
Subject: Tank 8 Valve Release, Superior Terminal, Superior, Wisconsin
Date: February 1, 2013
Project: 49161092
WDNR Spill Number: 20110405NO16-1
NRC Number: 972372

This memorandum describes the corrective action conducted in response to a crude oil release detected northeast of the Tank 8 berm at the Enbridge Energy Superior Terminal in Superior, Wisconsin on March 28, 2011. According to Enbridge, approximately 12 gallons of oil are estimated to have leaked from the valve.

Site Location and Information

The terminal operated by Enbridge Energy Limited Partnership is located at 2800 East 21st Street, Superior, Douglas County, Wisconsin (Figure 1). The surrounding land use is industrial, including oil refining and natural gas storage facilities at adjacent properties.

Tank 8 is located on the east side of the terminal (Figure 2). The nearest surface waters are the terminal fire protection ponds located 100 feet to the northeast, and the Nemadji River located approximately 0.25 miles to the east. The drainage ditches at the facility convey water to several individual overflow holding ponds and the closest one is located 450 feet to the southeast of the release (between the site and the river). Flume dam control structures are present in drainages between the overflow ponds and the Nemadji River to prevent impacted water which may reach the overflow ponds from migrating to the river.

Surficial geology in the vicinity of the site consists of glacial-lacustrine clay deposits that are over 150 feet thick (USGS Hydrologic Investigation Atlas HA-524, Water Resources of Wisconsin Lake Superior Basin). Sand fill material has been emplaced in some areas of the terminal as backfill around or below structures. Bedrock consists of sandstone of the Precambrian Bayfield Formation. Depth to groundwater at the terminal varies between approximately 1 and 8 feet below ground surface (bgs), dependent on location, as measured in monitoring wells located at the terminal.

Release and Response Background

Petroleum sheen was observed by Enbridge personnel on water within a drainage ditch to the northeast of the Tank 8 containment berm on March 28, 2011. They traced the sheen back to valve 221-V-SP1 (Figure 2) where a small volume of crude oil was found on the water surface around the valve stem. Enbridge personnel initiated response actions upon discovery of the release which included:

- Shutting off crude oil flow to the valve.
- Installing earthen berms and oil absorbent pads and booms in the adjacent ditch to recover crude oil from the water surface and prevent surface water migration.
- Excavating soil around the valve with a back hoe, a vacuum truck and hand tools to identify the source of the release and make the appropriate infrastructure repairs (Photo 1).
- Using a vacuum truck to remove pooled crude oil around the valve and in the excavation. Crude impacted water was reinjected into the pipeline system.
- Segregating excavated soil that exhibited obvious crude oil impacts (soil in contact with product, visible staining, and obvious odor) from soil without obvious crude oil impacts.
- Installing water management systems in the ditches to divert clean water from entering the excavation.

A pencil-sized corrosion hole in the valve was identified as the release source and a temporary repair was completed by Enbridge on April 10, 2011. Additional permanent repairs were planned for a later date. Enbridge reported the release to the Wisconsin Department of Natural Resources (WDNR) (WDNR Spill #: 20110405NO16-1). Enbridge contacted Barr on March 29, 2011 to request assistance with documenting the environmental conditions observed at the release site, segregation of crude oil impacted soil and coordinating disposal of the crude oil impacted soil. Barr arrived on site on March 30, 2011.

Field Activities

Barr conducted the following field tasks:

- The drainage ditch was inspected upstream and downstream of the release point by Barr. Standing water was still present in the ditch upon Barr's arrival and no crude oil impacts

(product, sheen, discoloration) were observed on the water or the ground surface. Enbridge reported that they had removed all observed crude oil impacts in the ditch with a vacuum truck and oil absorbent pads upon discovery of the release.

- Excavated soil was field screened with a photoionization detector (PID) using headspace procedures to determine whether crude impacts were present. Crude oil impacts such as odor, visual discoloration or sheen were also used for field screening purposes. Soil failing field screening criteria (headspace > 10ppm or obvious crude oil staining or odor) was hauled in the terminal stockpile area (Figure 2) until offsite disposal could be arranged. This task was completed during the different phases of the project that included the initial response excavation and the excavation to access the pipeline for the final repair work.
- Field screened soil from the temporary repair excavation extents to determine whether residual crude oil impacted soil remained in the sidewalls or bottom. Soil failing field screening criteria was excavated and stockpiled in the terminal stockpile area. Remedial excavation and field screening was limited by pipeline infrastructure and sheet piling installed along the western sidewall.

The final repair excavation was approximately 90 feet long by 25 feet wide by 7 feet deep (Figure 3; Photo 2) resulting in approximately 500 cubic yards of removed soil. Approximately 70 cubic yards of that volume was determined to be crude oil impacted. Groundwater and rainwater entering the excavation during the repair activities was periodically removed, as needed, by Enbridge and reinjected into the pipeline system.

Additional field screening and sidewall sampling were to be completed by Barr following the completion of the final valve repair and the removal of the sheet piling along the western sidewall. The repair was completed and the excavation was backfilled in April and May 2012 (Photo 3). Barr was not notified about the work however; therefore no sidewall or bottom samples were collected.

Geoprobe Boring Investigation

Since sidewall samples were not collected from the excavation to document whether additional crude oil impacted soil remained, on June 15, 2012, five soil Geoprobe soil borings were advanced around the valve release excavation area (Figure 3). One boring (SB-5) was advanced within the excavation footprint, as near to the release location as pipeline infrastructure allowed. The other four boring were

located to the northwest (SB-1), northeast (SB-2), southeast (SB-3), and southwest (SB-4) of the excavation limits.

Borings were advanced using push-probe methods, with recovery of continuous nominal 2-inch diameter core samples. Soil samples recovered from the borings were described in accordance with the Unified Soil Classification System. Soil was field screened with a photoionization detector (PID) following standard headspace procedures. Soil was also inspected for other evidence of crude oil impacts such as staining, obvious petroleum odor, and/or sheen. No crude oil impacts were detected with the PID or from the inspection. Boring logs are attached in Attachment A.

Analytical soil samples were collected at depth intervals of 5-6 feet and 14-15 feet bgs at SB-5, 3-4 feet bgs at SB-1, SB-2, and SB-3, and 5-6 feet at SB-4. The shallow sample depths were chosen to evaluate the direct contact risk and to analyze soil near the groundwater table. The depths to groundwater at the closest permanent monitoring wells (MW-5, MW-11, MW-16) on the terminal property range from 2 to 6 feet bgs (Figure 4, Table 1). The sample depth of 14-15 feet bgs at SB-5 was chosen to analyze the soil below the vertical extent of the excavation.

The samples were submitted to Pace Analytical Services for laboratory analyses of diesel range organics (DRO) and petroleum volatile organic compounds (PVOCs). Analyte concentrations were less than detection limits with the exception of a DRO concentration of 14 mg/kg from the source boring SB-5 at 5-6 feet bgs (Table 2). The laboratory analytical report can be found in Attachment B. These results confirm that the extent of the contamination was limited to the area around the valve and was adequately remediated during the response action activities described above.

Soil Disposal Coordination and Documentation

Crude oil impacted soil (headspace > 10ppm or obvious crude oil impacts) was excavated by backhoe and hydrovac and placed in the terminal soil containment area. Barr collected two analytical samples from the crude impacted soil stockpiles for laboratory analysis to characterize the soil for disposal. The sample was submitted to Legend Technical Services in St. Paul, MN for analysis of DRO and benzene, toluene, ethylbenzene, and xylenes (BTEX). Analytical results are shown in Table 1 and the Legend Lab report attached to the Waste Management waste profile application in Attachment C.

**Table 3
 Waste Characterization Soil Sampling Results Summary
 Tank 24 Containment Basin Swale Excavation**

Location ID	Date Completed	Analytical Results (mg/kg)				
		DRO	BTEX			
			Benzene	Ethyl Benzene	Toluene	Xylene
Stockpile-1	4/7/2011	190	<0.028	0.13	<0.028	0.29
Stockpile-2	4/7/2011	1000	0.52	1.4	1.9	5.8

Detections are reported in **Bold**

The laboratory results and a waste profile application were sent to and approved by the Waste Management Voyageur Landfill near Canyon, Minnesota. The soil was approved by the landfill under profile 102705MN. Enbridge solidified the hydrovac soil slurry with cement prior to hauling for transportation purposes. Approximately 98 tons of soil was hauled to the landfill. The landfill waste profile and hauling manifests are included in Attachment C.

Receptors

No product entered a surface water body during or after the release and no surface water receptors are currently at risk. There are no water supply wells within 1200 feet of the release location. The closest surface water feature, the Nemadji River, is located over ¼ mile from the release location. Groundwater monitoring wells are present on terminal property and are periodically sampled to detect potential groundwater impacts migrating off the property. DRO and BETX compounds have not been detected in samples from the wells around the perimeter of the terminal.

Conclusions

Concentrations of DRO and PVOCs in samples collected during the soil boring investigation were below detection limits and/or less than NR 720 Generic Residual Contaminant Levels (GRCLs). No water supply wells are present within 1200 feet of the release location and the closest surface water feature is over ¼ mile from the site. Soils with oil and residual crude oil impacts have been removed from the release location. Enbridge is recommending that no additional remedial action be taken for this release and requests that the WDNR close this spill site.

Attachments:

Site Photos: 1-3

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Site Detail Map

Table 1 – Monitoring Well Elevation Data

Table 2 – Soil Analytical Data Summary

Attachment A – Geoprobe Boring Logs

Attachment B – Analytical Reports

Attachment C – Waste Management Landfill Documents

- Waste Management Waste Profile Application with Legend Analytical Report
- Soil Hauling Manifests

Site Photos



Photo 1: Early valve repair excavation. Addition excavation work was required to locate the leak and complete the repairs. (4/6/2011)



Photo 2: Expanded excavation required for valve repair work. (12/6/2011)



Photo 3: Backfilled valve excavation. (5/3/2012)

Table

TABLE 1

**Monitoring Well Elevation Data
Enbridge Energy Terminal - Superior, Wisconsin**

Location	Date	TOC Elevation (feet NGVD)	Grade Elevation (feet NGVD)	Depth to Groundwater from TOC (feet)	Groundwater Elevation (feet NGVD)	Depth to Groundwater from Grade (feet)
MW-1	9/15/2008	665.19	663.15	9.43	655.76	7.39
	10/1/2009			6.90	658.29	4.86
	9/20/2010	665.22	663.46	5.61	659.61	3.85
	9/20/2011			6.23	658.99	4.47
MW-2	10/16/2008	659.42	656.96	4.04	655.38	1.58
	10/1/2009			7.25	652.17	4.79
	9/20/2010	659.37	657.06	4.81	654.56	2.50
	9/20/2011			6.74	652.63	4.43
MW-5	9/15/2008	645.43	642.85	6.32	639.11	3.74
	10/1/2009			7.50	637.93	4.92
	9/20/2010	645.37	642.85	6.26	639.11	3.74
	9/20/2011			7.55	637.82	5.03
MW-6	9/15/2008	648.03	646.07	7.51	640.52	5.55
	10/1/2009			8.98	639.05	7.02
	9/20/2010	648.01	645.79	7.65	640.36	5.43
	9/20/2011			7.94	640.07	5.72
MW-10	9/20/2010	662.01	660.11	6.10	655.91	4.20
	9/20/2011			6.52	655.49	4.62
MW-11	9/20/2010	656.33	654.06	8.31	648.02	6.04
	9/20/2011			8.70	647.63	6.43
MW-12	9/20/2010	649.46	645.36	6.65	642.81	2.55
	9/20/2011			7.35	642.11	3.25
MW-13	9/27/2010	647.51	644.77	3.92	643.59	1.18
	9/20/2011			5.08	642.43	2.34
MW-14	9/20/2010	661.15	659.27	5.57	655.58	3.69
	9/20/2011			6.32	654.83	4.44
MW-15	9/20/2010	660.88	659.10	3.50	657.38	1.72
	9/20/2011			5.03	655.85	3.25
MW-16	9/20/2010	650.56	648.69	2.91	647.65	1.04
	9/20/2011			4.16	646.40	2.29

Notes:

NGVD = National Geodetic Vertical Datum

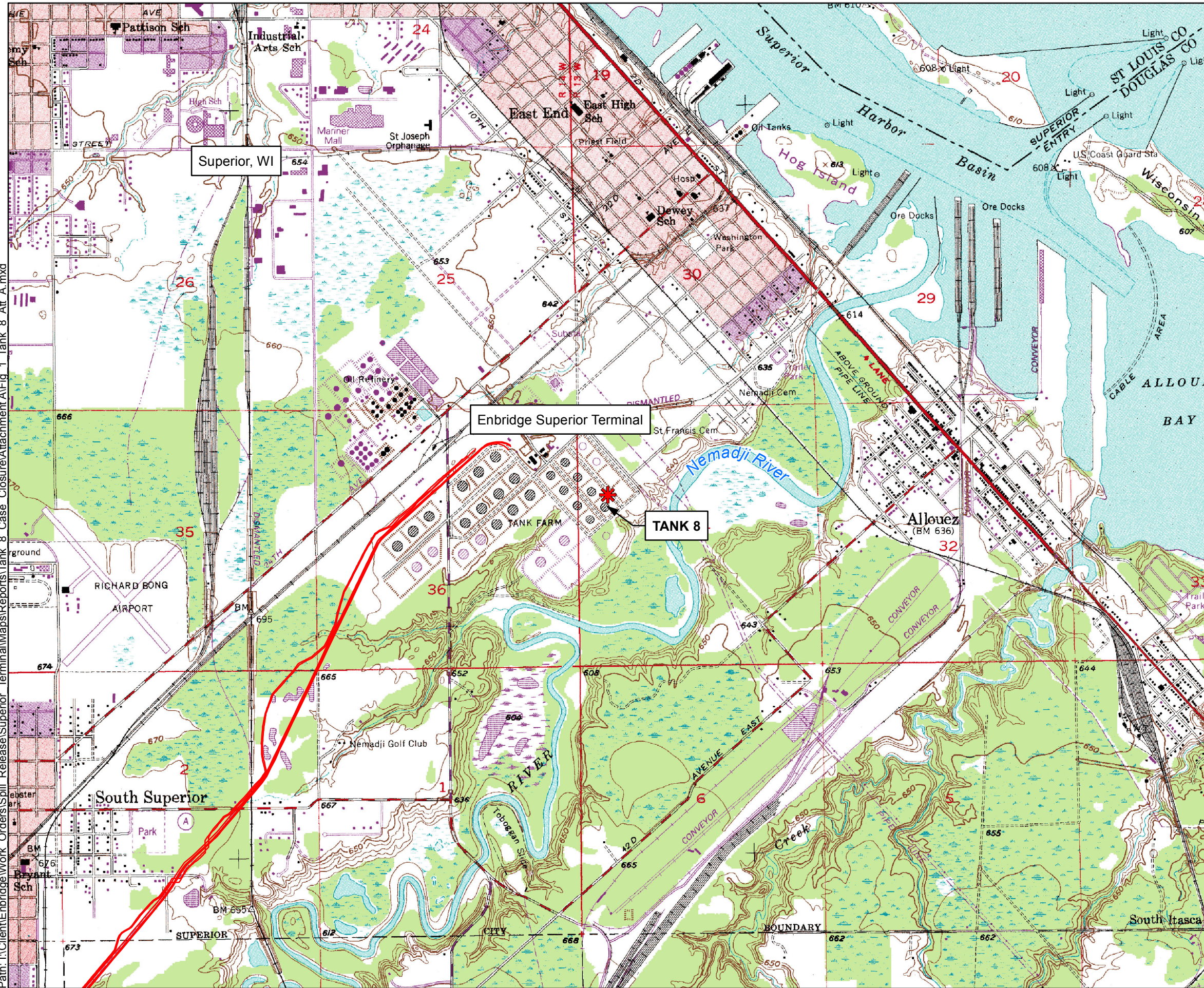
TOC = Top of Casing

**Table 2
Soil Analytical Data Summary
PVOC and DRO
Tank 8 Valve Release
Enbridge Energy Terminal - Superior, Wisconsin**

Chemical Name			Solids, percent	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Benzene	Ethyl benzene	Toluene	Xylenes, total	Diesel Range Organics
Effective Date	Exceedance Key									
Wisconsin Generic Residual Contaminant Levels NR 720.09	09/01/2007	BOLD				0.0055 mg/kg	2.9 mg/kg	1.5 mg/kg	4.1 mg/kg	250 mg/kg
Sys Loc Code	Sample Date	Depth Interval (ft)								
Geoprobe Samples										
TK8-SB-1	6/15/2012	3 - 4	76.5 %	< 0.067 mg/kg	< 0.067 mg/kg	< 0.067 mg/kg	< 0.067 mg/kg	< 0.067 mg/kg	< 0.20 mg/kg	< 11.3 mg/kg
TK8-SB-2	6/15/2012	3 - 4	77.6 %	< 0.066 mg/kg	< 0.066 mg/kg	< 0.066 mg/kg	< 0.066 mg/kg	< 0.066 mg/kg	< 0.20 mg/kg	< 9.9 mg/kg
TK8-SB-3	6/15/2012	3 - 4	79.4 %	< 0.062 mg/kg	< 0.062 mg/kg	< 0.062 mg/kg	< 0.062 mg/kg	< 0.062 mg/kg	< 0.19 mg/kg	< 9.7 mg/kg
TK8-SB-4	6/15/2012	5 - 6	74.9 %	< 0.068 mg/kg	< 0.068 mg/kg	< 0.068 mg/kg	< 0.068 mg/kg	< 0.068 mg/kg	< 0.21 mg/kg	<10.6 mg/kg
TK8-SB-5	6/15/2012	5 - 6	76.5 %	< 0.074 mg/kg	< 0.074 mg/kg	< 0.074 mg/kg	< 0.074 mg/kg	< 0.074 mg/kg	< 0.22 mg/kg	14.0 mg/kg
TK8-SB-5	6/15/2012	14 - 15	67.3 %	< 0.077 mg/kg	< 0.077 mg/kg	< 0.077 mg/kg	< 0.077 mg/kg	< 0.077 mg/kg	< 0.23 mg/kg	< 12.0 mg/kg

Figures

Path: I:\Client\Enbridge\Work Orders\Spill Release\Superior_Terminal\Maps\Reports\Tank 8 Case Closure\Attachment\Fig 1 Tank 8 Att A.mxd



- * Investigation Site
- Enbridge Pipeline

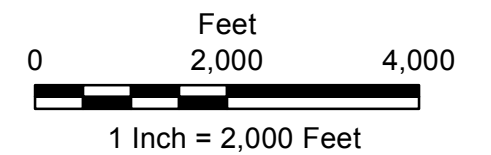


Figure 1

SITE LOCATION MAP
 Tank 8 Valve Release
 Enbridge Superior Terminal
 Superior, Wisconsin



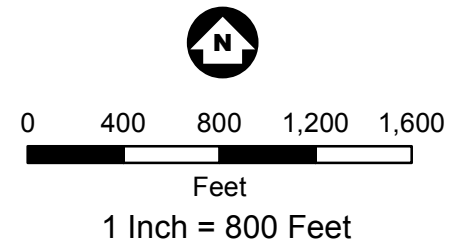
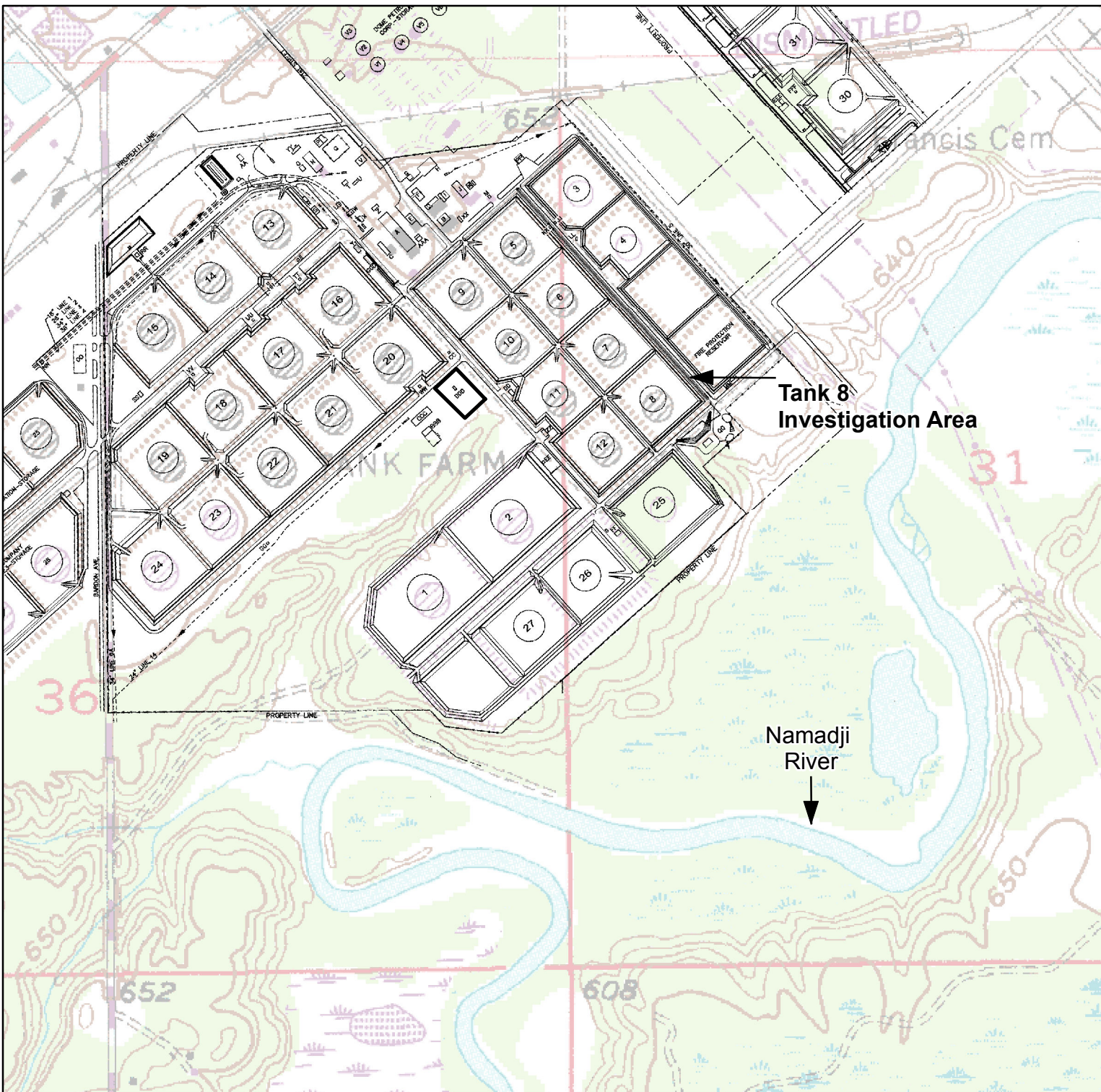







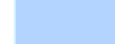
Figure 2

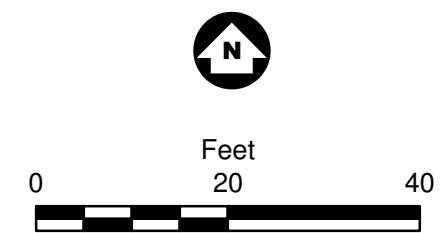
SITE MAP
 Tank 8 Valve Release
 Enbridge Superior Terminal
 Superior, WI



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-  Approximate Release Location
-  Geoprobe Boring Locations
-  Terminal Property Boundary
-  Terminal Pipeline Infrastructure
-  Excavation Extent
-  Drainage Ditch



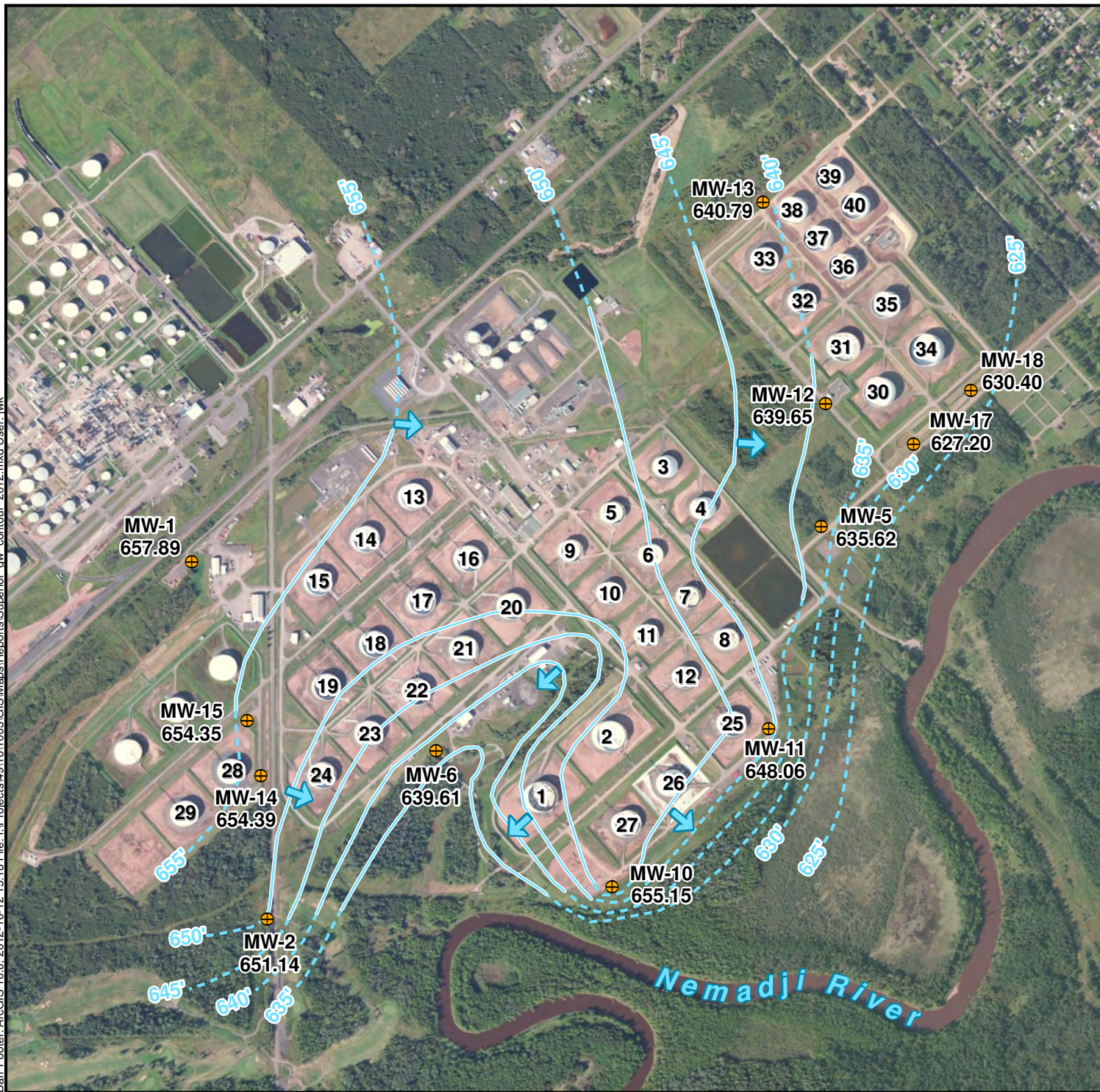
1 Inch = 20 Feet

Figure 3

SITE DETAIL MAP
 Tank 8 Valve Release
 Enbridge Superior Terminal
 Superior, Wisconsin



