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Technical Memorandum - Sent Via Email

| То: | Paul Turner, Enbridge Energy |
|----------|------------------------------------------------------------------------------------------------------|
| From: | Ryan Erickson |
| Subject: | LHB Geotechnical Drilling Hydrovac Borings (Tank 5 Containment Basin) – Historical Crude Oil Impacts |
| Date: | December 3, 2012 |
| Project: | 49161092 |

This memorandum summarizes the assessment and waste management activities conducted by Barr Engineering (Barr) at the request of Enbridge Energy (Enbridge) in response to the discovery of historical crude oil impacted soil in a hydrovac boring advanced in association with a LHB geotechnical investigation at the Enbridge Superior Terminal in Superior, Wisconsin (Figure 1) in October 2012.

Background

In accordance with Enbridge Superior Terminal utility sweep safety protocols, hydrovac borings were advanced to a depth of approximately 10 feet below ground surface (bgs) prior to the drilling of deeper geotechnical borings. On October 22, 2012, the hydrovac operator noticed a petroleum odor and observed a rainbow sheen on the surface of the water within the two boreholes in the western corner of the Tank 5 containment basin (Figure 2). Enbridge was notified and in turn contacted Barr to assist in confirming the presence of crude oil impacted soil within the borehole and to manage the impacted soil handling and disposal.

Field Documentation

Barr personnel confirmed the presence of crude oil impacts within the two hydrovac borings based on visual observations and olfactory evidence. The hydrovac slurry was placed into a roll-off dumpster located at the terminal contaminated soil stockpile area (Figure 2). No additional crude oil impacted soil was reported to Barr during the remaining geotechnical drilling investigation.

Soil Disposal Coordination and Documentation

The LHB boring was located approximately 30 feet to the northwest of a Geotechnical Boring with crude impacted soil completed by Barr in August 2012 (Figure 2, BH-2; Barr Geotechnical Investigation). that also generated impacted slurry requiring disposal.

Due to the proximity of the Tank 5 borings to BH-2, it was assumed based on generator knowledge that the crude impacts in these borings originated from the same historical release. As a result, the soil from the LHB borings was handled under the Shamrock Landfill profile previously approved for BH-2 (CL12-0067). Approximately 10 tons of soil slurry from the LHB borings was solidified with cement for transportation purposes and hauled to the landfill in November 2012 with other soil that included under the same profile. Waste documentation has been attached to the memo.

Conclusions

Enbridge indicated that the crude oil impacts discovered in the LHB borings were considered historical impacts. Barr checked the Enbridge historical release files and identified a 220-barrel release (#338) approximately 100 feet to the north of the LHB borings that occurred in 1967. This historical release occurred prior to the current WDNR spill reporting requirements and is therefore not part of the WDNR BRRTS database.

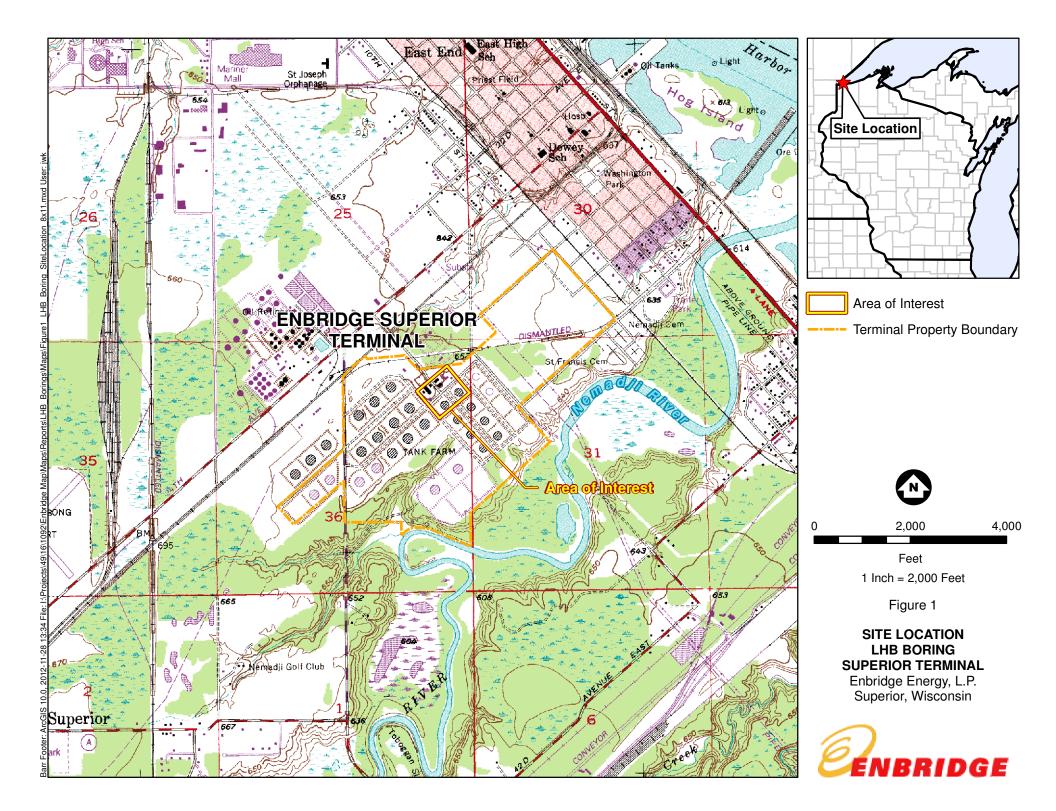
As was indicated in our November 28, 2012 memo to Enbridge regarding the BH-2 geotechnical boring, it is unclear whether the WDNR would now require this previously unreported and recently rediscovered spill to be reported since it occurred and was documented prior to the currently established release reporting requirements. It is recommended that Enbridge work with the WDNR to determine the proper reporting protocol (if any) for historic release sites at the Superior Terminal property. The rediscovered presence of this previously unreported release will likely fall under the WDNR spill reporting requirements (s. 292.11). However, unless determined otherwise from discussions Enbridge has with the WDNR, Barr is recommending no further action at this time.

