

Technical Memorandum

To: Karl Beaster, Enbridge Energy
From: Ryan Erickson
Subject: Enbridge Superior Terminal Line 61 PLM Tanker Truck Release
SERTS Spill ID: 20130925NO16-1
Date: November 20, 2013
Barr Project: 49161092

This memorandum summarizes the response actions completed by Barr Engineering (Barr) at the request of Enbridge Energy (Enbridge) following a crude oil release near the Line 61 pig launch building at the Enbridge Superior Terminal in Superior, Wisconsin (Figure 1).

Background

On September 25, 2013, Enbridge pipe line maintenance (PLM) personnel overfilled a tanker truck with crude oil from the pipeline system during routine pipeline maintenance activities. This resulted in an approximately 10 gallon crude oil release onto the ground surface near the southeast side of the Line 61 pig launch building (Photo 1; Figure 2). The crude oil migrated across the ground surface approximately 80 feet to the south where flow was stopped by an existing earthen berm structure (Figure 2).

Enbridge reported the release to the Wisconsin Department of Natural Resources (WDNR) and Spill Electronic Reporting and Tracking System (SERTS) #20130925NO16-1 was assigned. Enbridge requested that Barr assist with the initial site assessment, remedial excavation oversight and waste disposal coordination for the release event.

Release Response and Site Assessment

Enbridge personnel immediately responded to the release. Response efforts included using a vacuum truck to remove free product from the ground surface and excavating crude oil impacted gravel and clay soil (Photos 2 and 3; Figure 2; Attachment A). Crude oil recovered with the vacuum truck was injected back into the pipeline system. The crude oil impacted gravel and soil that was excavated was placed in a stockpile holding area within the terminal soil management area (SMA) (Figure 2) until offsite disposal could be coordinated.

Barr was onsite on September 25, 2013 shortly after the initial remedial actions had been completed to: field screen the excavation extents; determine whether residual crude oil impacts were still present; and to assist with the waste disposal process. Barr field screened gravel and soil from the excavation extent for the presence of organic vapors with a photoionization detector (PID), and was examined for indications of hydrocarbon impacts such as odor, discoloration, and sheen. The response action excavation continued until soil headspace values were documented to be below ten parts per million (ppm) and no other evidence of crude oil impacts (odor, staining, sheen) were observed (Attachment A).

Based on the field screening results, it was determined that the impacted gravel and soil had been successfully removed and no residual impacts remained above ten ppm, which is the established screening threshold defined in the draft WDNR negotiated agreement for the Superior Terminal. The final dimensions of the remedial excavation were approximately 80 feet long by 20-30 feet wide by 1-1.5 feet deep (Figure 2; Attachment A). The excavated crude oil impacted gravel and soil was temporarily stockpiled in the terminal SMA (Figure 2) until it could be approved for offsite disposal. The excavation was backfilled with clean material upon the completion of the field screening.

Waste Disposal Coordination

Two representative soil samples were collected from the contaminated stockpile by Barr on September 25, 2013 for waste characterization profiling. The samples were submitted to Legend Technical Services in St. Paul, Minnesota for laboratory analysis of diesel range organics (DRO) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Upon receipt of the analytical results, the laboratory report was submitted to the Shamrock Landfill in Cloquet, Minnesota as part of the waste profile application (Attachment B) and the waste profile was accepted (profile #CL13-0052). A total of 88.16 tons of contaminated soil was hauled to the landfill on October 7th and 8th, 2013 (Attachment B).

Conclusions

The gravel and soil impacted during the Line 61 PLM tanker crude oil release was excavated and has been disposed of at an approved landfill facility. Residual soil impacts were not identified in the final excavation extents through field screening methods established in the draft WDNR negotiated agreement. Based on this information it appears that the response action sufficiently addressed the soil impacted during the release and that no further action is recommended.

Attachments:

Site Photos: 1-3

Figure 1: Site Location

Figure 2: Site Layout

Attachment A: Enbridge Site Investigation Field Sampling and Screening Log

Attachment B: Waste Disposal Documentation

SITE PHOTOS:

September 25, 2013 release response and remediation



Photo 1



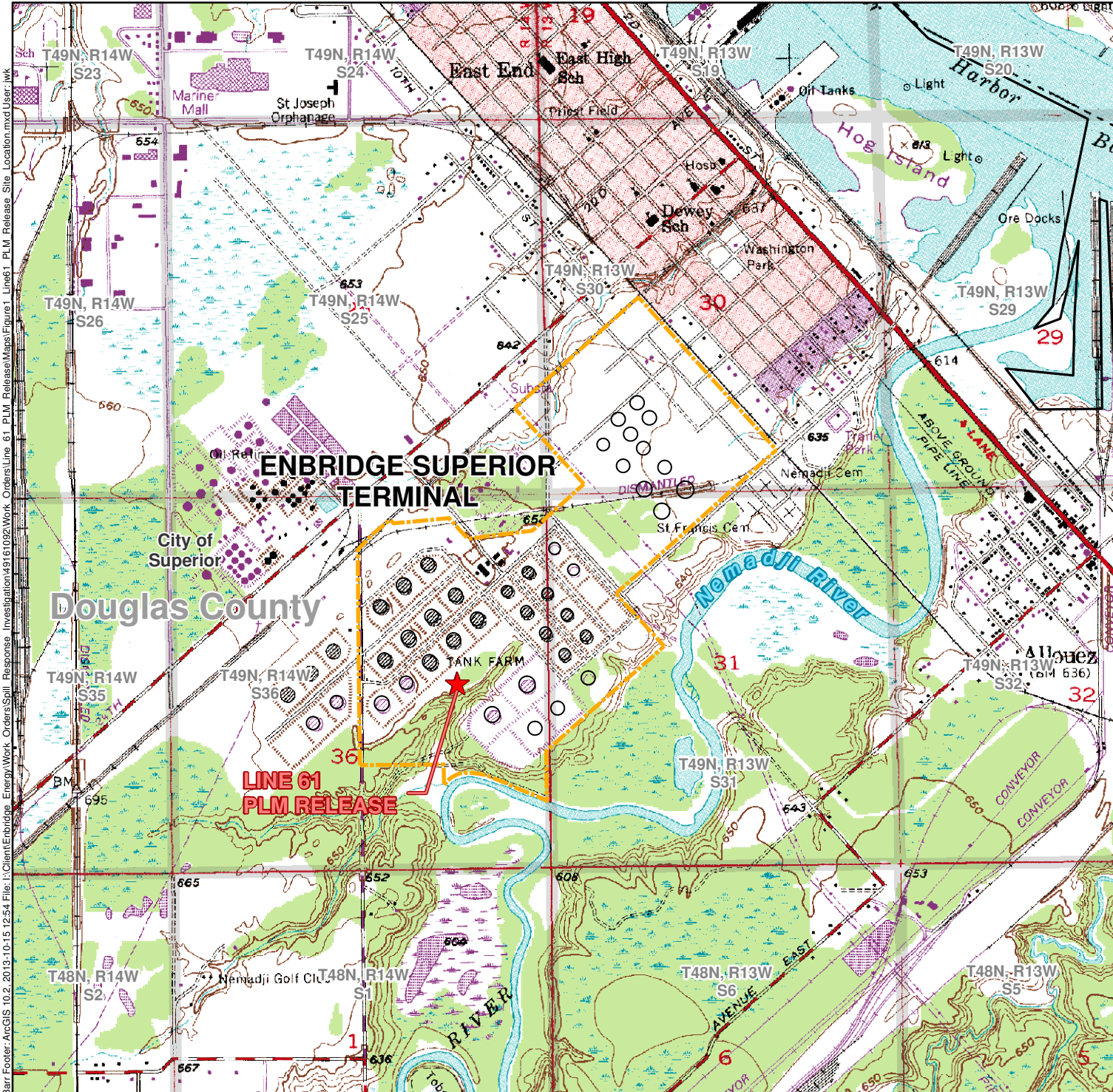
Photo 2

Photo 1: Crude oil on the ground surface after the Line 61 PLM tanker release (facing east). The black tanker from which the release occurred is visible on the left side of the photo. The white vacuum truck is removing crude oil from the ground surface.

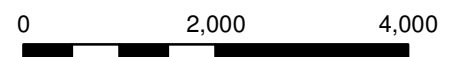
Photo 2: Remedial excavation along the southwestern site berm (facing east).



Photo 3: Remedial excavation at the release location (facing north).



- ★ Site Location
- Terminal Property Boundary



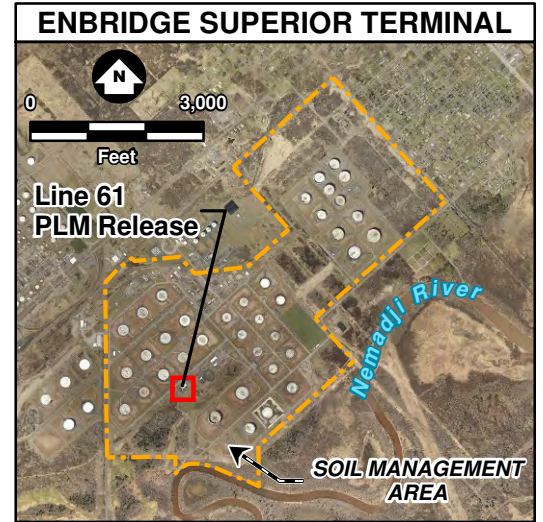
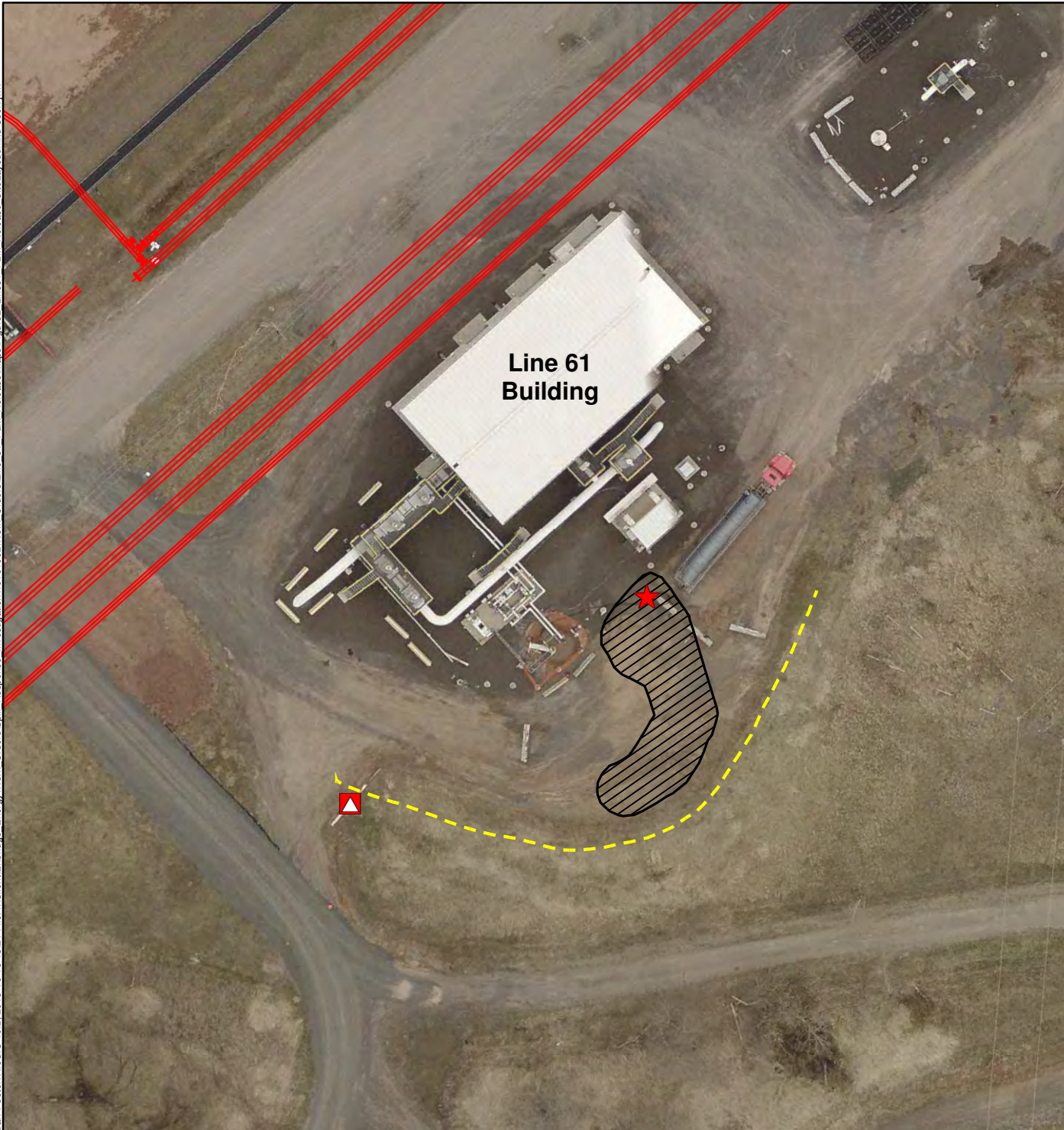
Feet
1 Inch = 2,000 Feet