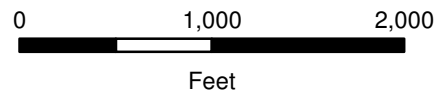
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- 630.40** Monitoring Well Location and Groundwater Elevation (ft)
- Groundwater Contour
Dashed where inferred
(Contour Interval = 5.0 ft)
- Inferred Groundwater Flow Direction

Monitoring well groundwater elevations were measured on September 26, 2012

Note:
Monitoring well locations 17 and 18 are newly installed and were not used in groundwater contour modeling



1 Inch = 1,000 Feet
Bing Imagery Circa August, 2011

Figure 4

**Groundwater Elevations
Superior Terminal
Enbridge Energy, L.P.
Superior, Wisconsin**




Attachment A
Geoprobe Boring Logs

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

Facility/Project Name Enbridge GP Tank 8			License/Permit/Monitoring Number N/A		Boring Number TK8-SB-1	
Boring Drilled By: Name of crew chief (first, last) and Firm Bob Giddings Matrix Environmental			Date Drilling Started 6/15/2012		Date Drilling Completed 6/15/2012	Drilling Method Direct Push
WI Unique Well No. N/A	DNR Well ID No. N/A	Common Well Name N/A	Final Static Water Level		Surface Elevation N/A Feet	Borehole Diameter 2.0 inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N			Lat 46° 41' 11.2"		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E	
SW 1/4 of NW 1/4 of Section 31, T 49 N, R 13 W			Long 92° 3' 12.3"		Feet <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID 816010580		County Douglas	County Code 16	Civil Town/City/ or Village Superior		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID (ppm)	Soil Properties				RQD/ Comments
									Odor/S/S/Sh	Moisture Content	G/S/F %	Color	
1 GP	60 36			0-2': (fill) Sand and Gravel with clay. Sand is fine to coarse grained, gravel is angular.	FILL			0.6	NNN	Moist	20/60/20	10YR 3/2	
				2-15': Clay, soft, red.				0.7	NNN	Moist	0/0/100	10R 4/4	
2 GP	60 60		5					0.7	NNN	Moist	0/0/100	10R 4/4	
					CL		0.7	NNN	Moist	0/0/100	10R 4/4		
3 GP	60 60		10	13': 1" lens of sand, medium grained.				0.7	NNN	Moist	0/0/100	10R 4/4	
				End of boring.									

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

Signature  Firm **Barr Engineering** Tel: _____ Fax: _____

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

Facility/Project Name Enbridge GP Tank 8		License/Permit/Monitoring Number N/A		Boring Number TK8-SB-2	
Boring Drilled By: Name of crew chief (first, last) and Firm Bob Giddings Matrix Environmental		Date Drilling Started 6/15/2012		Date Drilling Completed 6/15/2012	
Drilling Method Direct Push		WI Unique Well No. N/A		DNR Well ID No. N/A	
Common Well Name N/A		Final Static Water Level		Surface Elevation N/A Feet	
Borehole Diameter 2.0 inches		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/>		Local Grid Location	
State Plane N, E S/C/N		Lat 46° 41' 12.2"		<input type="checkbox"/> N <input type="checkbox"/> E	
SW 1/4 of NW 1/4 of Section 31, T 49 N, R 13 W		Long 92° 3' 11.8"		<input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID 816010580		County Douglas		County Code 16	
				Civil Town/City/ or Village Superior	

Sample	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID (ppm)	Soil Properties				RQD/ Comments
										Odor/St/Sh	Moisture Content	G/S/F %	Color	
1	GP	60 36			0-2': (fill) Sand and Gravel with clay. Sand is fine to coarse grained.	FILL			1.1	NNN	Moist	15/70/15	10R 4/4	
					2-15': Clay, stiff, red.				1.0	NNN	Moist	0/0/100	10R 4/4	
2	GP	60 60		5	4': Some gravel, fine (<1cm), black.				1.0	NNN	Moist	10/0/90	10R 4/4	
					9': 2" Sand-gravel lens. Gravel was quartz.	CL			1.1	NNN	Moist	0/0/100	10R 4/4	
3	GP	60 60		10	11': 1" quartz clast.				0.6	NNN	Moist	0/0/100	10R 4/4	
				15	End of boring.									

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

Signature  Firm **Barr Engineering** Tel: _____ Fax: _____

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

Facility/Project Name Enbridge GP Tank 8			License/Permit/Monitoring Number N/A		Boring Number TK8-SB-3		
Boring Drilled By: Name of crew chief (first, last) and Firm Bob Giddings Matrix Environmental			Date Drilling Started 6/15/2012		Date Drilling Completed 6/15/2012		
Drilling Method Direct Push		WT Unique Well No. N/A		DNR Well ID No. N/A		Common Well Name N/A	
Final Static Water Level		Surface Elevation N/A Feet		Borehole Diameter 2.0 inches			
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/>			State Plane N, E S/C/N			Local Grid Location	
SW 1/4 of NW 1/4 of Section 31, T 49 N, R 13 W			Lat 46° 41' 11.5"			Feet <input type="checkbox"/> N <input type="checkbox"/> E	
			Long 92° 3' 11.2"			Feet <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID 816010580		County Douglas		County Code 16		Civil Town/City/ or Village Superior	

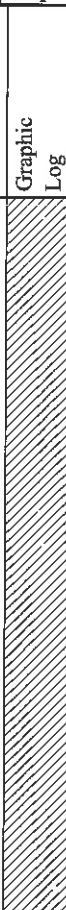
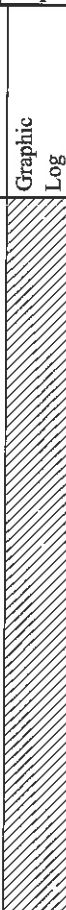
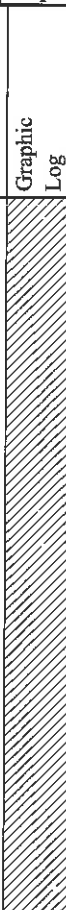
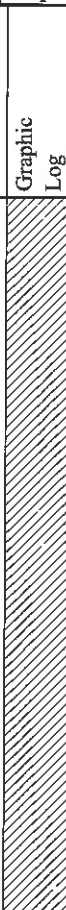
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID (ppm)	Soil Properties				RQD/ Comments
									Odor/S/S/Sh	Moisture Content	G/S/F %	Color	
1 GP	60 36			0-2': (fill) Sand and Gravel with clay. Sand is fine to coarse grained.	FILL			1.5	NNN	Moist	20/65/15	10R 4/4	
				2-15': Clay, red. 2.5': Some gray coloration.				1.3	NNN	Moist	0/0/100	10R 4/4	
2 GP	60 60		5					1.0	NNN	Moist	0/0/100	10R 4/4	
					CL			0.9	NNN	Moist	0/0/100	10R 4/4	
3 GP	60 60		10	10.5': 4" clayey sand lens. Sand is medium grained.				1.1	NNN	Moist	0/0/100	10R 4/4	
								1.3	NNN	Moist	0/0/100	10R 4/4	
			15	End of boring.									

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


Signature Firm **Barr Engineering** Tel: Fax:

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

Facility/Project Name Enbridge GP Tank 8			License/Permit/Monitoring Number N/A		Boring Number TK8-SB-4	
Boring Drilled By: Name of crew chief (first, last) and Firm Bob Giddings Matrix Environmental			Date Drilling Started 6/15/2012		Date Drilling Completed 6/15/2012	
Drilling Method Direct Push			Final Static Water Level		Surface Elevation N/A Feet	
WI Unique Well No. N/A		DNR Well ID No. N/A		Common Well Name N/A		Borehole Diameter 2.0 inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane SW 1/4 of NW 1/4 of Section 31, T 49 N, R 13 W			Local Grid Location Lat 46° 41' 11.9" Long 92° 3' 12.3"			Feet <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID 816010580		County Douglas		County Code 16		Civil Town/City/ or Village Superior

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Soil Properties				RQD/ Comments	
									Odor/S/S/SH	Moisture Content	G/S/F %	Color		
1 GP	60 48			0-15': Clay, soft, red.					0.7	NNN	Moist	0/0/100	10R 4/4	
				0.7					NNN	Moist	0/0/100	10R 4/4		
2 GP	60 24		5	4.5': Black organic clay.	CL				0.6	NNN	Moist	0/0/100	10R 4/4	
				6.5': 2" lens of black organic clay with organic material.					0.6	NNN	Moist	0/0/100	10R 4/4	
3 GP	60 60		10	9.5-10': Some fine gravel.							Moist	5/0/95		
				10-11': Black organic clay.							Moist	0/0/100		
			15	End of boring.										

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

Signature  Firm **Barr Engineering** Tel: _____ Fax: _____

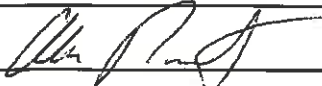
This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

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

Facility/Project Name Enbridge GP Tank 8			License/Permit/Monitoring Number N/A		Boring Number TK8-SB-5	
Boring Drilled By: Name of crew chief (first, last) and Firm Bob Giddings Matrix Environmental			Date Drilling Started 6/15/2012		Date Drilling Completed 6/15/2012	
WI Unique Well No. N/A		DNR Well ID No. N/A	Common Well Name N/A		Final Static Water Level	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N			Lat 46° 41' 12.0"		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
SW 1/4 of NW 1/4 of Section 31, T 49 N, R 13 W			Long 92° 3' 12.1"		Surface Elevation N/A Feet	
Facility ID 816010580			County Douglas		County Code 16	
					Civil Town/City/ or Village Superior	

Sample Number and Type	Length Alt. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID (ppm)	Soil Properties				RQD/ Comments	
									Odor/St/Sh	Moisture Content	G/S/F %	Color		
1 GP	60 0			0-5': No recovery. Advanced through gravel laid around and over culvert near boring location.										
2 GP	60 36		5	5-15': Clay, soft, red. Some gravel, small to medium sized.				1.0	N/N/N	Moist	10/0/90	10R 4/4		
3 GP	60 24		10	10-15': Poor recovery due to possible void spaces. Void spaces were saturated.	CL			0.8	N/N/N	Moist	5/0/95	10R 4/4		
4 GP			15	End of boring.										

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

Signature  Firm **Barr Engineering** Tel: _____ Fax: _____

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Attachment B
Analytical Reports

June 29, 2012

Andrea Nord
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

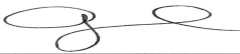
RE: Project: 49161092.01 RESP 001 Enbridge
Pace Project No.: 10195959

Dear Andrea Nord:

Enclosed are the analytical results for sample(s) received by the laboratory on June 19, 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,



Andrea Opland

andrea.opland@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

EPA Region 8 Certification #: Pace

Florida/NELAP Certification #: E87605

Georgia Certification #: 959

Idaho Certification #: MN00064

Illinois Certification #: 200011

Iowa Certification #: 368

Kansas Certification #: E-10167

Louisiana Certification #: 03086

Louisiana Certification #: LA080009

Maine Certification #: 2007029

Maryland Certification #: 322

Michigan DEQ Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT CERT0092

Nebraska Certification #: Pace

Nevada Certification #: MN_00064

New Jersey Certification #: MN-002

New Mexico Certification #: Pace

New York Certification #: 11647

North Carolina Certification #: 530

North Dakota Certification #: R-036

North Dakota Certification #: R-036A

Ohio VAP Certification #: CL101

Oklahoma Certification #: D9921

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Tennessee Certification #: 02818

Texas Certification #: T104704192

Washington Certification #: C754

Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10195959001	TK8-SB-1_3-4'	Solid	06/15/12 08:10	06/19/12 10:05
10195959002	TK8-SB-2_3-4'	Solid	06/15/12 09:05	06/19/12 10:05
10195959003	TK8-SB-3_3-4'	Solid	06/15/12 09:50	06/19/12 10:05
10195959004	TK8-SB-4_5-6'	Solid	06/15/12 11:00	06/19/12 10:05
10195959005	TK8-SB-5_5-6'	Solid	06/15/12 11:40	06/19/12 10:05
10195959006	TK8-SB-5_14-15	Solid	06/15/12 12:00	06/19/12 10:05
10195959007	Trip Blank	Solid	06/15/12 00:00	06/19/12 10:05

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10195959001	TK8-SB-1_3-4'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959002	TK8-SB-2_3-4'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959003	TK8-SB-3_3-4'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959004	TK8-SB-4_5-6'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959005	TK8-SB-5_5-6'	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959006	TK8-SB-5_14-15	WI MOD DRO	JRH	2	PASI-M
		WI MOD GRO	KT1	7	PASI-M
		ASTM D2974	JDL	1	PASI-M
10195959007	Trip Blank	EPA 8270 by SIM	WJH	18	PASI-M
		WI MOD GRO	KT1	7	PASI-M

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 49161092.01 RESP 001 Enbridge
Pace Project No.: 10195959

Method: WI MOD DRO
Description: WIDRO GCS
Client: Barr Engineering
Date: June 29, 2012

General Information:

6 samples were analyzed for WI MOD DRO. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with WI MOD DRO with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Surrogates:

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

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: OEXT/18913

T6: High boiling point hydrocarbons are present in the sample.

