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Technical Memorandum

To: Karl Beaster, Enbridge Energy
From: Ryan Erickson and Laura Novitzki
Subject: Enbridge Superior Terminal Soil Management Area Construction Oversight
Date: February 10, 2014
Project: 49161092

This memorandum summarizes the field screening, soil sampling and off-site soil management coordination activities completed by Barr Engineering Company (Barr) at the request of Enbridge Energy (Enbridge) during the construction of the current Superior Terminal (Terminal) Soil Management Area (SMA). These activities took place between December 2011 and September 2013.

Background

The Enbridge Superior Terminal in Superior, Wisconsin (Figure 1) is an approximately 450-acre facility that consists of 41 crude oil storage tanks and associated pipeline and Terminal infrastructure. Whenever excess soil is generated at the Terminal during infrastructure construction or maintenance activities or during contaminated soil remedial excavation activity, the soil is transported to the Terminal SMA until an off-site management plan is developed and approved. Soil is assumed to be "unimpacted" (and is referenced as such) unless field screening and/or analytical sample results indicate otherwise.

The SMA is an approximately 2.75-acre area located on the south end of the Superior Terminal (Figure 1). The SMA Facility is in an unused tank containment basin that has approximately 3-foot to 8-foot high berms around its perimeter. The ground surface and berms of the SMA consist of fat Superior clay (native and fill) that continues to a depth of approximately 150 feet below ground surface (bgs), based on area soil borings and well logs. Both unimpacted and contaminated soil is managed within the SMA in separate designated stockpile areas (Photos 1 and 2; Figures 2 and 3).

Between 2011 and 2013, a permanent SMA Facility was designed and constructed to better manage the soil generated at the Superior Terminal (Photos 3 and 4; Figure 3). The new SMA Facility infrastructure consists of: a contaminated solid soil stockpile building; contaminated hydrovac slurry roll-off containers; unimpacted hydrovac slurry roll-off containers; unimpacted soil stockpile areas; soil management

documentation buildings; equipment and soil staging area; and associated roadways. As part of the permanent SMA Facility construction project, excess soil was hauled off-site for site preparation purposes and previously-used, temporary soil management structures were removed.

Enbridge requested that Barr complete the following tasks during the permanent SMA Facility site preparation and construction activities:

- Identify the Wisconsin Department of Natural Resources (WDNR) unregulated soil criteria for off-site reuse
- Identify and segregate contaminated soil encountered during construction excavation activities
- Characterize SMA soil to be managed at off-site facilities
- Assist with coordination and documentation of the off-site management of unimpacted and contaminated soil
- Assess the environmental conditions of areas with identified contaminants
- Document the residual contamination left in place, if applicable

Barr was onsite as needed during permanent SMA Facility site preparation and construction activities to carry out the above tasks.

Wisconsin's Solid Waste Management Code and Statutes do not use the term "clean fill" and do not provide specific guidance regarding the management of unregulated fill. However, s. NR 500.08(2)(a) Wisconsin Administrative Code addresses this general topic, and exemptions can be evaluated on a case-by-case basis with the WDNR staff person assigned to the county in which the soil is excavated. In June of 2013, local WDNR staff was contacted to establish criteria for approving unimpacted soil for off-site unregulated reuse, as documented in Attachment A. The identified screening and sampling criteria is provided below:

- No contaminants are observed in the excavation or associated stockpiled soil.
- Soil is not excavated from a site with known historical impacts.
- Analytical sampling concentration results are below WDNR groundwater Residual Contaminant Levels (RCLs).
- Stockpile field screening headspace readings are less than 10 parts per million (ppm) with no observed contamination.

Enbridge considers soil meeting the above criteria exempt from NR 500.08(2)(a) requirements.

The off-site transport and management of unimpacted soil associated with the permanent SMA Facility construction project addressed in this memo took place prior to communication with the WDNR; however, the field screening used during the project met the WDNR criteria and the analytical sampling methods used were as rigorous, if not more rigorous, than those identified by the WDNR.

Field Methods

Between 2011 and 2013, Barr responded to multiple requests to characterize unimpacted and contaminated soil located in the SMA and identify appropriate off-site management facilities. Barr characterized the soil by field screening it for the presence of organic vapors using a photoionization detector (PID) and documented other potential indicators of impacts such as odor, discoloration, and sheen (Attachment B). Soil with a PID headspace exceeding 10 ppm or with other identified indicators of impacts was considered contaminated and was segregated for disposal at an approved landfill facility. Representative analytical soil samples were also collected from the unimpacted soil stockpiles and contaminated soil stockpiles and submitted for laboratory analysis. The analyzed parameters varied between sampling events based on the off-site soil management facility requirements (Tables 1 through 3; Attachment C). Unimpacted soil that met the unregulated soil criteria for off-site reuse was transported to Enbridge-approved gravel pit facilities.