Figure 1

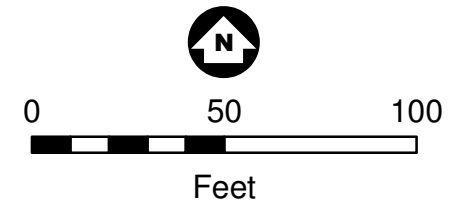
**LINE 61 PLM RELEASE
SITE LOCATION
SUPERIOR TERMINAL**
Enbridge Energy, L.P.
Superior, Wisconsin



Barr Footer: ArcGIS 10.2, 2013-10-15 12:54 File: I:\Client\Enbridge Energy\Work Orders\Spill Response Investigation\49161092\Work Orders\Line 61 PLM Release\Maps\Figure 1 Line 61 PLM Release Site Location.mxd User: jwk



-  Approximate Release Location
-  Remedial Excavation Extent
-  Berm
-  Davit
-  Pipeline Infrastructure
-  Terminal Property Boundary



1 Inch = 50 Feet
 Douglas County Aerial Photography Circa April/May, 2013
 Figure 2

**LINE 61 PLM RELEASE
 SITE LAYOUT MAP
 SUPERIOR TERMINAL**
 Enbridge Energy, L.P.
 Superior, Wisconsin



Attachment A

Enbridge Site Investigation Field Sampling and Screening Log

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: Milepost or Facility Line 61 / PLM Tanker Release