- TK8-SB-5_5-6' (Lab ID: 10195959005)
 - Diesel Range Organics

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 49161092.01 RESP 001 Enbridge
Pace Project No.: 10195959

Method: WI MOD GRO
Description: WIGRO GCV
Client: Barr Engineering
Date: June 29, 2012

General Information:

7 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Sample Preparation:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Method: EPA 8270 by SIM

Description: 8270 MSSV PAH by SIM

Client: Barr Engineering

Date: June 29, 2012

General Information:

1 sample was analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Surrogates:

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

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: OEXT/18910

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10195959006

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

- MS (Lab ID: 1221814)
 - Anthracene
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Benzo(k)fluoranthene
 - Chrysene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Method: EPA 8270 by SIM

Description: 8270 MSSV PAH by SIM

Client: Barr Engineering

Date: June 29, 2012

QC Batch: OEXT/18910

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10195959006

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

- Pyrene
- MSD (Lab ID: 1221815)
 - Anthracene
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Benzo(k)fluoranthene
 - Chrysene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene
 - Pyrene

Duplicate Sample:

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

Additional Comments:

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

ANALYTICAL RESULTS

Project: 49161092.01 RESP 001 Enbridge
Pace Project No.: 10195959

Sample: TK8-SB-1_3-4' **Lab ID: 10195959001** Collected: 06/15/12 08:10 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics Surrogates	<0.11.3	mg/kg	11.3	1.2	1	06/20/12 12:29	06/22/12 20:10		
n-Triacontane (S)	86 %		50-150		1	06/20/12 12:29	06/22/12 20:10		
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<0.067	mg/kg	0.067	0.0081	1	06/21/12 08:13	06/21/12 22:44	71-43-2	
Ethylbenzene	<0.067	mg/kg	0.067	0.011	1	06/21/12 08:13	06/21/12 22:44	100-41-4	
Toluene	<0.067	mg/kg	0.067	0.0081	1	06/21/12 08:13	06/21/12 22:44	108-88-3	
1,2,4-Trimethylbenzene	<0.067	mg/kg	0.067	0.0094	1	06/21/12 08:13	06/21/12 22:44	95-63-6	
1,3,5-Trimethylbenzene	<0.067	mg/kg	0.067	0.015	1	06/21/12 08:13	06/21/12 22:44	108-67-8	
Xylene (Total)	<0.20	mg/kg	0.20	0.022	1	06/21/12 08:13	06/21/12 22:44	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99 %		80-125		1	06/21/12 08:13	06/21/12 22:44	98-08-8	
Dry Weight Analytical Method: ASTM D2974									
Percent Moisture	23.5 %		0.10	0.10	1		06/19/12 00:00		

Sample: TK8-SB-2_3-4' **Lab ID: 10195959002** Collected: 06/15/12 09:05 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics Surrogates	<0.9.9	mg/kg	9.9	1.1	1	06/20/12 12:29	06/22/12 19:32		
n-Triacontane (S)	76 %		50-150		1	06/20/12 12:29	06/22/12 19:32		
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<0.066	mg/kg	0.066	0.0079	1	06/21/12 08:13	06/21/12 23:43	71-43-2	
Ethylbenzene	<0.066	mg/kg	0.066	0.011	1	06/21/12 08:13	06/21/12 23:43	100-41-4	
Toluene	<0.066	mg/kg	0.066	0.0079	1	06/21/12 08:13	06/21/12 23:43	108-88-3	
1,2,4-Trimethylbenzene	<0.066	mg/kg	0.066	0.0092	1	06/21/12 08:13	06/21/12 23:43	95-63-6	
1,3,5-Trimethylbenzene	<0.066	mg/kg	0.066	0.014	1	06/21/12 08:13	06/21/12 23:43	108-67-8	
Xylene (Total)	<0.20	mg/kg	0.20	0.021	1	06/21/12 08:13	06/21/12 23:43	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	98 %		80-125		1	06/21/12 08:13	06/21/12 23:43	98-08-8	
Dry Weight Analytical Method: ASTM D2974									
Percent Moisture	22.4 %		0.10	0.10	1		06/19/12 00:00		

ANALYTICAL RESULTS

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Sample: TK8-SB-3_3-4' **Lab ID: 10195959003** Collected: 06/15/12 09:50 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics	<9.7	mg/kg	9.7	1.1	1	06/20/12 12:29	06/22/12 19:39		
Surrogates									
n-Triacontane (S)	87	%	50-150		1	06/20/12 12:29	06/22/12 19:39		
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<0.062	mg/kg	0.062	0.0074	1	06/21/12 08:13	06/22/12 00:02	71-43-2	
Ethylbenzene	<0.062	mg/kg	0.062	0.0099	1	06/21/12 08:13	06/22/12 00:02	100-41-4	
Toluene	<0.062	mg/kg	0.062	0.0074	1	06/21/12 08:13	06/22/12 00:02	108-88-3	
1,2,4-Trimethylbenzene	<0.062	mg/kg	0.062	0.0087	1	06/21/12 08:13	06/22/12 00:02	95-63-6	
1,3,5-Trimethylbenzene	<0.062	mg/kg	0.062	0.014	1	06/21/12 08:13	06/22/12 00:02	108-67-8	
Xylene (Total)	<0.19	mg/kg	0.19	0.020	1	06/21/12 08:13	06/22/12 00:02	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-125		1	06/21/12 08:13	06/22/12 00:02	98-08-8	
Dry Weight Analytical Method: ASTM D2974									
Percent Moisture	20.6	%	0.10	0.10	1		06/19/12 00:00		

Sample: TK8-SB-4_5-6' **Lab ID: 10195959004** Collected: 06/15/12 11:00 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics	<10.6	mg/kg	10.6	1.2	1	06/20/12 12:29	06/22/12 19:47		
Surrogates									
n-Triacontane (S)	81	%	50-150		1	06/20/12 12:29	06/22/12 19:47		
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<0.068	mg/kg	0.068	0.0082	1	06/21/12 08:13	06/22/12 00:21	71-43-2	
Ethylbenzene	<0.068	mg/kg	0.068	0.011	1	06/21/12 08:13	06/22/12 00:21	100-41-4	
Toluene	<0.068	mg/kg	0.068	0.0082	1	06/21/12 08:13	06/22/12 00:21	108-88-3	
1,2,4-Trimethylbenzene	<0.068	mg/kg	0.068	0.0096	1	06/21/12 08:13	06/22/12 00:21	95-63-6	
1,3,5-Trimethylbenzene	<0.068	mg/kg	0.068	0.015	1	06/21/12 08:13	06/22/12 00:21	108-67-8	
Xylene (Total)	<0.21	mg/kg	0.21	0.022	1	06/21/12 08:13	06/22/12 00:21	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-125		1	06/21/12 08:13	06/22/12 00:21	98-08-8	
Dry Weight Analytical Method: ASTM D2974									
Percent Moisture	25.1	%	0.10	0.10	1		06/19/12 00:00		

ANALYTICAL RESULTS

Project: 49161092.01 RESP 001 Enbridge
Pace Project No.: 10195959

Sample: TK8-SB-5_5-6' Lab ID: **10195959005** Collected: 06/15/12 11:40 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics	14.0	mg/kg	10.6	1.2	1	06/20/12 12:29	06/23/12 09:30		T6
Surrogates									
n-Triacontane (S)	70 %		50-150		1	06/20/12 12:29	06/23/12 09:30		
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	< 0.074	mg/kg	0.074	0.0088	1	06/21/12 08:13	06/22/12 00:41	71-43-2	
Ethylbenzene	< 0.074	mg/kg	0.074	0.012	1	06/21/12 08:13	06/22/12 00:41	100-41-4	
Toluene	< 0.074	mg/kg	0.074	0.0088	1	06/21/12 08:13	06/22/12 00:41	108-88-3	
1,2,4-Trimethylbenzene	< 0.074	mg/kg	0.074	0.010	1	06/21/12 08:13	06/22/12 00:41	95-63-6	
1,3,5-Trimethylbenzene	< 0.074	mg/kg	0.074	0.016	1	06/21/12 08:13	06/22/12 00:41	108-67-8	
Xylene (Total)	< 0.22	mg/kg	0.22	0.024	1	06/21/12 08:13	06/22/12 00:41	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	98 %		80-125		1	06/21/12 08:13	06/22/12 00:41	98-08-8	
Dry Weight Analytical Method: ASTM D2974									
Percent Moisture	23.5	%	0.10	0.10	1		06/19/12 00:00		

Sample: TK8-SB-5_14-15 Lab ID: **10195959006** Collected: 06/15/12 12:00 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO									
Diesel Range Organics	< 12.0	mg/kg	12.0	1.3	1	06/20/12 12:29	06/23/12 09:07		
Surrogates									
n-Triacontane (S)	74 %		50-150		1	06/20/12 12:29	06/23/12 09:07		
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	< 0.077	mg/kg	0.077	0.0092	1	06/21/12 08:13	06/22/12 01:00	71-43-2	
Ethylbenzene	< 0.077	mg/kg	0.077	0.012	1	06/21/12 08:13	06/22/12 01:00	100-41-4	
Toluene	< 0.077	mg/kg	0.077	0.0092	1	06/21/12 08:13	06/22/12 01:00	108-88-3	
1,2,4-Trimethylbenzene	< 0.077	mg/kg	0.077	0.011	1	06/21/12 08:13	06/22/12 01:00	95-63-6	
1,3,5-Trimethylbenzene	< 0.077	mg/kg	0.077	0.017	1	06/21/12 08:13	06/22/12 01:00	108-67-8	
Xylene (Total)	< 0.23	mg/kg	0.23	0.024	1	06/21/12 08:13	06/22/12 01:00	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	98 %		80-125		1	06/21/12 08:13	06/22/12 01:00	98-08-8	
Dry Weight Analytical Method: ASTM D2974									
Percent Moisture	32.7	%	0.10	0.10	1		06/20/12 00:00		
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3550									
Acenaphthene	< 14.9	ug/kg	14.9	7.4	1	06/20/12 07:07	06/25/12 23:39	83-32-9	
Acenaphthylene	< 14.9	ug/kg	14.9	7.4	1	06/20/12 07:07	06/25/12 23:39	208-96-8	

ANALYTICAL RESULTS

Project: 49161092.01 RESP 001 Enbridge

Sample Project No.: 10195959

Sample: TK8-SB-5_14-15 **Lab ID: 10195959006** Collected: 06/15/12 12:00 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3550									
Anthracene	38.6	ug/kg	14.9	7.4	1	06/20/12 07:07	06/25/12 23:39	120-12-7	M1
Benzo(a)anthracene	122	ug/kg	14.9	0.51	1	06/20/12 07:07	06/25/12 23:39	56-55-3	M1
Benzo(a)pyrene	101	ug/kg	14.9	0.44	1	06/20/12 07:07	06/25/12 23:39	50-32-8	M1
Benzo(b)fluoranthene	138	ug/kg	14.9	2.3	1	06/20/12 07:07	06/25/12 23:39	205-99-2	M1
Benzo(g,h,i)perylene	61.9	ug/kg	14.9	0.49	1	06/20/12 07:07	06/25/12 23:39	191-24-2	M1
Benzo(k)fluoranthene	57.8	ug/kg	14.9	1.7	1	06/20/12 07:07	06/25/12 23:39	207-08-9	M1
Chrysene	129	ug/kg	14.9	0.48	1	06/20/12 07:07	06/25/12 23:39	218-01-9	M1
Dibenz(a,h)anthracene	<14.9	ug/kg	14.9	0.51	1	06/20/12 07:07	06/25/12 23:39	53-70-3	
Fluoranthene	264	ug/kg	14.9	0.55	1	06/20/12 07:07	06/25/12 23:39	206-44-0	M1
Fluorene	<14.9	ug/kg	14.9	7.4	1	06/20/12 07:07	06/25/12 23:39	86-73-7	
Indeno(1,2,3-cd)pyrene	50.4	ug/kg	14.9	0.43	1	06/20/12 07:07	06/25/12 23:39	193-39-5	M1
Naphthalene	<14.9	ug/kg	14.9	0.28	1	06/20/12 07:07	06/25/12 23:39	91-20-3	
Phenanthrene	148	ug/kg	14.9	0.43	1	06/20/12 07:07	06/25/12 23:39	85-01-8	M1
Pyrene	221	ug/kg	14.9	0.56	1	06/20/12 07:07	06/25/12 23:39	129-00-0	M1
Surrogates									
2-Fluorobiphenyl (S)	80	%	30-125		1	06/20/12 07:07	06/25/12 23:39	321-60-8	
Terphenyl-d14 (S)	87	%	30-146		1	06/20/12 07:07	06/25/12 23:39	1718-51-0	

Sample: Trip Blank **Lab ID: 10195959007** Collected: 06/15/12 00:00 Received: 06/19/12 10:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV									
Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<0.050	mg/kg	0.050	0.0060	1	06/21/12 08:13	06/22/12 01:20	71-43-2	
Ethylbenzene	<0.050	mg/kg	0.050	0.0080	1	06/21/12 08:13	06/22/12 01:20	100-41-4	
Toluene	<0.050	mg/kg	0.050	0.0060	1	06/21/12 08:13	06/22/12 01:20	108-88-3	
1,2,4-Trimethylbenzene	<0.050	mg/kg	0.050	0.0070	1	06/21/12 08:13	06/22/12 01:20	95-63-6	
1,3,5-Trimethylbenzene	<0.050	mg/kg	0.050	0.011	1	06/21/12 08:13	06/22/12 01:20	108-67-8	
Xylene (Total)	<0.15	mg/kg	0.15	0.016	1	06/21/12 08:13	06/22/12 01:20	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-125		1	06/21/12 08:13	06/22/12 01:20	98-08-8	

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Project No.: 10195959

QC Batch: GCV/9423 Analysis Method: WI MOD GRO
 QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
 Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005, 10195959006, 10195959007

METHOD BLANK: 1222948 Matrix: Solid
 Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005, 10195959006, 10195959007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	<0.050	0.050	06/21/12 20:09	
1,3,5-Trimethylbenzene	mg/kg	<0.050	0.050	06/21/12 20:09	
Benzene	mg/kg	<0.050	0.050	06/21/12 20:09	
Ethylbenzene	mg/kg	<0.050	0.050	06/21/12 20:09	
Toluene	mg/kg	<0.050	0.050	06/21/12 20:09	
Xylene (Total)	mg/kg	<0.15	0.15	06/21/12 20:09	
a,a,a-Trifluorotoluene (S)	%	99	80-125	06/21/12 20:09	