Below is a summary of the project field activities, findings and resulting actions. Figure 2 illustrates the SMA site conditions and characterization sampling points prior to and during the construction of the permanent SMA. The current permanent SMA Facility layout is shown on Figure 3. Field screening logs are included in Attachment B. Analytical sampling data is summarized in Tables 1, 2 and 3 and the laboratory reports are included in Attachment C. Unimpacted soil hauling tracking documentation is included in Table 4 and Attachment D, and contaminated soil waste disposal documentation is included in Attachment E.

Field Activities and Results

Unimpacted SMA Soil: Characterization and Management

Between 2011 and 2013, Barr field screened and sampled soil located in the SMA's unimpacted soil handling area prior to its approval for management at off-site facilities. Below are descriptions of the soil characterization events and subsequent management actions:

Off-site Construction Fill Inquiry – May 2011

A local industry expressed potential interest in using excess soil from the SMA as fill in a nearby construction project. Enbridge requested that Barr field screen and sample soil from the SMA to determine whether the soil could be used as construction fill. Barr field screened soil on May 17, 2011 from six locations (Figure 2) and no crude oil impacts were detected.

Analytical samples *Stockpile-1* through *Stockpile-6* were collected from the each of the field screening locations and were submitted to Pace Analytical Services in Minneapolis, Minnesota for analysis of: diesel range organics (DRO); benzene, ethyl benzene, toluene and xylenes (BTEX); and polycyclic aromatic hydrocarbons (PAH). Analyte concentrations were below laboratory detection limits except for a DRO detection of 64 mg/kg in sample *Stockpile-6*. The potentially interested party did not end up using the soil from the SMA.

Permanent SMA Facility Site Preparation – October 2012 to June 2013

The excavation and removal of soil from the SMA basin was required to prepare the site for construction of the permanent SMA Facility. Enbridge requested that Barr identify off-site soil management options and complete any required characterization sampling. Below is a summary of the identified soil management facilities, the related soil characterization activities and the off-site soil management actions.

Shamrock Landfill, Cloquet, Minnesota

The Shamrock Landfill, near Cloquet, Minnesota, was identified as a potential unimpacted soil management facility. The landfill required analytical and geotechnical soil analyses prior to the acceptance of the material as daily cover. Barr field screened and collected analytical soil samples in five locations on October 9, 2012. No contaminants were detected through field screening.
One analytical sample was collected from each screening location (analytical samples *Terminal Stockpile-1* through *Terminal Stockpile-5*). The samples were submitted to ALS Environmental in Holland,

Michigan for analysis of: PAHs; gasoline range organics (GRO); RCRA metals; and volatile organic compounds (VOCs). Two geotechnical samples were also collected and submitted to Soil Engineering Testing, Inc. in Richfield, Minnesota for hydraulic conductivity, grain size distribution (ASTM D422), and moisture density curve (ASTM D698, Method B) testing. The field screening and analytical and geotechnical laboratory results met the Shamrock Landfill unimpacted soil fill criteria; however, no unimpacted soil was sent to the landfill from the SMA.

Udeen Gravel Pits, Superior, Wisconsin

Udeen Trucking, Inc. operates several unregulated gravel pits south of Superior, Wisconsin that were identified as a management option for unimpacted SMA soil. Field screening and analytical sampling criteria, similar to those identified by the WDNR in 2013 (Attachment A), were used to approve soil for transport to the Udeen gravel pits.

Previous field screening and analytical sampling results (analytical samples *Stockpile-1* through *Stockpile-6* and *Terminal Stockpile-1* through *Terminal Stockpile-5*) were used as part of the documentation to approve the soil located in the unimpacted soil handling area for unregulated off-site management. Analyte concentrations from the previously collected soil samples were below the WDNR groundwater RCL with the exception of the RCRA metals arsenic, barium and selenium, which have regional background concentrations that exceed the groundwater RCL.

Based on the field screening and analytical sampling results, Enbridge determined that soil from the SMA unimpacted soil handling area could be hauled to the Udeen gravel pits located south of Superior, Wisconsin (Figure 4). To supplement the existing data and provide additional documentation regarding the condition of soil being transported to the unregulated management facility, Enbridge requested that Barr monitor and field screen soil prior to it being hauled to the gravel pits. Barr was onsite 33 times between December 2012 and May 2013 (Table 4) to field screen soil being transported off-site. No headspace readings exceeded 10 parts per million and no petroleum impacts (odor, discoloration, sheen) were identified (Attachment B). Approximately 14,715 cubic yards of soil were hauled to the Udeen gravel pits from the SMA during this time period (Table 4; Attachment D).