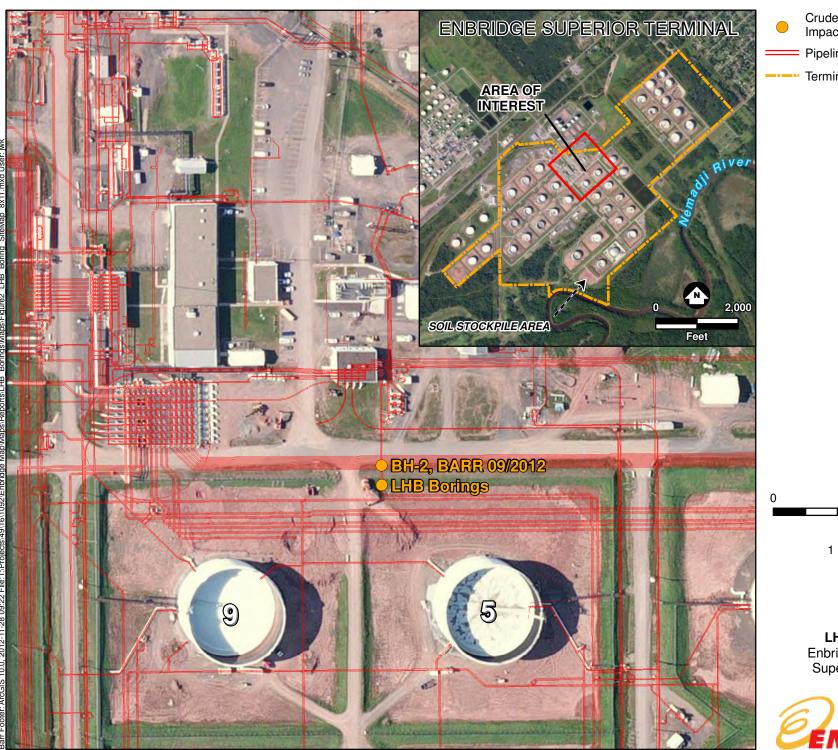
Attachments

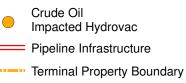
Figure 1 – Boring Site LocationFigure 2 – Site Map LHB BoringsSKB Soil Profile with Legend Analytical Report for BH-2

SKB Waste Acceptance Letter for BH-2

Waste Disposal Documentation for LHB Borings (CL12-0067)







10.0.