Equipment used: PID -ionization detector with 10.6 eV lamp

Background Headspace: 0.1 ppm

Date: 9/25/15

Sampler: REE

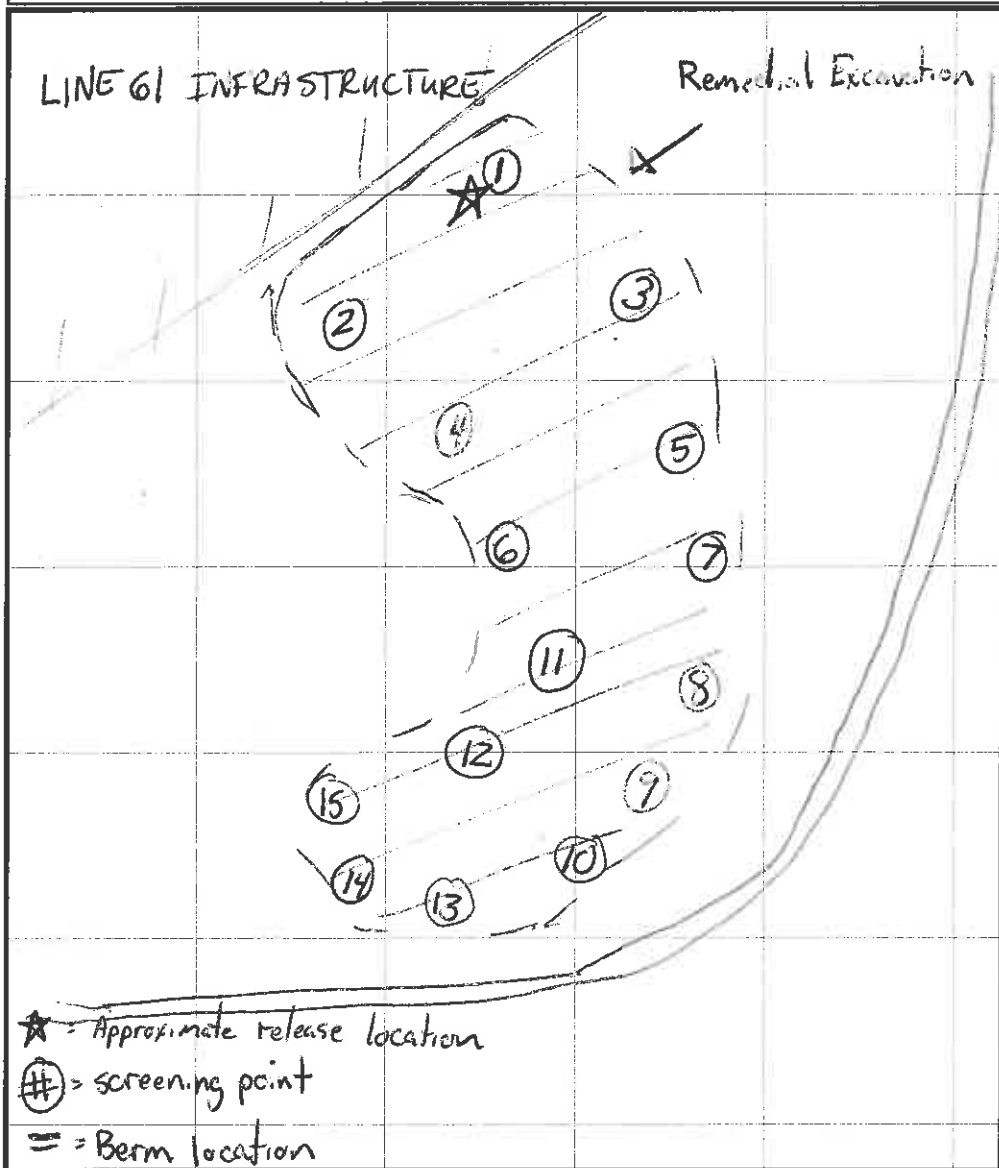
Calibration Time: 1000

Sample Nomenclature (Location - sample type - #): ---

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

Sample ID	Depth (FT)	Time (military)	Soil Type (USCS)	Color/Discolor	Odor/ Sheen	Headspace Reading (ppm)	Final Extent
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/Rainbow	275	Y
1	1	1245	CL+GP	Reddish brown	N/N	9.9	Y
2	1					2.9	Y
3	1					6.2	Y
4	1					0.9	Y
5	1					3.2	Y
6	1					4.9	Y
7	1					0.9	Y
8	1					6.9	Y
9	1.5					0.8	Y
10	1.5					0.7	Y
11	1.5					0.3	Y
12	1.5					0.7	Y
13	1.5					0.6	Y
14	1.5					0.3	Y
15	1.5	1330	▽	▽	▽	1.3	Y

SITE SKETCH: north is up; excavation extents & depths, impacted areas, sample locations, borings, wells, structures, utilities, natural features... **1 inch/grid = 20 FEET**



Attachment B

Waste Disposal Documentation

P.O. Number	Customer Code	SKB Representative	CL
-------------	---------------	--------------------	----

I. Generator Information

Generator Name: Enbridge Pipelines Limited Partnership, LLC		Generator EPA ID Number	SIC Code
Generator Location: Enbridge Superior Terminal - Line 61/PLM release	County: Douglas	Generator Contact: Alex Smith	
		Phone: 715-398-4795	Fax: 832-325-5511
Generator Mailing Address (if different: 1320 Grand Ave, Superior, WI 54880		Generator Email Address: alex.smith@enbridge.com	
Bill To Name & Address: Enbridge Energy, 1100 Louisiana Ave, STE. 3300, Houston, TX 77002		Bill To #:	Billing Contact: Alex Smith
		Phone: 715-398-4795	Fax: 832-325-5511
		Billing Email Address: alex.smith@enbridge.com	
Invoice Contact:			

II. Waste Generation Information

Waste Name: Crude contaminated soil - Line 61 release	Estimated rate of waste generation: 50	<input checked="" type="checkbox"/> one time
		<input type="checkbox"/> yearly
Generator Facility Operations and/or Site History: Enbridge Pipeline Terminal		
Describe the generating process or source of contaminated soil/debris and/or waste: Line 61/PLM Release		

III. Waste Composition and Constituents (list all known)

	Actual Range	
	%	ppm
Crude oil impacted soil	100	

IV. Waste Properties

Physical state: <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge <input type="checkbox"/> Gas	Free Liquids: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	pH Range: <input type="checkbox"/> <2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-8 <input type="checkbox"/> 8-12.4 <input type="checkbox"/> >12.5	Flash point: <input type="checkbox"/> ≤ 140°F <input type="checkbox"/> > 140°F to < 200°F <input type="checkbox"/> > 200°F	Color: Brown	Odor (describe): petroleum odor
--	--	---	---	--------------	---------------------------------

V. Waste Classification

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

VI. Shipping Information

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

VII. Certification of Non Hazardous Waste & Approval Conditions

I hereby certify and warrant, on behalf of the generator and myself that, to the best of my knowledge and belief, the information contained herein is accurate, and true and that the waste is nonhazardous as defined in Title 42, Unites States Code Section 6903, Minnesota Statute Section 116.06, Subdivision 13, and/or any rules adopted by the Minnesota Pollution Control Agency under Minnesota Statute Section 116.07.