LABORATORY CONTROL SAMPLE & LCSD: 1222949 1222950

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	5	5.6	5.1	111	102	80-120	9	20	
1,3,5-Trimethylbenzene	mg/kg	5	5.6	5.2	112	103	80-120	8	20	
Benzene	mg/kg	5	5.5	5.2	109	104	80-120	5	20	
Ethylbenzene	mg/kg	5	5.6	5.2	112	105	80-120	7	20	
Toluene	mg/kg	5	5.5	5.2	110	104	80-120	6	20	
Xylene (Total)	mg/kg	15	16.7	15.5	111	103	80-120	7	20	
a,a,a-Trifluorotoluene (S)	%				97	99	80-125			

MATRIX SPIKE SAMPLE: 1222951

Parameter	Units	10195951001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	<0.065	6.3	6.0	96	80-120	
1,3,5-Trimethylbenzene	mg/kg	<0.065	6.3	6.1	97	80-120	
Benzene	mg/kg	<0.065	6.3	5.7	90	80-120	
Ethylbenzene	mg/kg	<0.065	6.3	6.0	95	80-120	
Toluene	mg/kg	<0.065	6.3	5.8	92	80-120	
Xylene (Total)	mg/kg	<0.20	18.9	18.0	95	80-120	
a,a,a-Trifluorotoluene (S)	%				98	80-125	

SAMPLE DUPLICATE: 1222952

Parameter	Units	10195951002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	<0.070	<0.066		20	
1,3,5-Trimethylbenzene	mg/kg	<0.070	<0.066		20	
Benzene	mg/kg	<0.070	<0.066		20	
Ethylbenzene	mg/kg	<0.070	<0.066		20	
Toluene	mg/kg	<0.070	<0.066		20	

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

SAMPLE DUPLICATE: 1222952

Parameter	Units	10195951002 Result	Dup Result	RPD	Max RPD	Qualifiers
Xylene (Total)	mg/kg	<0.21	<0.20		20	
a,a,a-Trifluorotoluene (S)	%	97	100	3		

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

QC Batch: MPRP/33090

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005

SAMPLE DUPLICATE: 1221468

Parameter	Units	10195942001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	1.0	0.96	5	30	

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

QC Batch: MPRP/33113

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 10195959006

SAMPLE DUPLICATE: 1222044

Parameter	Units	129022001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	65.6	71.4	8	30	

SAMPLE DUPLICATE: 1222115

Parameter	Units	10195984006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.1	20.4	2	30	

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

QC Batch:	OEXT/18910	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3550	Analysis Description:	8270 Solid PAH by SIM MSSV
Associated Lab Samples:	10195959006		

METHOD BLANK: 1221812 Matrix: Solid

Associated Lab Samples: 10195959006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Acenaphthylene	ug/kg	<10.0	10.0	06/26/12 14:11	
Anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(a)anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(a)pyrene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(b)fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(g,h,i)perylene	ug/kg	<10.0	10.0	06/26/12 14:11	
Benzo(k)fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Chrysene	ug/kg	<10.0	10.0	06/26/12 14:11	
Dibenz(a,h)anthracene	ug/kg	<10.0	10.0	06/26/12 14:11	
Fluoranthene	ug/kg	<10.0	10.0	06/26/12 14:11	
Fluorene	ug/kg	<10.0	10.0	06/26/12 14:11	
Indeno(1,2,3-cd)pyrene	ug/kg	<10.0	10.0	06/26/12 14:11	
Naphthalene	ug/kg	<10.0	10.0	06/26/12 14:11	
Phenanthrene	ug/kg	<10.0	10.0	06/26/12 14:11	
Pyrene	ug/kg	<10.0	10.0	06/26/12 14:11	
2-Fluorobiphenyl (S)	%	74	30-125	06/26/12 14:11	
Terphenyl-d14 (S)	%	70	30-146	06/26/12 14:11	

LABORATORY CONTROL SAMPLE: 1221813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	33.3	25.3	76	48-125	
Acenaphthylene	ug/kg	33.3	24.7	74	47-125	
Anthracene	ug/kg	33.3	27.2	82	55-125	
Benzo(a)anthracene	ug/kg	33.3	23.6	71	57-125	
Benzo(a)pyrene	ug/kg	33.3	28.2	85	63-125	
Benzo(b)fluoranthene	ug/kg	33.3	29.8	89	52-125	
Benzo(g,h,i)perylene	ug/kg	33.3	29.3	88	59-125	
Benzo(k)fluoranthene	ug/kg	33.3	28.0	84	60-125	
Chrysene	ug/kg	33.3	27.7	83	62-125	
Dibenz(a,h)anthracene	ug/kg	33.3	27.2	81	60-125	
Fluoranthene	ug/kg	33.3	30.4	91	63-125	
Fluorene	ug/kg	33.3	26.6	80	54-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	28.4	85	57-125	
Naphthalene	ug/kg	33.3	23.0	69	46-125	
Phenanthrene	ug/kg	33.3	29.1	87	53-125	
Pyrene	ug/kg	33.3	28.1	84	63-125	
2-Fluorobiphenyl (S)	%			75	30-125	
Terphenyl-d14 (S)	%			80	30-146	

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

Parameter	10195959006		MS		MSD		MS		MSD		% Rec	Limits	RPD	Max RPD	Qual
	Units	Result	Spike Conc.	MS Spike Conc.	MS Result	MSD Result	% Rec	% Rec							
Acenaphthene	ug/kg	<14.9	49.5	49.4	38.9	36.1	79	73	30-150	8	30				
Acenaphthylene	ug/kg	<14.9	49.5	49.4	37.9	35.3	77	72	30-127	7	30				
Anthracene	ug/kg	38.6	49.5	49.4	43.7	41.2	10	5	30-150	6	30 M1				
Benzo(a)anthracene	ug/kg	122	49.5	49.4	45.5	39.5	-155	-168	30-128	14	30 M1				
Benzo(a)pyrene	ug/kg	101	49.5	49.4	49.2	47.7	-104	-107	30-130	3	30 M1				
Benzo(b)fluoranthene	ug/kg	138	49.5	49.4	57.9	51.1	-161	-175	30-131	12	30 M1				
Benzo(g,h,i)perylene	ug/kg	61.9	49.5	49.4	49.1	45.8	-26	-33	30-149	7	30 M1				
Benzo(k)fluoranthene	ug/kg	57.8	49.5	49.4	47.7	43.7	-20	-29	30-149	9	30 M1				
Chrysene	ug/kg	129	49.5	49.4	52.5	44.7	-154	-170	30-150	16	30 M1				
Dibenz(a,h)anthracene	ug/kg	<14.9	49.5	49.4	41.3	39.7	56	53	30-150	4	30				
Fluoranthene	ug/kg	264	49.5	49.4	65.8	54.5	-401	-425	30-150	19	30 M1				
Fluorene	ug/kg	<14.9	49.5	49.4	41.5	39.7	84	80	40-125	5	30				
Indeno(1,2,3-cd)pyrene	ug/kg	50.4	49.5	49.4	47.9	43.8	-5	-13	30-150	9	30 M1				
Naphthalene	ug/kg	<14.9	49.5	49.4	32.4	31.3	65	63	32-125	3	30				
Phenanthrene	ug/kg	148	49.5	49.4	52.0	46.6	-193	-205	30-134	11	30 M1				
Pyrene	ug/kg	221	49.5	49.4	59.0	51.7	-327	-343	30-150	13	30 M1				
2-Fluorobiphenyl (S)	%						73	70	30-125						
Terphenyl-d14 (S)	%						82	80	30-146						

QUALITY CONTROL DATA

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

QC Batch: OEXT/18913 Analysis Method: WI MOD DRO
 QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS
 Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005, 10195959006

METHOD BLANK: 1222197 Matrix: Solid
 Associated Lab Samples: 10195959001, 10195959002, 10195959003, 10195959004, 10195959005, 10195959006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<10.0	10.0	06/22/12 19:01	
n-Triacontane (S)	%	77	50-150	06/22/12 19:01	

Parameter	Units	1222198		1222199			% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec				
Diesel Range Organics	mg/kg	80	66.0	77.9	82	97	70-120	17	20	
n-Triacontane (S)	%				86	100	50-150			

QUALIFIERS

Project: 49161092.01 RESP 001 Enbridge

Pace Project No.: 10195959

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.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

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

T6 High boiling point hydrocarbons are present in the sample.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161092.01 RESP 001 Enbridge
Pace Project No.: 10195959

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10195959001	TK8-SB-1_3-4'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959002	TK8-SB-2_3-4'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959003	TK8-SB-3_3-4'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959004	TK8-SB-4_5-6'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959005	TK8-SB-5_5-6'	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959006	TK8-SB-5_14-15	WI MOD DRO	OEXT/18913	WI MOD DRO	GCSV/9725
10195959001	TK8-SB-1_3-4'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959002	TK8-SB-2_3-4'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959003	TK8-SB-3_3-4'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959004	TK8-SB-4_5-6'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959005	TK8-SB-5_5-6'	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959006	TK8-SB-5_14-15	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959007	Trip Blank	TPH GRO/PVOC WI ext.	GCV/9423	WI MOD GRO	GCV/9424
10195959001	TK8-SB-1_3-4'	ASTM D2974	MPRP/33090		
10195959002	TK8-SB-2_3-4'	ASTM D2974	MPRP/33090		
10195959003	TK8-SB-3_3-4'	ASTM D2974	MPRP/33090		
10195959004	TK8-SB-4_5-6'	ASTM D2974	MPRP/33090		
10195959005	TK8-SB-5_5-6'	ASTM D2974	MPRP/33090		
10195959006	TK8-SB-5_14-15	ASTM D2974	MPRP/33113		
10195959006	TK8-SB-5_14-15	EPA 3550	OEXT/18910	EPA 8270 by SIM	MSSV/8231

Chain of Custody

4700 West 77th Street
 Minneapolis, MN 55435-4803
 (952) 832-2600

BARR

WO#: 10195959



10195959

10195959

Number of Containers/Preservative

COC 1 of 1

Water

Soil

Project Number: 49161092.01 RESP 001

Project Name: Enbridge GP Tank 8

Sample Origination State WI (use two letter postal state abbreviation)

COC Number: **No 35256**

Location	Start Depth	Stop Depth	Depth Unit (m./ft. or in.)	Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix			Type			VOCs (HCl) #1	SVOCs (unpreserved) #2	Dissolved Metals (HNO ₃)	Total Metals (HNO ₃)	General (unpreserved) #3	Diesel Range Organics (HCl)	Nutrients (H ₂ SO ₄) #4	VOCs (tared MeOH) #1	GRO, BTEX (tared MeOH) #1	DRO (tared unpreserved)	Metals (unpreserved)	SVOCs (unpreserved) #2 PAH	% Solids (plastic vial, unpres.)	PbOC - MTBE	Total Number Of Containers	
						Water	Soil		Grab	Comp.	QC																
1. TK8-SB-1	3	4	ft	06/15/2012	8:16	X			X													2		1	2	5	
2. TK8-SB-2	3	4			9:05	X			X													2		1	2	5	
3. TK8-SB-3	3	4			9:50	X			X													2		1	2	5	
4. TK8-SB-4	5	6			11:00	X			X													2		1	2	5	
5. TK8-SB-5	5	6			11:40	X			X													2		1	2	5	
6. TK8-SB-5	14	15	↓	↓	12:00	X			X													2	1	1	2	6	
7.																											
8.																											
9.																											
10.																											

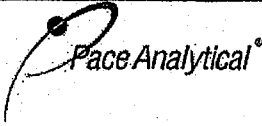
Project Manager: REE
 Project QC Contact: AAN
 Sampled by: ARP2/AJM
 Laboratory: PACE

10195959001
 002
 003
 004
 005
 006

Common Parameter/Container - Preservation Key

- #1 - Volatile Organics = BTEX, GRO, TPH, 8260 Full List
- #2 - Semivolatile Organics = PAHs, PCP, Dioxins, 8270 Full List, Herbicide/Pesticide/PCBs
- #3 - General = pH, Chloride, Fluoride, Alkalinity, TSS, TDS, TS, Sulfate
- #4 - Nutrients = COD, TOC, Phenols, Ammonia Nitrogen, TKN

Relinquished By: <i>[Signature]</i>	On Ice? <input checked="" type="radio"/> N	Date: 6/14/12	Time: 10:00	Received by: <i>[Signature]</i>	Date: 6/14/12	Time: 10:00
Relinquished By: <i>Daniel Li</i>	On Ice? <input checked="" type="radio"/> N	Date: 06/18/12	Time: 15:15	Received by: <i>[Signature]</i>	Date: 6-19-12	Time: 10:05
Samples Shipped VIA: <input type="checkbox"/> Air Freight <input type="checkbox"/> Federal Express <input type="checkbox"/> Sampler <input type="checkbox"/> Other: _____				Air Bill Number: 572		

	Document Name: Sample Condition Upon Receipt Form	Revised Date: 15Feb2012 Page 1 of 1
	Document Number: F-MN-L-213-rev.02	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Barr

Project # 10195959

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 793693089196



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

Packing Material: Bubble Wrap Bubble Bags None Other _____ Temp Blank: Yes No _____

Thermometer Used 80344042 or 80512447 Type of Ice: Wet Blue None _____ Samples on ice, cooling process has begun

Cooler Temperature 5.7
Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: CSJ 6/19/12

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>SL</u>		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	<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. (HNO3, H2SO4, HCL<2; NaOH >12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Samp #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<u>CSJ 6-19-12</u>
Pace Trip Blank Lot # (if purchased): <u>091911-3</u>		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [Signature] Date: 6/19/12

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)

Attachment C

Waste Management Landfill Documents



Requested Disposal Facility Voyageur Landfill, Canyon, MN Profile Number _____
 Renewal for Profile Number _____ Waste Approval Expiration Date _____