150 300 Feet

1 Inch = 150 Feet

Figure 2

SITE MAP LHB BORINGS Enbridge Energy, L.P. Superior, Wisconsin





REPORT NAME:Tons Each Load By WSIDDESCRIPTION:Tonnage for EACH LOAD, grouped by customerDATE RANGE:01/01/2012 to 11/30/2012PRINTED ON (DATE):Friday, November 30, 2012

ENBS1

Enbridge Pipelines Limited Partnership,

2800 East 21st St Superior WI 54880

| | | | | | | d Total (1 Total (Lo | , | 36.73 3 |
|----------|----------|------------|--------------|-----------------------------------|------|-------------------------|-----------|------------|
| | | | | Total # of Loads: 3 | | То | tal Tons: | 36.73 |
| 5766 (A) | 10875 | 11/12/2012 | CL12-0067 | Crude Contaminated Soil (Pipe Rac | 1A | T34 | 1170 | 9.93 |
| 5765 (A) | 10874 | 11/12/2012 | CL12-0067 | Crude Contaminated Soil (Pipe Rac | 1A | T34 | 1170 | 14.56 |
| 5762 (A) | 10873 | 11/12/2012 | CL12-0067 | Crude Contaminated Soil (Pipe Rac | 1A | T34 | 1170 | 12.24 |
| LOAD # | MANIFEST | ARRIVED | WASTE STREAM | WASTE NAME | CELL | SPOT. | LIFT | TONS |





| P.O. Number | Customer Code | S | KB Represe | ntative Jon Penh | neiter | CL | , | |
|-------------------------------------------------------------------------------|--------------------------------|----------------|---------------|----------------------------------------------|-------------|--------------|------------------------------|--------------|
| I. Generator Information | on | | | | | | | |
| Generator Name: Enbridge Pipe Partnership, LLC | elines Limited | Generator I | EPA ID Num | ber | | | SIC Code | |
| Generator Location: Enbridge Superior Terminal -Pipe Rack | County: Douglas | Generator (| Contact: Pa | ul Turner | | | | |
| Boring | Douglas | Phone: 7' | 15-398-47 | 52 | Fax: 71 | 5-398-322 | 23 | |
| Generator Mailing Address (if differen | nt: 1320 Grand Ave. | Generator I | Email Addres | s: paul.turner@ | enbridae | .com | | |
| Superior, WI 54880 | , | | | | | | | |
| Bill To Name & Address: Enbridg Energy, 1100 Louisiana Ave, | | Billing Cont | act: Paul | Turner | | | | |
| 3300, Houston, TX 77002 | | Phone: 7' | 15-398-91 | 92 | Fax: 71 | 5-398-322 | 3 | |
| Invoice Contact: | - | Billing Ema | il Address: | paul.turner@ent | oridge.co | m | | |
| II. Waste Generation Ir | oformation | | | | | | | |
| Waste Name: Pipe Rack Boring | | | Estimat | ed rate of waste ger os. | | | one | e time |
| Generator Facility Operations and/or | Site History: Enbridge Pipe | eline Termi | | | | | | ··· y |
| Describe the generating process or s | source of contaminated soil/de | bris and/or v | waste: Pip | eline Terminal Act | ivities | | | |
| III. Waste Composition | and Constituents (list all kn | own) | | | | | Actual Rang | • |
| Crude contaminated soil | | | | | | | % 100 | ppm |
| | | | | | | | | |
| | | | | | | | | |
| IV. Waste Properties | | | | | | | | |
| Solid Liquid [| | · · | 2.4 2.4 | point: 140°F 140°F to < 200°F 200°F | Cold Bro | | Odor (de petroleu odor | |
| V. Waste Classification | | 12.0 | | 2001 | I | | | |
| Waste stream properties (answe | | | | Does this waste | | | 🗌 Yes | 🛛 No |
| Does this waste stream contain a hazardous waste, either in pure | 2 • • • • | s Ves | s 🛛 No | Is this waste leth 7045.0131 Subp | | n. Rules | 🗌 Yes | 🖾 No |
| treatment residue? Does this waste stream contain | PCB material | | s 🛛 No | Is this waste rec | velable? | | Yes | 🛛 No |
| If yes, concentration: | ppm | | | Is this waste exp | - | | Yes | |
| Does this waste stream contain | | 🗌 Yes | | Is this waste infe | | | Yes | 🖾 No |
| Does this waste contain asbesto | | | | Is this putrescible | | | | No No |
| Does this waste contain oxidizer Does this waste contain radioact | | ☐ Yes ☐ Yes | | Is this waste den Is this waste sev | | | ☐ Yes ☐ Yes | 🛛 No 🕅 No |
| Please attach any available inf | | | | | | | | |
| | nations. Include MSDS's and | d any inforr | nation from | other agencies (i.e | e., MPCA, I | USEPA) | | |
| VI. Shipping Informatio Proper DOT Shipping Name (per CF | | | | | | | | |
| Reportable Quantity | DOT Hazard Class | UN/NA N | lumber | | Pac | king Group | | |
| Method of packaging: drums (si |) | Method o | of shipment | nd dump 🔲 Rail | | er (Specify) | | |
| Bulk Solids boxes (si | ze) | | | | | | | |
| | Hazardous Waste & Approva | | | | | | | . 1 |
| I hereby certify and warrant, on beha and true and that the waste is nonha | | | | | | | | |
| and/or any rules adopted by the Mini | nesota Pollution Control Agend | cy under Min | inesota Stati | ute Section 116.07. | | | | |
| I understand that any approval is no | | | | | | | | |
| of the waste. Therefore, if the compo | generator, hereby agi | | | | | | | |
| 120 | | | | _ . | | | | |
| | Paul Turn Printed Nar | | | Environme Title | ntal Analy | <u>yst</u> | Date | - |
| | | | | | | | Dale | |