I understand that any approval is no longer valid if there are any changes in the process generating the waste or there have been changes in the composition of the waste. Therefore, if the composition of the waste stream changes or potentially changes, I or someone representing the generator, will immediately notify SKB Environmental. I, on behalf of the generator, hereby agree to fully indemnify SKB Environmental for any damages and/or costs incurred as a result of this certification being inaccurate or untrue.

 Signature	Alex Smith Printed Name	Environmental Analyst Title	10/1/2013 Date
--	----------------------------	--------------------------------	-------------------



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

September 30, 2013

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

Work Order Number: 1304775
RE: 49161092

Enclosed are the results of analyses for samples received by the laboratory on 09/26/13. If you have any questions concerning this report, please feel free to contact me.

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

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

WI Accreditation #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC

A handwritten signature in black ink that reads "Bach Pham".

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

A handwritten signature in blue ink that reads "Samantha Jaworski".

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

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LN61-PLM-Stockpile-1	1304775-01	Soil	09/25/13 14:15	09/26/13 09:45
LN61-PLM-Stockpile-2	1304775-02	Soil	09/25/13 14:20	09/26/13 09:45

Shipping Container Information

Default Cooler Temperature (°C): 14.3

Received on ice: Yes Temperature blank was present Received on ice pack: No
Received on melt water: No Ambient: No Acceptable (IH/ISO only): No
Custody seals: No

Case Narrative:

The dry weight correction and dilution applies to the sample result, MDL, and RL.

Ethylbenzene was present in the method blank between the MDL and RL for the BTEX analysis.

DRO chromatograms for both samples are attached.

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LN61-PLM-Stockpile-1 (1304775-01) Soil Sampled: 09/25/13 14:15 Received: 09/26/13 9:45										
Diesel Range Organics	3100	480	55	mg/kg dry	50	B312609	09/26/13	09/27/13	WI(95) DRO	D-04
<i>Surrogate: Triacontane (C-30)</i>	<i>120</i>			<i>70-130 %</i>		"	"	"	"	
LN61-PLM-Stockpile-2 (1304775-02) Soil Sampled: 09/25/13 14:20 Received: 09/26/13 9:45										
Diesel Range Organics	1200	180	21	mg/kg dry	20	B312609	09/26/13	09/27/13	WI(95) DRO	D-04
<i>Surrogate: Triacontane (C-30)</i>	<i>104</i>			<i>70-130 %</i>		"	"	"	"	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LN61-PLM-Stockpile-1 (1304775-01) Soil Sampled: 09/25/13 14:15 Received: 09/26/13 9:45										
Benzene	5.9	0.032	0.0040	mg/kg dry	1	B312605	09/26/13	09/26/13	WI(95) GRO	
Ethylbenzene	6.0	0.032	0.0028	mg/kg dry	1	"	"	"	"	
Toluene	22	0.16	0.018	mg/kg dry	5	"	"	09/27/13	"	
Xylenes (total)	33	0.097	0.010	mg/kg dry	1	"	"	09/26/13	"	
Surrogate: 4-Fluorochlorobenzene	124			80-150 %		"	"	09/27/13	"	
LN61-PLM-Stockpile-2 (1304775-02) Soil Sampled: 09/25/13 14:20 Received: 09/26/13 9:45										
Benzene	0.18	0.034	0.0042	mg/kg dry	1	B312605	09/26/13	09/26/13	WI(95) GRO	
Ethylbenzene	0.28	0.034	0.0029	mg/kg dry	1	"	"	"	"	
Toluene	0.54	0.034	0.0036	mg/kg dry	1	"	"	"	"	
Xylenes (total)	1.4	0.10	0.011	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	111			80-150 %		"	"	"	"	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LN61-PLM-Stockpile-1 (1304775-01) Soil Sampled: 09/25/13 14:15 Received: 09/26/13 9:45										
% Solids	77			%	1	B312710	09/27/13	09/27/13	% calculation	
LN61-PLM-Stockpile-2 (1304775-02) Soil Sampled: 09/25/13 14:20 Received: 09/26/13 9:45										
% Solids	74			%	1	B312710	09/27/13	09/27/13	% calculation	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

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

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3I2609 - Sonication (Wisc DRO)											
Blank (B3I2609-BLK1)											
						Prepared & Analyzed: 09/26/13					
Diesel Range Organics	< 0.93	8.0	0.93	mg/kg wet							
Surrogate: <i>Triacontane (C-30)</i>	12.2			mg/kg wet	16.0		76.2	70-130			
LCS (B3I2609-BS1)											
						Prepared: 09/26/13 Analyzed: 09/27/13					
Diesel Range Organics	46.7	8.0	0.93	mg/kg wet	64.0		72.9	70-120			
Surrogate: <i>Triacontane (C-30)</i>	13.0			mg/kg wet	16.0		81.3	70-130			
LCS Dup (B3I2609-BSD1)											
						Prepared: 09/26/13 Analyzed: 09/27/13					
Diesel Range Organics	52.1	8.0	0.93	mg/kg wet	64.0		81.5	70-120	11.1	20	
Surrogate: <i>Triacontane (C-30)</i>	13.6			mg/kg wet	16.0		85.1	70-130			