A. Waste Generator Facility Information (must reflect location of waste generation/origin)

- 1. Generator Name: Enbridge Pipeline Limited Partnership, LLC
- 2. Site Address: Superior Terminal - Tank 8
- 3. City/ZIP: Superior
- 4. State: WI
- 5. County: Douglas
- 6. Contact Name/Title: Karl Beaster, Environmental Analyst
- 7. Email Address: Karl.Beaster@enbridge.com
- 8. Phone: (715) 394-1430
- 9. FAX: (715) 394-1500
- 10. NAICS Code: 486110
- 11. Generator USEPA ID #: 486110
- 12. State ID# (if applicable): NA

B. Customer Information same as above

P. O. Number: Tank 8 Superior Terminal - 4/2011 - 49161092

- 1. Customer Name: Enbridge Energy
- 2. Billing Address: 1100 Louisiana Ave, STE. 3300
- 3. City, State and ZIP: Houston, TX 77002
- 4. Contact Name: Karl Beaster, Hans Wronka (Barr Eng.)
- 5. Contact Email: karl.beaster@enbridge.com, haw@barr.com
- 6. Phone: (715) 394-1430
- 7. Transporter Name: Various Transporters
- 8. Transporter ID # (if appl.): _____
- 9. Transporter Address: _____
- 10. City, State and ZIP: _____

C. Waste Stream Information

1. DESCRIPTION

a. Common Waste Name: Crude Impacted Soil
 State Waste Code(s): _____

b. Describe Process Generating Waste or Source of Contamination:

Crude oil release

- c. Typical Color(s): Brown
- d. Strong Odor? Yes No Describe: _____
- e. Physical State at 70°F: Solid Liquid Powder Semi-Solid or Sludge Other: _____
- f. Layers? Single layer Multi-layer NA
- g. Water Reactive? Yes No If Yes, Describe: _____
- h. Free Liquid Range (%): _____ to _____ NA(solid)
- i. pH Range: ≤2 2.1-12.4 ≥12.5 NA(solid) Actual: _____
- j. Liquid Flash Point: < 140°F ≥ 140°F NA(solid) Actual: _____
- k. Flammable Solid: Yes No
- l. Physical Constituents: List all constituents of waste stream - (e.g. Soil 0-80%, Wood 0-20%): (See Attached)

Constituents (Total Composition Must be > 100%)	Lower Range	Unit of Measure	Upper Range	Unit of Measure
1. <u>Crude contaminated soil</u>	<u>100%</u>			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				

2. ESTIMATED QUANTITY OF WASTE AND SHIPPING INFORMATION

- a. One Time Event Base Repeat Event
- b. Estimated Annual Quantity: 75 Tons Cubic Yards Drums Gallons Other (specify): _____
- c. Shipping Frequency: _____ Units per Month Quarter Year One Time Other
- d. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If yes, answer e.) Yes No
- e. USDOT Shipping Description (if applicable): _____

3. SAFETY REQUIREMENTS (Handling, PPE, etc.): _____



Generator's Non-hazardous Waste Profile Sheet

D. Regulatory Status (Please check appropriate responses)

1. Is this a USEPA (40 CFR Part 261)/State hazardous waste? If yes, contact your sales representative. Yes No
2. Is this waste included in one or more of categories below (Check all that apply)? If yes, attach supporting documentation. Yes No
 - Delisted Hazardous Waste Excluded Wastes Under 40 CFR 261.4
 - Treated Hazardous Waste Debris Treated Characteristic Hazardous Waste
3. Is the waste from a Federal (40 CFR 300, Appendix B) or state mandated clean-up? If yes, see instructions. Yes No
4. Does the waste represented by this waste profile sheet contain radioactive material? Yes No
 - a. If yes, is disposal regulated by the Nuclear Regulatory Commission? Yes No
 - b. If yes, is disposal regulated by a State Agency for radioactive waste/NORM? Yes No
5. Does the waste represented by this waste profile sheet contain concentrations of regulated Polychlorinated Biphenyls (PCBs)? Yes No
 - a. If yes, is disposal regulated under TSCA? Yes No
6. Does the waste contain untreated, regulated, medical or infectious waste? Yes No
7. Does the waste contain asbestos? Yes No
If Yes, Friable Non Friable
8. Is this profile for remediation waste from a facility that is a major source of Hazardous Air Pollutants (Site Remediation NESHAP, 40 CFR 63 subpart GGGGG)? Yes No
If yes, does the waste contain <500 ppmw VOHAPs at the point of determination? Yes No

E. Generator Certification (Please read and certify by signature below)

By signing this Generator's Waste Profile Sheet, I hereby certify that all:

1. Information submitted in this profile and all attached documents contain true and accurate descriptions of the waste material;
2. Relevant information within the possession of the Generator regarding known or suspected hazards pertaining to this waste has been disclosed to WM/the Contractor;
3. Analytical data attached pertaining to the profiled waste was derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules; and
4. Changes that occur in the character of the waste (i.e. changes in the process or new analytical) will be identified by the Generator and disclosed to WM (and the Contractor if applicable) prior to providing the waste to WM (and the Contractor if applicable).
5. Check all that apply:
 - Attached analytical pertains to the waste. Identify laboratory & sample ID #'s and parameters tested:
Legend Analytical, Stockpile-1, Stockpile-2, BTEX and DRO # Pages: _____
 - Only the analyses identified on the attachment pertain to the waste (identify by laboratory & sample ID #'s and parameters tested).
Attachment #: _____
 - Additional information necessary to characterize the profiled waste has been attached (other than analytical).
Indicate the number of attached pages: _____
 - I am an agent signing on behalf of the Generator, and the delegation of authority to me from the Generator for this signature is available upon request.
 - By Generator process knowledge, the following waste is not a listed waste and is below all TCLP regulatory limits.

Certification Signature: Title: Environmental Analyst
 Company Name: Enbridge Energy, Limited Partnership, LLC Name (Print): Karl Beaster
 Date: 04/25/11

FOR WM USE ONLY

Management Method: Landfill Bioremediation Non-hazardous solidification Other: _____

Approval Decision: Approved Not Approved
 Waste Approval Expiration Date: _____

Management Facility Precautions, Special Handling Procedures or Limitation on approval: _____

Shall not contain free liquid
 Shipment must be scheduled into disposal facility
 Approval Number must accompany each shipment
 Waste Manifest must accompany load

WM Authorization Name / Title: _____ Date: _____
 State Authorization (if Required): _____ Date: _____



GENERATOR ANALYTICAL CERTIFICATION FORM

Appendix B

In completing this form, the Generator certifies that, unless otherwise indicated on the attached analytical, to the best of his/her knowledge:

- This waste does not contain regulated concentrations of the following metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver.
- This waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4-D, or 2, 4, 5-TP (Silvex).
- This waste does not contain regulated concentrations of the following organics: benzene, carbon tetrachloride, chlorobenzene, chloroform, o-cresol, m-cresol, p-cresol, cresol (total), 1, 4-dichlorobenzene, 1, 2-dichloroethane, 1, 1-dichloroethylene, 2, 4-dinitrotoluene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, methyl ethyl ketone, nitrobenzene, pentachlorophenol, pyridine, tetrachloroethylene, trichloroethylene (TCE), 2, 4, 5-trichlorophenol, 2, 4, 6-trichlorophenol, or vinyl chloride.
- This waste does not exhibit the characteristic of ignitability.
- This waste does not exhibit the characteristic of reactivity.
- This waste does not exhibit the characteristic of corrosivity.
- This waste does not contain regulated concentrations of PCBs (Polychlorinated Biphenyls).
- This waste does not contain regulated concentrations of TPH (oil and grease).
- This waste does not contain infectious wastes as defined by Minnesota Rules, Chapter 7035.

Generator Name: Enbridge Energy, Limited Partnership, LLC

Contractor/Generator Signature: 

Title: Environmental Analyst Date: 04/25/11

Common Name of Waste: Crude impacted soil

Attachment A

Master Enbridge Energy Soil Disposal Profile

Enbridge Energy, Limited Partnership

Generating site Address or Site ID:

Estimated Quantity: _____

Representative Sample ID Numbers: _____

Requested Disposal Facility: _____

By completing this form the generator certifies that the waste is identical to that described on the Master Enbridge Energy Soil Disposal Profile signed on _____, is the result of spills and/or leaks in uncontaminated soil and is not a hazardous waste, does not contain regulated radioactive material or regulated concentrations of PCBs. Any spills and/or leaks in any area with potential for additional contamination will be identified and profiled separately.

Project Reference Number (to appear on invoice): _____

*project number and site ID must appear on the invoice



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

April 19, 2011

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

Work Order Number: 1101489
RE: 49161092

Enclosed are the results of analyses for samples received by the laboratory on 04/08/11. 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

A handwritten signature in black ink that reads "Terri A. Olson".

Terri Olson
Client Manager II
tolson@legend-group.com

A handwritten signature in black ink that reads "William Dahl".

William Dahl
QA/QC Coordinator
wdahl@legend-group.com

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile-1	1101489-01	Soil	04/07/11 10:45	04/08/11 08:45
Stockpile-2	1101489-02	Soil	04/07/11 10:50	04/08/11 08:45

Shipping Container Information

Default Cooler	Temperature (°C):	
Received on ice: Yes	Temperature blank was not present	Received on ice pack: No
Received on melt water: No	Ambient: No	Acceptable (IH/ISO only): No
Custody seals: No		

Case Narrative:

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
---	---	--

DRO/8015B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1101489-01) Soil Sampled: 04/07/11 10:45 Received: 04/08/11 8:45										
Diesel Range Organics	190	8.6	1.4	mg/kg dry	1	B1D1406	04/14/11	04/17/11	WI(95) DRO	
<i>Surrogate: C-30</i>	<i>90.5</i>			<i>70-130 %</i>		"	"	"	"	
Stockpile-2 (1101489-02) Soil Sampled: 04/07/11 10:50 Received: 04/08/11 8:45										
Diesel Range Organics	1000	78	13	mg/kg dry	10	B1D1406	04/14/11	04/18/11	WI(95) DRO	
<i>Surrogate: C-30</i>	<i>84.1</i>			<i>70-130 %</i>		"	"	"	"	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
---	---	--

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1101489-01) Soil Sampled: 04/07/11 10:45 Received: 04/08/11 8:45										
Benzene	<0.028	0.028	0.0043	mg/kg dry	1	B1D0801	04/08/11	04/08/11	WI(95) GRO	
Ethylbenzene	0.13	0.028	0.0053	mg/kg dry	1	"	"	"	"	
Toluene	<0.028	0.028	0.0027	mg/kg dry	1	"	"	"	"	
Xylenes (total)	0.29	0.085	0.014	mg/kg dry	1	"	"	"	"	
<i>Surrogate: 4-Fluorochlorobenzene</i>	<i>100</i>			<i>80-150 %</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
Stockpile-2 (1101489-02) Soil Sampled: 04/07/11 10:50 Received: 04/08/11 8:45										
Benzene	0.52	0.031	0.0047	mg/kg dry	1	B1D0801	04/08/11	04/08/11	WI(95) GRO	
Ethylbenzene	1.4	0.031	0.0058	mg/kg dry	1	"	"	"	"	
Toluene	1.9	0.031	0.0030	mg/kg dry	1	"	"	"	"	
Xylenes (total)	5.8	0.093	0.015	mg/kg dry	1	"	"	"	"	
<i>Surrogate: 4-Fluorochlorobenzene</i>	<i>130</i>			<i>80-150 %</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
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PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1101489-01) Soil Sampled: 04/07/11 10:45 Received: 04/08/11 8:45										
% Solids	88			%	1	B1D1412	04/14/11	04/15/11	% calculation	
Stockpile-2 (1101489-02) Soil Sampled: 04/07/11 10:50 Received: 04/08/11 8:45										
% Solids	81			%	1	B1D1412	04/14/11	04/15/11	% calculation	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
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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 B1D1406 - Sonication (Wisc DRO)											
Blank (B1D1406-BLK1)											
						Prepared: 04/14/11 Analyzed: 04/16/11					
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: C-30	14.0			mg/kg wet	16.0		87.5	70-130			
LCS (B1D1406-BS1)											
						Prepared: 04/14/11 Analyzed: 04/16/11					
Diesel Range Organics	56.8	8.0	1.3	mg/kg wet	64.0		88.8	70-120			
Surrogate: C-30	14.4			mg/kg wet	16.0		89.8	70-130			
LCS Dup (B1D1406-BSD1)											
						Prepared: 04/14/11 Analyzed: 04/17/11					
Diesel Range Organics	60.6	8.0	1.3	mg/kg wet	64.0		94.6	70-120	6.38	20	
Surrogate: C-30	15.4			mg/kg wet	16.0		96.3	70-130			

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
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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
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Batch B1D0801 - EPA 5035 Soil (Purge and Trap)

Blank (B1D0801-BLK1)

Prepared & Analyzed: 04/08/11

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	23.7			ug/L	25.0		94.8	80-150			

LCS (B1D0801-BS1)

Prepared & Analyzed: 04/08/11

Benzene	98.7			ug/L	100		98.7	80-120			
Ethylbenzene	102			ug/L	100		102	80-120			
Toluene	91.7			ug/L	100		91.7	80-120			
Xylenes (total)	309			ug/L	300		103	80-120			
Surrogate: 4-Fluorochlorobenzene	25.5			ug/L	25.0		102	80-150			

LCS Dup (B1D0801-BSD1)

Prepared & Analyzed: 04/08/11

Benzene	94.4			ug/L	100		94.4	80-120	4.44	20	
Ethylbenzene	96.7			ug/L	100		96.7	80-120	5.77	20	
Toluene	87.0			ug/L	100		87.0	80-120	5.31	20	
Xylenes (total)	291			ug/L	300		97.2	80-120	5.77	20	
Surrogate: 4-Fluorochlorobenzene	24.3			ug/L	25.0		97.4	80-150			

Matrix Spike (B1D0801-MS1)