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

August 15, 2012

REVISION

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

Work Order Number: 1203709 RE: 49161172

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

Enclosed are the results of analyses for samples received by the laboratory on 08/10/12. 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

TH

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

yla Im

Tyler Jones Chemist I tjones@legend-group.com

Legend Technical Services, Inc.

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



| Barr Engineering Co. | Project: | 49161172 | | | |
|--------------------------------|-----------------------|--------------------|----------|-----------------------|-------------------|
| 4700 W 77th St | Project Number: | 49161172 Pipe Rock | | Work Or | rder #: 1203709 |
| Minneapolis, MN 55435 | Project Manager: | Ms. Andrea Nord | | Date Re | eported: 08/15/12 |
| | ANALYTICAL F | REPORT FOR SAM | MPLES | | |
| Sample ID | | Laboratory ID | Matrix | Date Sampled | Date Received |
| Pipe Rock | | 1203709-01 | Soil | 08/09/12 14:00 | 08/10/12 08:45 |
| Trip Blank | | 1203709-02 | Methanol | 08/09/12 00:00 | 08/10/12 08:45 |
| | | | | | |
| Shipping Container Information | tion | | | | |
| Default Cooler | Temperature (°C): 6.8 | | | | |
| Received on ice: Yes | Temperature blank v | was present | | l on ice pack: No | |
| Received on melt water: No | Ambient: No | | Acceptab | ole (IH/ISO only): No | C |
| Custody seals: No | | | | | |

Case Narrative:

This report was revised on August 15, 2012 to attach the DRO chromatogram for the sample. This report supercedes the report dated August 14, 2012.



| Barr Engineering Co. | Project: | 49161172 | | |
|-----------------------|------------------|--------------------|----------------|----------|
| 4700 W 77th St | Project Number: | 49161172 Pipe Rock | Work Order #: | 1203709 |
| Minneapolis, MN 55435 | Project Manager: | Ms. Andrea Nord | Date Reported: | 08/15/12 |

DRO/8015B Legend Technical Services, Inc.

| Analyte | Result | RL | MDL | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------|-------|-----------|-------------|----------|---------|----------|----------|------------|-------|
| Pipe Rock (1203709-01) Soil | Sampled: 08/09/12 | 14:00 | Received: | 08/10/12 8: | 45 | | | | | |
| Diesel Range Organics | 120 | 14 | 2.3 | mg/kg dry | 1 | B2H1312 | 08/13/12 | 08/13/12 | WI(95) DRO | L1 |
| Surrogate: Triacontane (C-30) | 86.5 | | | 70-130 % | | " | " | " | " | |