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

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

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3I2605 - EPA 5035 Soil (Purge and Trap)											
Blank (B3I2605-BLK1)						Prepared & Analyzed: 09/26/13					
Benzene	< 0.0031	0.025	0.0031	mg/kg wet							
Ethylbenzene	0.0131	0.025	0.0022	mg/kg wet							B-02, J
Toluene	< 0.0027	0.025	0.0027	mg/kg wet							
Xylenes (total)	< 0.0080	0.075	0.0080	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	23.9			ug/L	25.0		95.8	80-150			
LCS (B3I2605-BS1)						Prepared & Analyzed: 09/26/13					
Benzene	103			ug/L	100		103	80-120			
Ethylbenzene	105			ug/L	100		105	80-120			
Toluene	105			ug/L	100		105	80-120			
Xylenes (total)	311			ug/L	300		104	80-120			
Surrogate: 4-Fluorochlorobenzene	24.7			ug/L	25.0		98.6	80-150			
LCS (B3I2605-BS2)						Prepared & Analyzed: 09/26/13					
Benzene	103			ug/L	100		103	80-120			
Ethylbenzene	102			ug/L	100		102	80-120			
Toluene	104			ug/L	100		104	80-120			
Xylenes (total)	303			ug/L	300		101	80-120			
Surrogate: 4-Fluorochlorobenzene	25.1			ug/L	25.0		100	80-150			
LCS Dup (B3I2605-BSD1)						Prepared & Analyzed: 09/26/13					
Benzene	102			ug/L	100		102	80-120	0.964	20	
Ethylbenzene	105			ug/L	100		105	80-120	0.300	20	
Toluene	104			ug/L	100		104	80-120	1.25	20	
Xylenes (total)	310			ug/L	300		103	80-120	0.333	20	
Surrogate: 4-Fluorochlorobenzene	25.2			ug/L	25.0		101	80-150			
Matrix Spike (B3I2605-MS1)						Source: 1304752-01 Prepared & Analyzed: 09/26/13					
Benzene	106			ug/L	100	0.130	106	80-120			
Ethylbenzene	107			ug/L	100	0.264	107	80-120			
Toluene	109			ug/L	100	<	109	80-120			
Xylenes (total)	317			ug/L	300	<	106	80-120			
Surrogate: 4-Fluorochlorobenzene	25.4			ug/L	25.0		102	80-150			

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3I2710 - General Preparation											
Duplicate (B3I2710-DUP1)											
Source: 1304777-06 Prepared & Analyzed: 09/27/13											
% Solids	79.0			%		79.0			0.00	20	

Barr Engineering Co. 4700 W 77th St Minneapolis, MN 55435	Project: 49161092 Project Number: 49161092 300 Project Manager: Ms. Andrea Nord	Work Order #: 1304775 Date Reported: 09/30/13
---	---	--

Notes and Definitions

J Parameter was present between the MDL and RL and should be considered an estimated value

D-04 The hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.

B-02 Target analyte was present in the method blank between the MDL and RL.

< Less than value listed

dry Sample results reported on a dry weight basis

NA Not applicable. The %RPD is not calculated from values less than the reporting limit.

MDL Method Detection Limit

RL Reporting Limit

RPD Relative Percent Difference

LCS Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)

MS Matrix Spike = Laboratory Fortified Matrix (LFM)

Page 1

Data File: \\lts-target\targetdata\chem\FID5.i\130926.b\038.d

Date: 27-SEP-2013 07:58

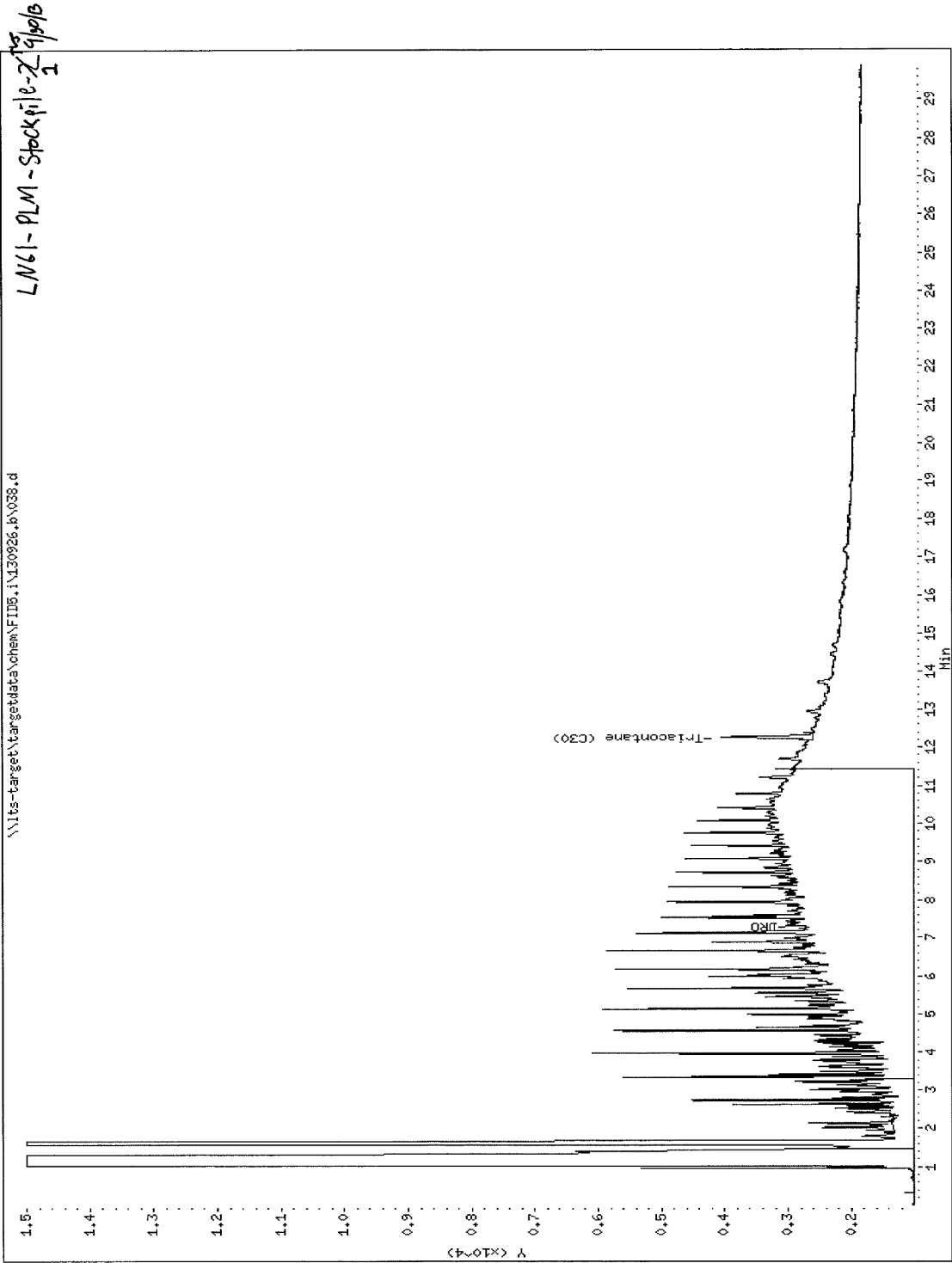
Client ID:

Sample Info: 1304775-01 x50

Instrument: FID5.i

Operator: TL

Column diameter: 0.53



Page 1

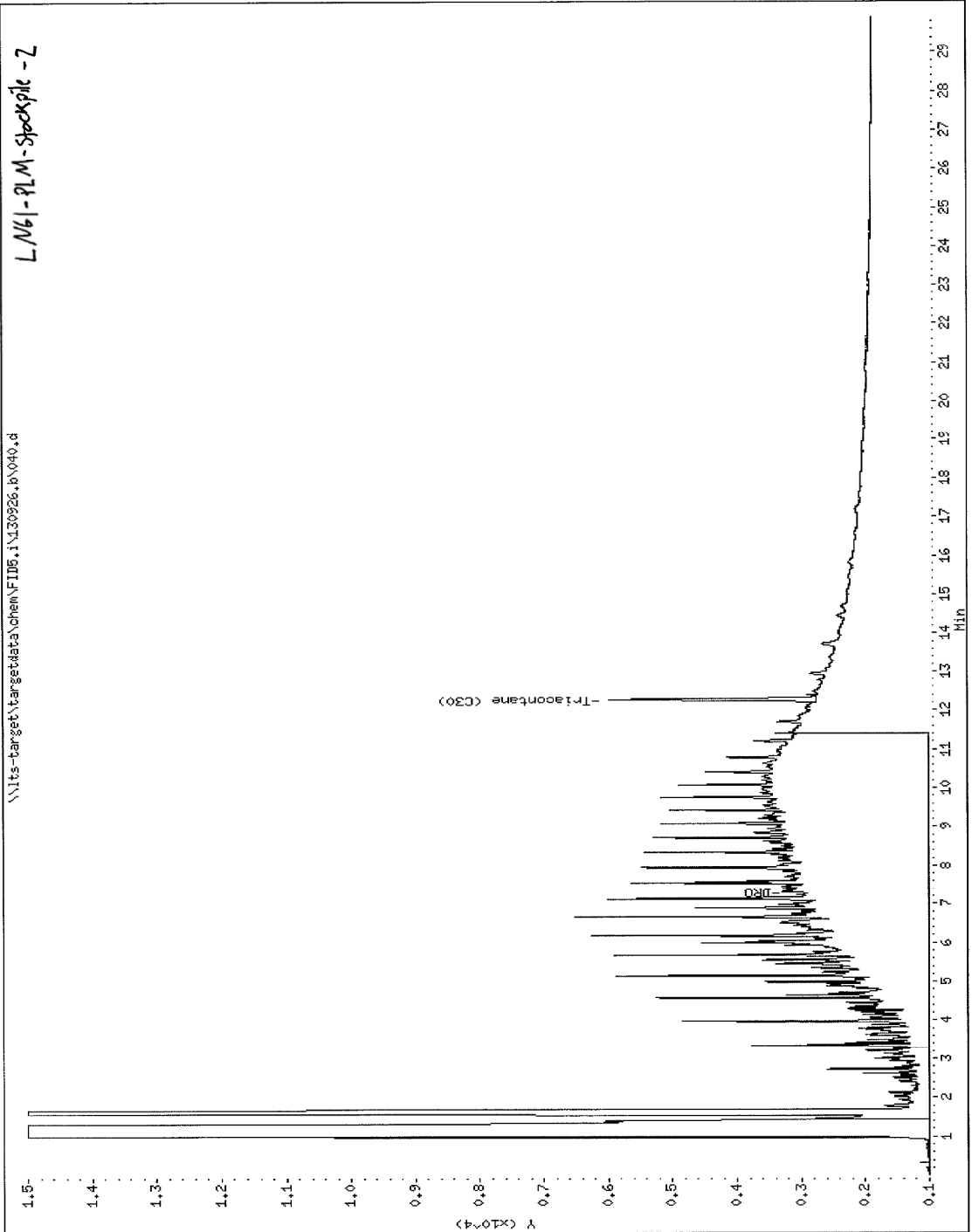
Data File: \\lts-target\targetdata\chem\FID5.i\130926.b\040.d
 Date : 27-SEP-2013 09:08
 Client ID:
 Sample Info: 1304775-02 x20