Source: 1101429-02

Prepared & Analyzed: 04/08/11

Benzene	98.4			ug/L	100	<	98.4	80-120			
Ethylbenzene	103			ug/L	100	0.532	102	80-120			
Toluene	89.0			ug/L	100	0.176	88.8	80-120			
Xylenes (total)	314			ug/L	300	2.83	104	80-120			
Surrogate: 4-Fluorochlorobenzene	26.1			ug/L	25.0		105	80-150			

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
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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 B1D1412 - General Preparation											
Duplicate (B1D1412-DUP1)											
	Source: 1101577-08					Prepared: 04/14/11	Analyzed: 04/15/11				
% Solids	90.0			%		88.0			2.25	20	
Duplicate (B1D1412-DUP2)											
	Source: 1101586-06					Prepared: 04/14/11	Analyzed: 04/15/11				
% Solids	97.0			%		98.0			1.03	20	
Duplicate (B1D1412-DUP3)											
	Source: 1101586-12					Prepared: 04/14/11	Analyzed: 04/15/11				
% Solids	98.0			%		98.0			0.00	20	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 Project Manager: Ms. Andrea Nord	Work Order #: 1101489 Date Reported: 04/19/11
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Notes and Definitions

< 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)



INDUSTRIAL WASTE & DISPOSAL SERVICES AGREEMENT

Exhibit A

CUSTOMER INFORMATION
Enbridge Energy
1100 Louisiana Avenue Suite 3300
Houston, TX 77002
Contact Name: Karl Beaster
Contact Phone: 715-394-1430

GENERATOR INFORMATION (If different from Customer Information)
Enbridge Pipeline Limited Partnership
Superior Terminal-Culvert Repair Tank 8
Superior, WI

PROFILE NUMBER: 102701MN
DISPOSAL FACILITY: Voyageur Landfill
EXPIRATION DATE: 04/26/2012
PO NUMBER: tank 8 superior terminal

Service Information	Material / Ticket Description	Anticipated Volume	Rate / UOM / Minimum
Disposal	Crude Impacted Soil	Ton	\$37.00/Ton
Profile Fee	Profile Fee		\$125.00
Tax	All applicable Taxes		
Fuel	*See Note Below		
Environmental	\$5.00/load- less than 2 tons, \$10.00/load- more than 2 tons		
Transportation			
Digout (frozen load): \$50.00/load		Washout Fee: \$100.00/load	Certificate of Burial / Destruction: \$50.00/each event
Containers provided by WM:	Quantity:	Size:	Quantity: Size:
Additional Information/Special Handling:	<ul style="list-style-type: none"> - Acceptance of waste is contingent upon the completion, submittal and approval of special waste profile sheet, required analytical, Industrial Waste & Disposal Services Agreement (ISA), and Exhibit A. All loads must be manifested. Confirmation will be sent to customer upon approval to ship into designated facility. - Prices quoted herein are valid for 60 days from Tuesday, April 26, 2011 unless Waste Management is hired for this project prior to the expiration of this 60 day period in which case pricing remains valid in accordance with the terms of the Service Agreement - The fuel surcharge percentage can fluctuate on a weekly basis; www.wm.com provides the current Fuel Surcharge and DOE average. The actual percentage rate applied to the total project invoice will be determined the week that the invoice is generated. - If Waste Management (or a Waste Management contracted hauler) is NOT providing the transportation services, you must ensure that the transporter is licensed and approved to haul the Special Waste or Hazardous Waste. - Please see profile approval form for special handling instructions. 		

THE WORK CONTEMPLATED BY THIS EXHIBIT A IS TO BE DONE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE INDUSTRIAL SERVICES AGREEMENT OR OTHER CONTRACTUAL AGREEMENT BETWEEN THE PARTIES DATED: _____

COMPANY Waste Management of Wisconsin, Inc.
 By: _____
 Name: Becky Baumann
 Title: Technical Service Representative
 (800)WMDisposal or (800) 963-4776

CUSTOMER Enbridge Energy
 By: [Signature]
 Name: Karl Beaster
 Title: Environmental Analyst
 Date: 04/26/11



INDUSTRIAL WASTE SERVICES & DISPOSAL AGREEMENT

COMPANY: Waste Management of Wisconsin, Inc
A WASTE MANAGEMENT COMPANY

CUSTOMER: Enbridge Energy

Name: Becky Baumann _____
Date

Name: Karl Beaster _____ 04/26/11
Date

Title: Technical Service Representative _____

Title: Environmental Analyst _____

Initial Term: 36 months _____

Effective Date of Agreement: _____

This Industrial Waste & Disposal Services Agreement, consisting of the terms and conditions set forth herein, and Exhibit A, and/or Confirmation Letter(s) and the Profile Sheet(s) entered into from and after the date hereof from time to time (all of the foregoing being collectively referred to as the "Agreement"), is made as of the Effective Date shown above by and between the Customer named above, on its and its subsidiaries and affiliates behalf (collectively, "Customer") and the Waste Management entity named above ("the Company").

TERMS AND CONDITIONS

1. SERVICES PROVIDED. The Company will provide Customer with collection, management, transportation, disposal, treatment, and recycling services ("Services") for Customer's non-hazardous solid waste, special waste, and/or hazardous waste (collectively "Industrial Waste") as described on Exhibit A and/or Confirmation Letter(s) and/or applicable Profile Sheets. **Solid Waste** means garbage, refuse and rubbish including those which are recyclable but excluding Special Waste and Hazardous Waste. **Special Waste** includes polychlorinated biphenyl ("PCB") wastes, industrial process wastes, asbestos containing material, petroleum contaminated soils, treated/de-characterized wastes, incinerator ash, medical wastes, demolition debris and other materials requiring special handling in accordance with applicable federal, state, provincial or local laws or regulations. **Hazardous Waste** means any toxic or radioactive substances, as such terms are defined by applicable federal, state, provincial or local laws or regulations. All Industrial Waste that is generated, handled and/or collected by Customer shall be managed exclusively by Company during the term of this Agreement. When Company handles special or hazardous waste for Customer, Customer will provide Company with a Generator's Waste Profile Sheet ("Profile Sheet") describing all special or hazardous waste, and provide a representative sample of such waste on request. In the event this Agreement includes transportation by Company, Customer shall, at the time of tender, provide to Company accurate and complete documents, shipping papers or manifests as are required for the lawful transfer of the special or hazardous waste under all applicable federal, state or local laws or regulations. Tender of delivery shall be considered nonconforming if not in accordance with this Paragraph.

ordinances, regulations, orders, permits or other legal requirements applicable to the Industrial Waste.

2. CUSTOMER WARRANTIES. Customer hereby represents and warrants that all waste material delivered by Customer to Company shall be in accordance with waste descriptions given in this Agreement and shall not be or contain any Nonconforming Waste. "Nonconforming Waste" means: (a) non-hazardous Solid Waste that contains regulated Special Waste or Hazardous Waste; (b) waste that is not in conformance with the description of the waste in Exhibit A, the Confirmation Letter(s) or the Profile Sheet incorporated herein; (c) waste that is or contains any infectious waste, radioactive, volatile, corrosive, flammable, explosive, biomedical, biohazardous material, regulated medical or hazardous waste or toxic substances, as defined pursuant to or listed or regulated under applicable federal, state or local law, except as stated on the Profile Sheet or Confirmation Letter; or (d) waste that is prohibited from being received, managed or disposed of at the designated disposal facility by federal, state or local law, regulation, rule, code, ordinance, order, permit or permit condition. Customer (including its subcontractors) represents and warrants that it will comply with all applicable laws,

3. TERM OF AGREEMENT; RIGHT OF FIRST REFUSAL. The Initial Term of this Agreement shall be 36 months, commencing on the Effective Date set forth above. This Agreement shall automatically renew thereafter for additional terms of twelve (12) months each ("Renewal Term") unless either party gives to the other party written notice of termination at least ninety (90) days prior to the termination of the then-existing term; provided however, that the terms and conditions of this Agreement shall remain in full force and effect, in accordance with its terms, with respect to any uncompleted or unfinished Service provided for in an Exhibit A, Confirmation Letter and/or Profile Sheet until such Service is completed. Customer grants to Company a right of first refusal to match any offer which Customer receives or intends to make after the completion of any Term of this Agreement relating to any services provided hereunder and further agrees to give Company prompt written notice of any such offer and a reasonable opportunity to respond to it.

4. INSPECTION; REJECTION OF WASTE. Title to and liability for Nonconforming Waste shall remain with Customer at all times. Company shall have the right to inspect, analyze or test any waste delivered by Customer. If Customer's Industrial Waste is Nonconforming Waste, Company can, at its option, reject Nonconforming Waste and return it to Customer or require Customer to remove and dispose of the Nonconforming Waste at Customer's expense. Customer shall indemnify, hold harmless (in accordance with Section 9) and pay or reimburse Company for any and all costs, damages and/or fines incurred as a result of or relating to Customer's tender or delivery of Nonconforming Waste or other failure to comply or conform to this Agreement, including costs of inspection, testing and analysis.

5. SPECIAL HANDLING; TITLE. If Company elects to handle, rather than reject, Nonconforming Waste, Company shall have the right to manage the same in the manner deemed most appropriate by Company given the characteristics of the Nonconforming Waste. Company may assess and Customer shall pay additional fees associated with delivery of Nonconforming Waste, including, but not limited to, special handling or disposal charges, and costs associated with different quantities of waste, different delivery dates, modifications in operations, specialized equipment, and other operational, environmental, health, safety or regulatory requirements. Title to and ownership of acceptable Industrial Waste shall transfer to Company upon its final acceptance of such waste.

6. COMPANY WARRANTIES. Company hereby represents and warrants that: (a) Company will manage the Industrial Waste in a safe and workmanlike manner in full compliance with all valid and applicable federal, state

and local laws, ordinances, orders, rules and regulations; and (b) it will use disposal facilities that have been issued permits, licenses, certificates or approvals required by valid and applicable laws, ordinances and regulations necessary to allow the facility to accept, treat and/or dispose of Industrial Waste. Except as provided herein, Company makes no other warranties and hereby disclaims any other warranty, whether implied or statutory.

7. LIMITED LICENSE TO ENTER. When a Customer is transporting Industrial Waste to a Company facility, Customer and its subcontractors shall have a limited license to enter a disposal facility for the sole purpose of off-loading Industrial Waste at an area designated, and in the manner directed, by Company. Customer shall, and shall ensure that its subcontractors, comply with all rules and regulations of the facility, as amended. Company may reject Industrial Waste, deny Customer or its subcontractors entry to its facility and/or terminate this Agreement in the event of Customer's or its subcontractors' failure to follow such rules and regulations.

8. CHARGES AND PAYMENTS. Customer shall pay the rates set forth on Exhibit A or a Confirmation Letter, which may be modified as provided in this Agreement. The rates may be adjusted by Company to account for: any increase in or to recoup all or any portion of, disposal, transportation, fuel or environmental compliance fees or costs; any change in the composition of the Industrial Waste; increased costs due to uncontrollable circumstances, including, without limitation, changes in local, state or federal laws or regulations, imposition of taxes, fees or surcharges and acts of God such as floods, fires, etc. Company may also increase the charges to reflect increases in the Consumer Price Index for the municipal or regional area in which the Services are rendered. Increases in charges for reasons other than as provided above require the consent of Customer which may be evidenced verbally, in writing or by the actions and practices of the parties. All rate adjustments as provided above and in Paragraph 5 shall take effect upon notification from Company to Customer. Customer shall pay the rates in full within 30 days of receipt of each invoice from Company. Customer shall pay a late fee on all past due amounts accruing from the date of the invoice at a rate of eighteen percent (18%) per annum or, if less, the maximum rate allowed by law.

9. INDEMNIFICATION. The Company agrees to indemnify, defend and save Customer harmless from and against any and all liability (including reasonable attorneys fees) which Customer may be responsible for or pay out as a result of bodily injuries (including death), property damage, or any violation or alleged violation of law, to the extent caused by Company's breach of this Agreement or by any negligent act, negligent omission or willful misconduct of the Company or its employees, which occurs (1) during the collection or transportation of Customer's Industrial Waste by Company, or (2) as a result of the disposal of Customer's Industrial Waste, after the date of this Agreement, in a facility owned by a subsidiary or affiliate of Waste Management, Inc., provided that the Company's indemnification obligations will not apply to occurrences involving Nonconforming Waste.

Customer agrees to indemnify, defend and save the Company harmless from and against any and all liability (including reasonable attorneys fees) which the Company may be responsible for or pay out as a result of bodily injuries (including death), property damage, or any violation or alleged violation of law to the extent caused by Customer's breach of this Agreement or by any negligent act, negligent omission or willful misconduct of the Customer or its employees, agents or contractors in the performance of this Agreement or Customer's use, operation or possession of any equipment furnished by the Company.

Neither party shall be liable to the other for consequential, incidental or punitive damages arising out of the performance of this Agreement.

10. UNCONTROLLABLE CIRCUMSTANCES. Except for the obligation to make payments hereunder, neither party shall be in default for its failure to perform or delay in performance caused by events beyond its reasonable control, including, but not limited to, strikes, riots, imposition of laws or governmental orders, fires, acts of God, and inability to obtain equipment, permit

changes and regulations, restrictions (including land use) therein, and the affected party shall be excused from performance during the occurrence of such events.

11. ASSIGNMENT. This Agreement shall be binding on and shall inure to the benefit of the parties and their respective successors and assigns.

12. ENTIRE AGREEMENT. This Agreement represents the entire understanding and agreement between the parties relating to the management of waste and supersedes any and all prior agreements, whether written or oral, between the parties regarding the same; provided that, the terms of any national service agreement between the parties shall govern over any inconsistent terms herein.