| Barr Engineering Co. | | Proje | ect: | 49161172 | | | | | | |
|----------------------------------|-----------------|----------|--------------|--------------|-----------|---------|----------|----------|-------------|----------|
| 4700 W 77th St | | Proje | ect Number: | 49161172 | Pipe Rock | | | Wo | rk Order #: | 1203709 |
| Minneapolis, MN 55435 | | Proje | ect Manager: | Ms. Andre | a Nord | | | Dat | e Reported: | 08/15/12 |
| | | | WI(9 | 95) GRO/ | 3015B | | | | | |
| | | L | egend Te | chnical S | ervices | , Inc. | | | | |
| Analyte | Result | RL | MDL | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| Pipe Rock (1203709-01) Soil Sa | mpled: 08/09/12 | 14:00 | Received: | 08/10/12 8: | 45 | | | | | |
| Benzene | <0.036 | 0.036 | 0.0054 | mg/kg dry | 1 | B2H1306 | 08/13/12 | 08/13/12 | WI(95) GRO | 1 |
| Ethylbenzene | <0.036 | 0.036 | 0.0067 | mg/kg dry | 1 | " | " | " | " | |
| Toluene | <0.036 | 0.036 | 0.0034 | mg/kg dry | 1 | " | " | " | " | |
| Xylenes (total) | <0.11 | 0.11 | 0.017 | mg/kg dry | 1 | " | " | " | " | |
| Surrogate: 4-Fluorochlorobenzene | 98.2 | | | 80-150 % | | " | " | " | " | |
| Trip Blank (1203709-02) Methane | ol Sampled: 08/ | /09/12 0 | 0:00 Rece | ived: 08/10/ | 12 8:45 | | | | | |
| Benzene | <0.025 | 0.025 | 0.0038 | mg/kg wet | 1 | B2H1306 | 08/13/12 | 08/13/12 | WI(95) GRO | 1 |
| Ethylbenzene | <0.025 | 0.025 | 0.0047 | mg/kg wet | 1 | " | " | " | " | |
| Toluene | <0.025 | 0.025 | 0.0024 | mg/kg wet | 1 | " | " | " | " | |
| Xylenes (total) | <0.075 | 0.075 | 0.012 | mg/kg wet | 1 | " | " | " | " | |
| Surrogate: 4-Fluorochlorobenzene | 94.3 | | | 80-150 % | | " | " | " | " | |



| Barr Engineering Co. | | Proj | ect: | 49161172 | 2 | | | | | |
|-----------------------------|-------------------|-------|-----------------|------------|-------------|---------|----------|----------|---------------|----------|
| 4700 W 77th St | | Proj | ect Number: | 49161172 | 2 Pipe Rock | | | Wo | rk Order #: | 1203709 |
| Minneapolis, MN 55435 | | Proj | ect Manager: | Ms. Andre | ea Nord | | | Dat | e Reported: | 08/15/12 |
| | | L | PEF egend Te | CENT S | | , Inc. | | | | |
| Analyte | Result | RL | MDL | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| Pipe Rock (1203709-01) Soil | Sampled: 08/09/12 | 14:00 | Received: | 08/10/12 8 | :45 | | | | | |
| % Solids | 65 | | | % | 1 | B2H1408 | 08/14/12 | 08/14/12 | % calculation | n |



| Barr Engineering Co. | Project: | 49161172 | | |
|-----------------------|------------------|--------------------|----------------|----------|
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| Minneapolis, MN 55435 | Project Manager: | Ms. Andrea Nord | Date Reported: | 08/15/12 |

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 B2H1312 - Sonication (Wisc D | RO) | | | | | | | | | | |
| Blank (B2H1312-BLK1) | | | | F | Preparec | & Analyze | ed: 08/13/ | 12 | | | |
| Diesel Range Organics | < 8.0 | 8.0 | 1.3 | mg/kg wet | | | | | | | |
| Surrogate: Triacontane (C-30) | 11.6 | | | mg/kg wet | 16.0 | | 72.7 | 70-130 | | | |
| LCS (B2H1312-BS1) | | | | F | reparec | & Analyze | ed: 08/13/ | 12 | | | |
| Diesel Range Organics | 50.7 | 8.0 | 1.3 | mg/kg wet | 64.0 | | 79.2 | 70-120 | | | |
| Surrogate: Triacontane (C-30) | 12.4 | | | mg/kg wet | 16.0 | | 77.8 | 70-130 | | | |
| LCS Dup (B2H1312-BSD1) | | | | F | reparec | 1: 08/13/12 | Analyzed | 1: 08/14/12 | | | |
| Diesel Range Organics | 51.5 | 8.0 | 1.3 | mg/kg wet | 64.0 | | 80.4 | 70-120 | 1.59 | 20 | |
| Surrogate: Triacontane (C-30) | 13.6 | | | mg/kg wet | 16.0 | | 85.3 | 70-130 | | | |



| Barr Engineering Co. | Project: | 49161172 | | |
|-----------------------|------------------|--------------------|----------------|----------|
| 4700 W 77th St | Project Number: | 49161172 Pipe Rock | Work Order #: | 1203709 |
| Minneapolis, MN 55435 | Project Manager: | Ms. Andrea Nord | Date Reported: | 08/15/12 |