Instrument: FID5.i

Operator: TAL

Column diameter: 0.53

Column phase:



October 02, 2013

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

RE: CL13-0052 Crude Contaminated Soil - Line 61 Release

Dear Mr. Beaster,

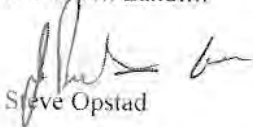
This agreement will confirm the price and length of service for disposal and /or transportation of your non-hazardous industrial material at our facility. This agreement is for the term of the Waste Approval granted by Shamrock Landfill and is for all services ordered and performance initiated within such period and does include the disposal surcharge fees which you are obligated to pay as of the date of this agreement. Shamrock Landfill may incur additional costs including but not limited to increases in state and local taxes. Shamrock Landfill may pass these costs on to the customer only after notification to the Customer. This agreement grants Shamrock Landfill the exclusive right to dispose of the referenced waste for the term of this agreement. This agreement shall automatically renew thereafter for an additional term of 24 months "Renewal Term" unless either party gives the other party written notification of termination at least 90 days prior to the termination of the then-existing term. Shamrock Landfill will notify the customer prior to the expiration of the agreement of any rate changes prior to the start of the Renewal Term.

Payment and terms are net thirty (30) days. Interest will be charged at a rate of 1 ½% per month (18% annually) on any unpaid balance 30 days after the date of the invoice. In the event Customer terminates this Agreement prior to its expiration other than as a result of a breach by Shamrock Landfill or Shamrock Landfill terminates this agreement for Customer's breach (including nonpayment) Customer agrees to pay to Shamrock Landfill as liquidated damages a sum calculated as follows: (1) if the remaining term under this agreement is six or more months Customer shall pay its average monthly charges multiplied by six; or (2) if the remaining term under this agreement is less than six months Customer shall pay its average monthly charge multiplied by the number of months remaining in the term. Customer expressly acknowledges that in the event of an unauthorized termination of this agreement the anticipated loss to Shamrock Landfill in such event is estimated to be the amount set forth in the foregoing liquidated damages provision and such estimated value is reasonable and is not imposed as a penalty.

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

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

Shamrock Landfill


Steve Opstad

Customer ACCEPTED BY: (name, position)

Alex Smith Environmental Analyst

DATE: 10-7-2013



WASTE APPROVAL Period: 10/2/2013 to 9/25/2015

Bill To Customer

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

Service For Generator

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

Disposal

Waste Description: Crude Contaminated Soil - Line 61 Release

Estimated Volume: 50 YARDS / ONE TIME ONLY

Disposal Method: Secure Non-Hazardous Landfill

Treatment Method: None Expected For Conforming Waste

Pricing

Disposal	\$16.00	Per Ton	Crude Contaminated Soil - Line 61 Release
----------	---------	---------	---

Notification of Waste Acceptance

PAGE 1 of 2
10/2/2013

CUSTOMER INFORMATION

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

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

INVOICE INFORMATION

Bill #: 2133
Enbridge Pipelines Limited Partnership,
Accounts Payable

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

Profile Sheet #:
Waste Stream #: CL13-0052
Waste Name: Crude Contaminated Soil - Line 61 Release

Thank you for selecting SHAMROCK LANDFILL for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided in the profile sheet number listed above and conditions below. Our facility has the necessary permits to allow the storage, treatment, or disposal of this waste. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

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

ACCEPTANCE INFORMATION

The waste stream identified by the reference above is acceptable for disposal.
The anticipated frequency of shipment is 50 YARDS / ONE TIME ONLY

This waste is acceptable for delivery beginning on 10/2/2013 thru 9/25/2015 at which time the material will need to be reanalyzed and recertified.

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

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

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

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

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

WASTE STREAM ANALYSIS INFORMATION

Waste Name: Crude Contaminated Soil - Line 61 Release
Physical State: Solid
Process Producing Waste: tank 5 platform excavation

PRE-ACCEPTANCE SAMPLE RESULTS

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

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

COMMENTS

AUTHORIZATION

Approval:



Date:

10/2/13



REPORT NAME: **Tons Each Load By WSID**
DESCRIPTION: **Tonnage for EACH LOAD, grouped by customer**
DATE RANGE: **01/01/2013 to 10/08/2013**
PRINTED ON (DATE): **Tuesday, October 08, 2013**

ENBSI

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

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT	LIFT	TONS
14026 (A)	16984	10/7/2013	CL13-0052	Crude Contaminated Soil - Line 61	2A	R41	1175	17.84
14036 (A)	16982	10/7/2013	CL13-0052	Crude Contaminated Soil - Line 61	2A	R42	1175	19.65
14062 (A)	16983	10/7/2013	CL13-0052	Crude Contaminated Soil - Line 61	2A	R42	1175	17.36
14069 (A)	16978	10/7/2013	CL13-0052	Crude Contaminated Soil - Line 61	2A	R42	1175	16.10
14113 (A)	16977	10/8/2013	CL13-0052	Crude Contaminated Soil - Line 61	2A	R40	1175	17.21

Total # of Loads: 5 **Total Tons: 88.16**

Grand Total (Tons): 88.16
Grand Total (Loads): 5