13. TERMINATION; LIQUIDATED DAMAGES. Company may immediately terminate this Agreement, (a) in the event of Customer's breach of any term or provision of this Agreement, including failure to pay on a timely basis or (b) if Customer becomes insolvent, the subject of an order for relief in bankruptcy, receivership, reorganization dissolution, or similar law, or makes an assignment for the benefit of its creditors or if Company deems itself insecure as to payment ("Default"). Notice of termination shall be in writing and deemed given when delivered in person or by certified mail, postage prepaid, return receipt requested. In the event Customer terminates this Agreement prior to the expiration of any Initial or Renewal Term for any reason other than as provided herein, or in the event Company terminates this Agreement for Customer's Default, liquidated damages in addition to the Company's legal fees shall be paid and calculated as follows: 1) if the remaining Initial Term under this Agreement is six or more months, Customer shall pay its most recent monthly charges multiplied by six; 2) if the remaining Initial Term under this Agreement is less than six months, Customer shall pay its most recent monthly charges multiplied by the number of months remaining in the Term; 3) if the remaining Renewal Term under this Agreement is three or more months, Customer shall pay its most recent monthly charges multiplied by three; or 4) if the remaining Renewal Term under this Agreement is less than three months, Customer shall pay its most recent monthly charges multiplied by the number of months remaining in the Renewal Term. Customer acknowledges that the actual damage to Company in the event of termination is difficult to fix or prove, and the foregoing liquidated damages amount is reasonable and commensurate with the anticipated loss to Company resulting from such termination and is an agreed upon fee and is not imposed as a penalty. Collection of liquidated damages by Company shall be in addition to any rights or remedies available to Company under this Agreement or at common law.

14. MISCELLANEOUS. (a) The prevailing party will be entitled to recover reasonable fees and court costs, including attorneys' fees, in interpreting or enforcing this Agreement. In the event Customer fails to pay Company all amounts due hereunder, Company will be entitled to collect all reasonable collection costs or expenses, including reasonable attorneys fees, court costs or handling fees for returned checks from Customer; (b) The validity, interpretation and performance of this Agreement shall be construed in accordance with the law of the state in which the Services are performed; (c) If any provision of this Agreement is declared invalid or unenforceable, then such provision shall be deemed severable from and shall not affect the remainder of this Agreement, which shall remain in full force and effect; (d) Customer's payment obligation for Services and the Warranties and Indemnification made by each party shall survive termination of this Agreement.

Agreed & Accepted

COMPANY

Signed: _____

CUSTOMER

Signed:  _____

WM WASTE MANAGEMENT NON-HAZARDOUS WASTE MANIFEST
 If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4, and 5. Manifest No. **5650**

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: Enbridge Pipelines j) Generating Location (Name): Enbridge Pipelines
 b) Generator's Address: Various k) Address: Tank 8 Superior Terminal - 7/20/11
19161092
 c) Generator's Representative: Dennis Wedan d) Telephone Number: (715) 398 8323
 e) Telephone Number: (715) 398 8323
 f) WASTE MANAGEMENT APPROVAL CODE: W102705MM

Common Name of Waste: Crude impacted soil m) Asbestos ONLY: Friable; Both; % friable % non-friable
 Description of Waste: _____ n) Type of Containers: T R How many 1
 Disposal Volume: 71.6 Tons _____ Cubic Yards _____ Other _____
 Number of Containers: _____

TYPE OF CONTAINERS
 TR - TRUCK
 DM - METAL DRUM
 DP - PLASTIC DRUM
 BA - BAG
 BB - 6 MIL. PLASTIC BAG
 BC - 12 MIL. PLASTIC BAG

g) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
 Signature of Driver: Dennis Wedan Date of Receipt: 5-5-11
 Signature of Generator's Authorized Agent: _____ Date of Delivery: _____

SECTION 2 TRANSPORTER 1

a) Transporter's Name: 3410 0163 Ave
 b) Transporter's Address: 715 394 5838
 c) Telephone Number: (715) 394 5838
 d) Vehicle License No./State: DA45288 MN
 e) Trailer or Container No.: 2943
 f) Name of Driver (print/type): Zeas Pumpel
 g) I hereby warrant that the above named and described material was received from the generator on the date of delivery referenced below.
 Signature of Driver: _____ Date of Receipt: 5-5-11
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: 5-5-11

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____
 b) Transfer Facility's Address: _____
 c) Telephone Number: () _____
 d) Vehicle License No./State: _____
 e) Trailer or Container No.: _____
 f) Name of Driver (print/type): _____
 g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
 Signature of Transfer Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 4 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: CANYON LANDFILL Permit No. _____
 b) Physical Address: 6830 Hwy 53, CANYON, MN 55717
 c) Telephone Number: (218) 345-6303
 d) Mailing Address: _____
 e) Name of Disposal Facility's Authorized Agent (print/type): _____
 f) The material delivered by the Transporter has been received at the Disposal Facility.
 g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
 Signature of Disposal Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
 a) Operator's Name: _____ c) Telephone Number: () _____
 b) Operator's Address: _____
 c) Recommended special handling instructions and additional information: _____

Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type): _____ Signature of Operator's Authorized Agent: _____ Date: _____
 Responsible Agency: Minnesota Pollution Control Agency, 520 Lafayette Rd. N. St. Paul, MN 55155
 Name and Address: Metro 651-296-6300 Out of State 1-800-657-3864

WHITE-DESTINATION (Disposal Facility) CANARY-GENERATOR PINK-TRANSPORTER GOLD-GENERATOR

WM WASTE MANAGEMENT NON-HAZARDOUS WASTE MANIFEST
 If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4, and 5. Manifest No. **5658**

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: Enbridge Pipelines j) Generating Location (Name): Enbridge Pipelines
 b) Generator's Address: Various k) Address: Tank 8 Superior Terminal - 7/20/11
19161092
 c) Generator's Representative: Dennis Wedan d) Telephone Number: (715) 398 8323
 e) Telephone Number: (715) 398 8323
 f) WASTE MANAGEMENT APPROVAL CODE: W102705MM

Common Name of Waste: Crude impacted soil m) Asbestos ONLY: Friable; Both; % friable % non-friable
 Description of Waste: _____ n) Type of Containers: T R How many 1
 Disposal Volume: 71.6 Tons _____ Cubic Yards _____ Other _____
 Number of Containers: _____

TYPE OF CONTAINERS
 TR - TRUCK
 DM - METAL DRUM
 DP - PLASTIC DRUM
 BA - BAG
 BB - 6 MIL. PLASTIC BAG
 BC - 12 MIL. PLASTIC BAG

g) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
 Signature of Driver: Dennis Wedan Date of Receipt: 5-5-11
 Signature of Generator's Authorized Agent: _____ Date of Delivery: _____

SECTION 2 TRANSPORTER 1

a) Transporter's Name: _____
 b) Transporter's Address: _____
 c) Telephone Number: () _____
 d) Vehicle License No./State: _____
 e) Trailer or Container No.: _____
 f) Name of Driver (print/type): _____
 g) I hereby warrant that the above named and described material was received from the generator on the date of delivery referenced below.
 Signature of Driver: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____
 b) Transfer Facility's Address: _____
 c) Telephone Number: () _____
 d) Vehicle License No./State: _____
 e) Trailer or Container No.: _____
 f) Name of Driver (print/type): _____
 g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
 Signature of Transfer Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 4 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: CANYON LANDFILL Permit No. _____
 b) Physical Address: 6830 Hwy 53, CANYON, MN 55717
 c) Telephone Number: (218) 345-6303
 d) Mailing Address: _____
 e) Name of Disposal Facility's Authorized Agent (print/type): _____
 f) The material delivered by the Transporter has been received at the Disposal Facility.
 g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
 Signature of Disposal Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
 a) Operator's Name: _____ c) Telephone Number: () _____
 b) Operator's Address: _____
 c) Recommended special handling instructions and additional information: _____

Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type): _____ Signature of Operator's Authorized Agent: _____ Date: _____
 Responsible Agency: Minnesota Pollution Control Agency, 520 Lafayette Rd. N. St. Paul, MN 55155
 Name and Address: Metro 651-296-6300 Out of State 1-800-657-3864

WHITE-DESTINATION (Disposal Facility) CANARY-GENERATOR PINK-TRANSPORTER GOLD-GENERATOR

WM WASTE MANAGEMENT NON-HAZARDOUS WASTE MANIFEST
 If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4, and 5. Manifest No. **5657**

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: Enbridge Pipelines j) Generating Location (Name): Enbridge Pipelines
 b) Generator's Address: Various k) Address: Tank 8 Superior Terminal, 7/20/11
19161092
 c) Generator's Representative: Dennis Wedan d) Telephone Number: (715) 398 8323
 e) Telephone Number: (715) 398 8323
 f) WASTE MANAGEMENT APPROVAL CODE: W102705MM

Common Name of Waste: Crude impacted soil m) Asbestos ONLY: Friable; Both; % friable % non-friable
 Description of Waste: _____ n) Type of Containers: T R How many 1
 Disposal Volume: 75.00 Tons _____ Cubic Yards _____ Other _____
 Number of Containers: _____

TYPE OF CONTAINERS
 TR - TRUCK
 DM - METAL DRUM
 DP - PLASTIC DRUM
 BA - BAG
 BB - 6 MIL. PLASTIC BAG
 BC - 12 MIL. PLASTIC BAG

g) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
 Signature of Driver: Dennis Wedan Date of Receipt: 5-5-11
 Signature of Generator's Authorized Agent: _____ Date of Delivery: _____

SECTION 2 TRANSPORTER 1

a) Transporter's Name: AJS Lorraine
 b) Transporter's Address: 6276 Hwy 2 Duluth MN
 c) Telephone Number: (218) 729-4686
 d) Vehicle License No./State: DA5201 MN
 e) Trailer or Container No.: 403
 f) Name of Driver (print/type): Thomas Pen
 g) I hereby warrant that the above named and described material was received from the generator on the date of delivery referenced below.
 Signature of Driver: _____ Date of Receipt: 5-5-11
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: 5-5-11

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____
 b) Transfer Facility's Address: _____
 c) Telephone Number: () _____
 d) Vehicle License No./State: _____
 e) Trailer or Container No.: _____
 f) Name of Driver (print/type): _____
 g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
 Signature of Transfer Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 4 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: CANYON LANDFILL Permit No. _____
 b) Physical Address: 6830 Hwy 53, CANYON, MN 55717
 c) Telephone Number: (218) 345-6303
 d) Mailing Address: _____
 e) Name of Disposal Facility's Authorized Agent (print/type): _____
 f) The material delivered by the Transporter has been received at the Disposal Facility.
 g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
 Signature of Disposal Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
 a) Operator's Name: _____ c) Telephone Number: () _____
 b) Operator's Address: _____
 c) Recommended special handling instructions and additional information: _____

Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type): _____ Signature of Operator's Authorized Agent: _____ Date: _____
 Responsible Agency: Minnesota Pollution Control Agency, 520 Lafayette Rd. N. St. Paul, MN 55155
 Name and Address: Metro 651-296-6300 Out of State 1-800-657-3864

WHITE-DESTINATION (Disposal Facility) CANARY-GENERATOR PINK-TRANSPORTER GOLD-GENERATOR

WM WASTE MANAGEMENT NON-HAZARDOUS WASTE MANIFEST
 If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4, and 5. Manifest No. **69893**

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: Enbridge Pipeline Limited Partnership j) Generating Location (Name): Enbridge Pipeline Limited Partnership
 b) Generator's Address: Various Locations k) Address: Tank 8 Superior Terminal 4/2011-10161092
8
 c) Generator's Representative: Dennis Wedan d) Telephone Number: 715-398-8323
 e) Telephone Number: 715-398-8323
 f) WASTE MANAGEMENT APPROVAL CODE: 30277MM
102705 MW

Common Name of Waste: Crude Impacted Soil m) Asbestos ONLY: Friable; Both; % friable % non-friable
 Description of Waste: _____ n) Type of Containers: How many 1
 Disposal Volume: 301.2 Tons _____ Cubic Yards _____ Other _____
 Number of Containers: _____

TYPE OF CONTAINERS
 TR - TRUCK
 DM - METAL DRUM
 DP - PLASTIC DRUM
 BA - BAG
 BB - 6 MIL. PLASTIC BAG
 BC - 12 MIL. PLASTIC BAG

g) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
 Signature of Driver: Dennis Wedan Date of Receipt: 5/11/11
 Signature of Generator's Authorized Agent: _____ Date of Delivery: _____

SECTION 2 TRANSPORTER 1

a) Transporter's Name: 3410 0163 Ave
 b) Transporter's Address: 715 394 5838
 c) Telephone Number: (715) 394 5838
 d) Vehicle License No./State: DA5201 MN
 e) Trailer or Container No.: 403
 f) Name of Driver (print/type): Thomas Pen
 g) I hereby warrant that the above named and described material was received from the generator on the date of delivery referenced below.
 Signature of Driver: _____ Date of Receipt: 5-5-11
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: 5-5-11

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____
 b) Transfer Facility's Address: _____
 c) Telephone Number: () _____
 d) Vehicle License No./State: _____
 e) Trailer or Container No.: _____
 f) Name of Driver (print/type): _____
 g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
 Signature of Transfer Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 4 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: Voyager Landfill (SW-428)
 b) Physical Address: 8830 Hwy 53, Canyon, MN 55717
 c) Telephone Number: 218-345-6303
 d) Mailing Address: _____
 e) Name of Disposal Facility's Authorized Agent (print/type): _____
 f) The material delivered by the Transporter has been received at the Disposal Facility.
 g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
 Signature of Disposal Facility's Authorized Agent: _____ Date of Receipt: _____
 Signature of Transporter's Authorized Agent: _____ Date of Delivery: _____

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
 a) Operator's Name: _____ c) Telephone Number: () _____
 b) Operator's Address: _____
 c) Recommended special handling instructions and additional information: _____

Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type): _____ Signature of Operator's Authorized Agent: _____ Date: _____
 Responsible Agency: Minnesota Pollution Control Agency, 520 Lafayette Rd. N. St. Paul, MN 55155
 Name and Address: Metro 651-296-6300 Out of State 1-800-657-3864

WHITE-DESTINATION (Disposal Facility) CANARY-GENERATOR PINK-TRANSPORTER GOLD-GENERATOR