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

| | | | | | Spike | Source | | %REC | | %RPD | |
|----------------------------------|---------------|-----------|---------|-----------|----------|-----------|-------------|--------|------|-------|-------|
| Analyte | Result | RL | MDL | Units | Level | Result | %REC | Limits | %RPD | Limit | Notes |
| Batch B2H1306 - EPA 5035 Soil (P | urge and Trap |) | | | | | | | | | |
| Blank (B2H1306-BLK1) | | | | | Prepared | & Analyze | ed: 08/13/1 | 12 | | | |
| 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 | 23.0 | | | ug/L | 25.0 | | 91.9 | 80-150 | | | |
| LCS (B2H1306-BS1) | | | | | Prepared | & Analyze | ed: 08/13/1 | 12 | | | |
| Benzene | 92.6 | | | ug/L | 100 | | 92.6 | 80-120 | | | |
| Ethylbenzene | 95.9 | | | ug/L | 100 | | 95.9 | 80-120 | | | |
| Toluene | 93.1 | | | ug/L | 100 | | 93.1 | 80-120 | | | |
| Xylenes (total) | 288 | | | ug/L | 300 | | 95.9 | 80-120 | | | |
| Surrogate: 4-Fluorochlorobenzene | 24.0 | | | ug/L | 25.0 | | 96.1 | 80-150 | | | |
| LCS Dup (B2H1306-BSD1) | | | | | Prepared | & Analyze | ed: 08/13/1 | 12 | | | |
| Benzene | 95.1 | | | ug/L | 100 | | 95.1 | 80-120 | 2.72 | 20 | |
| Ethylbenzene | 98.5 | | | ug/L | 100 | | 98.5 | 80-120 | 2.77 | 20 | |
| Toluene | 96.1 | | | ug/L | 100 | | 96.1 | 80-120 | 3.17 | 20 | |
| Xylenes (total) | 301 | | | ug/L | 300 | | 100 | 80-120 | 4.59 | 20 | |
| Surrogate: 4-Fluorochlorobenzene | 25.0 | | | ug/L | 25.0 | | 100 | 80-150 | | | |
| Matrix Spike (B2H1306-MS1) | S | ource: 12 | 203710- | 01 | Prepared | & Analyze | ed: 08/13/1 | 12 | | | |
| Benzene | 94.1 | | | ug/L | 100 | < | 94.1 | 80-120 | | | |
| Ethylbenzene | 97.7 | | | ug/L | 100 | 0.134 | 97.5 | 80-120 | | | |
| Toluene | 95.5 | | | ug/L | 100 | 0.139 | 95.4 | 80-120 | | | |
| Xylenes (total) | 293 | | | ug/L | 300 | < | 97.7 | 80-120 | | | |
| Surrogate: 4-Fluorochlorobenzene | 23.7 | | | ug/L | 25.0 | | 94.7 | 80-150 | | | |



| Barr Engineering Co. | Project: | 49161172 | | |
|-----------------------|------------------|--------------------|----------------|----------|
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| Minneapolis, MN 55435 | Project Manager: | Ms. Andrea Nord | Date Reported: | 08/15/12 |

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 B2H1408 - General Preparation | | | | | | | | | | | |
| Duplicate (B2H1408-DUP1) | S | ource: 1 | 203714-0 | 2 | Prepared | l & Analyze | ed: 08/14/1 | 2 | | | |
| % Solids | 91.0 | | | % | | 91.0 | | | 0.00 | 20 | |
| Duplicate (B2H1408-DUP2) | S | ource: 1 | 203714-0 | 4 | Prepared | & Analyze | ed: 08/14/1 | 2 | | | |
| % Solids | 93.0 | | | % | | 94.0 | | | 1.07 | 20 | |

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

| Barr Engineering Co. | Project: | 49161172 | | |
|-----------------------|------------------|--------------------|----------------|----------|
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| Minneapolis, MN 55435 | Project Manager: | Ms. Andrea Nord | Date Reported: | 08/15/12 |

Notes and Definitions

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

| Chain of 4700 West 77th | Street | | | 120' Endi | sdyp_ | | | 1 | | | | 100 | lumb Vater | 19052 | of Con | taine | rs/P | rese | rvati [.] Soil | /e | | П | coc | : _1 | 0 | • |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|-------------------------------------|------------------------------------|-------------------------------|----------|--------------|------|--------------|---------------|---------|----------------------------------|--------------------------|----------------------|--------|--------|----------|---------|----------------------------|----------------------------------|----|-----------------|------------------|--------------|---------|--------------|
| BARR Minneapolis, M. (952) 832-2600 | N 5543. | 5-4803 | | | | 5 | | | | Π | | | | | | | | | | | | Π | Project Manag | | | |
| Project Number: 49/16- | 117 | 2 | | 3 | Si | | 4 | | | | | | - | - | | | 107 | | | | 12 | era | | | 5 | |
| Project Name: Pipe R | acK | Ge | otec | 102al | | | | | | | (HNDA) | (*) (| E# (p | | | 3 | DH) #1 | (post | 2#5 | ('saudua | | Containe | Project QC C | ; ontact: | <u></u> | <u>w</u> |
| Sample Origination State 💆 🗜 | (use two | letter | postal st | ate abbreviation) | | | | | | | served | HNO ₃ | eserve. | (°0 | | CHO-M | red Me | prote | served | c vial, | | | 0) | | 8 | 7 |
| COC Number: | | | | | N | <u></u> | 221423 | 52 | 56 | - C | uopre | tals (| (uapr | #ngc | | L Para | EX (Is | i por | upre | (plasti | | mber | Samps | a oy: | μ. | |
| Location | Start Depth | Stop Depth | Depth Unit (m./ft. or in.) | Collection Date (mm/dd/yyyy) | Collection Time (hb:mm) | Mater | atrix 105 | Ê. | ompe Comp | VOCs (HCI) #1 | SVOCs (| Total Metals (HNO ₃) | General (unpreserved) #3 | Nutrients (H2SO4) #4 | | | GRO, BTI | DRO (13 | SVOCs. (unpreserved) #2 | % Solids (plastic vial, unpres.) | | Total Number Of | Labora | nory: _ | Leo | 122 Ind |
| 1. Roe Rock | 1 | - - | - | 8/9/12 | 1400 | | × | ŀ | ĸ | | | | | | | | | X | | 1.1 | ſ | 3 | Rus A BJ | i A | ulys | 3 |
| Trip Blank | | | | | | | | | | | | | - 250 5- | | | | | | | | | | B1 | EX | 1 | lo |
| 3. 3 /14/2 1 / | | | | | | | | | | | | | | | ł | | | | | | | | | r | 1 | |
| 4. | 5 | | | | | | | | 13 | | | | | | | Τ | | | | | | Π | 0 | | | |
| 5. | 5 | | | | | Π | | I | | Π | - | T | 1 | | | T | | | | | с, | Π | | | | |
| 6. | 1 | 7 | | | - | Ħ | | Ħ | | t | | | | 1 | | 1 | | | | - | - | H | | | | |
| 7. | | | | | | | | | | | | | 200 | 3, 3 | | | | | | 2.10 | | Η | 2 | | | |
| 8. | | | | | | Ħ | | Ħ | | Ħ | | | | | | | | T | | | | H | | | | |
| 9. | | | | | | | | | 1 | | | | | | | | | | | | | Ħ | | | | |
| 10. | | | | | 25 | | | Ħ | | | | | | | | | | | | | | Π | 2 | | | |
| Common Parameter/Container | | | 2 | Relinquished By: | C) | 10 | 0n | lce? | | Date | | | lime | | Receiv | red b | y: | └╌┙ | ليلم | | | <u>L</u> | | Dat | te | Time |
| Volatile Organics = BTEX, GR P2 - Semivolatile Organics = PAHs, Full List, Herbicide/Pesticide/PC | PCP, Diou By | ins, 8270 | -un [] | Relinquished By: | ر مرعم « مر | . | Ou | | _ | Date | | | <u>Fime</u> | - | Receiv | R | Ph | ~ | R | > | | | | 8/19 | ъ I | Time 8:45 |
| General = pH, Chloride, Fluorid TDS, TS, Sulfate Natrienss = COD, TOC, Phenol | | | 5 | Samples Shipped | VIA: □Air F □Other | | 1 | Fed | ral | Ехрге | 85 | □ Sa | umplo | Cr | Air Bi | II N | mbe | r: | | | | | | ++ | | |

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Inc.

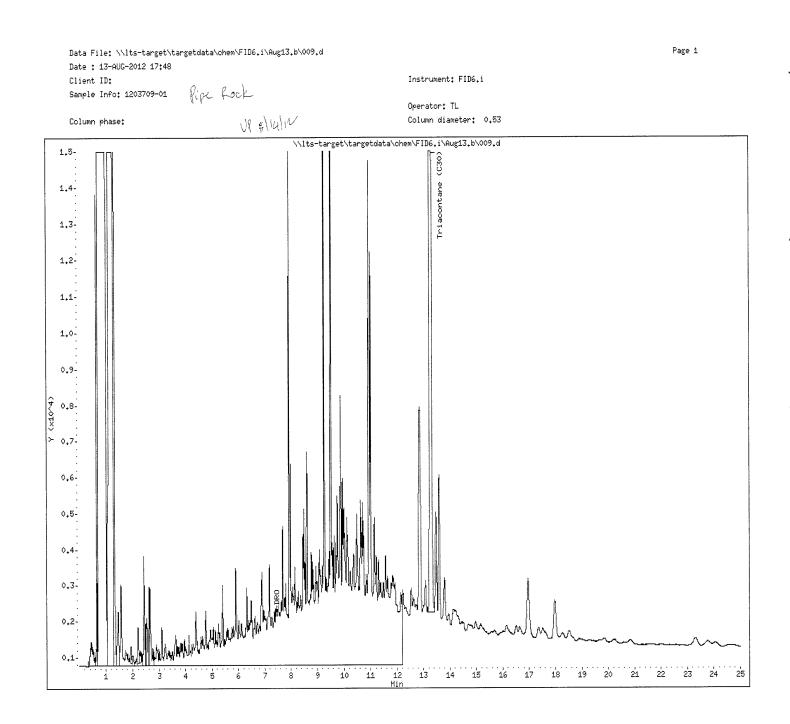
88 Empire Drive St Paul, MN 55103 Tel: 651-642-1150 Fax: 651-642-1239

Legend Technical Services, Inc.

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

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August 27, 2012

Paul Turner Enbridge Pipelines Limited Partnership, LLC Central Square Office 1320 Grand Ave Superior, WI 54880

RE: CL12-0067 Crude Contaminated Soil (Pipe Rack Boring)

Dear Mr. Turner,

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 SKB 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. SKB may incur additional costs including but not limited to increases in state and local taxes. SKB may pass these costs on to the customer only after notification to the Customer. This agreement grants SKB 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. SKB 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 SKB or SKB terminates this agreement for Customer's breach (including nonpayment) Customer agrees to pay to SKB 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 SKB 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 Rosemount, MN office at SKB Rosemount, 13425 Courthouse Blvd, Rosemount, MN 55068 or Via Fax at 651/438-1549 or email to jonp@skbinc.com.

SKB Shamrock Landfill Ion Penheiter Envyronmental Analyst Customer ACCEPTED DATE: 8/28/2012

WASTE APPROVAL Period: 8/27/2012 to 8/9/2014





Bill To Customer

Enbridge Pipelines Limited Partnership, LLC Central Square Office 1320 Grand Ave Superior, WI 54880

Service For Generator

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

Disposal

Waste Description: Crude Contaminated Soil (Pipe Rack Boring)

Estimated Volume: 10 YARDS / ONE TIME ONLY

Disposal Method: Secure Non-Hazardous Landfill

Treatment Method: None Expected For Conforming Waste

Pricing

Disposal

\$19.00 Per Ton

Crude Contaminated Soil (Pipe Rack Boring)





Notification of Waste Acceptance

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CUSTOMER INFORMATION

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

2800 East 21st St Superior, WI 54880 Contact: Paul Turner Phone: (715) 398-4752

INVOICE INFORMATION

Bill #: 2133 Enbridge Pipelines Limited Partnership, CEntral Square Office

1320 Grand Ave Superior, WI 54880 Contact: Paul Turner Phone: (715) 398-4752

Profile Sheet #: Waste Stream #: CL12-0067 Waste Name: Crude Contaminated Soil (Pipe Rack Boring)

Thank you for selecting SKB 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 10 YARDS / ONE TIME ONLY

This waste is acceptable for delivery beginning on 8/27/2012 thru 8/9/2014 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 SKB Shamrock Landfill. Free liquids must be solidified either prior to shipment to SKB Shamrock Landfill or at SKB 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 SKB Shamrock Landfill manifest.





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WASTE STREAM ANALYSIS INFORMATION

Waste Name:Crude Contaminated Soil (Pipe Rack Boring)Physical State:SolidProcess Producing Waste:pipeline terminal activities

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 SKB Shamrock Landfill employees for the purpose of determining waste acceptability. No other claims are made or implied.

COMMENTS

| AUTHORIZATION Approval: | 1. Del- | Date: | 8/28/12 |
|----------------------------|---------|-------|---------|
| | 0 | | |