Contaminated SMA Soil: Site Documentation, Characterization and Management

In 2013, crude oil impacted soil was identified in one road cut excavation and beneath the temporary contaminated soil stockpile area. Barr field screened the impacted areas after construction / remedial excavation activities were completed and initiated waste characterization and off-site disposal coordination of contaminated soil. Below are descriptions of these events:

Eastern SMA Access Road Excavation – January 2013

The access road along the eastern edge of the SMA was widened and improved as part of the permanent SMA Facility construction. The road improvement project consisted of excavating the existing road to a depth of approximately 2 to 3.5 feet deep bgs and widening the road's original footprint several feet to the east (Photo 5). The road excavation was covered with a geotechnical fabric and backfilled with new road bed material.

On January 9, 2013, an approximately 3- to 4-inch seam of crude oil impacted soil was encountered along the eastern edge of the road-cut approximately 2 feet bgs. Barr field screened and sampled soil from ten locations along the road-cut (Figure 2; Attachment B). The only field screening sample with a headspace detection exceeding 10 ppm was sample *S-1* (32.0 ppm), which was collected from 2 feet bgs and had a petroleum odor and sheen. A petroleum odor was also identified in field screening samples *R-1* and *R-3*, but their headspace detections were less than 10 ppm. Based on the location, the extent, and the condition of the impacted soil, Enbridge presumed that the impacts were associated with an improperly disposed of historical contaminated truck load of soil. Since the extent and magnitude of the observed impacts were minor, Enbridge decided to have Barr document the residual soil impacts and to leave the remaining contamination in place beneath the road bed fill material.

One waste characterization sample (sample *SMARoad-Stockpile-1*) was collected from contaminated soil stockpile on January 9, 2013 and sent to Legend Technical Services, Inc. in St Paul, Minnesota for analysis of DRO and BTEX. The laboratory report was submitted to the Shamrock Landfill as part of a waste profile application. The soil was approved under waste profile #CL13-0002 and 14.02 tons of impacted soil was hauled to Shamrock Landfill on March 1, 2013. The landfill waste profile application and approval documentation, the waste characterization laboratory report and the landfill soil disposal summary are included in Attachment E.

Temporary Contaminated Soil Stockpile Area Deconstruction – August 2013

As part of the transition to the permanent SMA Facility, the temporary contaminated soil stockpile area, which was used between 2011 and 2013, was deconstructed (Photos 6 and 7). The temporary contaminated stockpile area was approximately 65 feet wide by 80 feet long with 3-foot berms on three of the four sides. An impervious rubber liner covered the stockpile bottom and berms. Timber mats were placed on top of the liner to enable the use of large soil management equipment.

During deconstruction of the stockpile area in August of 2013, Barr completed the following site tasks:

- Field screened soil that was located beneath the rubber liner (sand and clay fill) during excavation activities for headspace and other indicators of potential hydrocarbon impacts such as odor, discoloration and sheen.
- Segregated hydrocarbon impacted soil with a headspace greater than 10 ppm or displaying evidence of other potential hydrocarbon contamination indicators.
- Field screened the final excavation extents to document any residual hydrocarbon impacts.
- Collected waste characterization analytical samples from the hydrocarbon impacted soil stockpile.
- Assisted with coordination and documentation of soil managed off-site.

Up to 18 inches of hydrocarbon impacted soil was excavated from beneath the contaminated stockpile area, in some locations, and was segregated and stockpiled (Photo 8) until off-site management was approved. Barr collected 52 field screening soil samples (Attachment B) from the footprint of the deconstructed temporary contaminated stockpile area on August 22 and 23, 2013. No residual hydrocarbon impacts were identified after deconstruction activities were completed.

Two representative waste characterization samples (samples *SMA Stockpile-1* and *SMA Stockpile-2*), consisting of impacted soil and rubber liner material, were collected from the contaminated stockpiles on August 22, 2013 and sent to Legend Technical Services for laboratory analysis of DRO and BTEX. The laboratory report was submitted to the Shamrock Landfill as part of a waste profile application. The waste stream was approved under waste profile #CL13-0040 and 355.65 tons of impacted material was sent to Shamrock Landfill on September 4 and 5, 2013. The landfill waste profile application and approval documentation, the waste characterization laboratory report and the landfill material disposal summary are included in Attachment E.

Summary and Conclusions

Soil excavated from the SMA that did not exceed the WDNR field screening or analytical sampling criteria identified in the 2013 WDNR communication was sent to the Udeen Gravel Pits to be managed off-site as an unregulated fill. Soil and construction material exceeding the WDNR criteria were managed at the Shamrock Landfill. Residual hydrocarbon impacts that were identified with the SMA during construction activities were limited to a thin seam of impacted soil with a headspace of 32.0 ppm along the east side of the eastern access road. The impacted soil seam was covered with unimpacted road construction fill material, which along with employee awareness will prevent future direct contact exposure.

The groundwater pathway for the Superior Terminal is currently being reviewed by the WDNR on a case by case site-wide basis. If the WDNR agrees that the risk to the groundwater pathway associated with the identified or potential hydrocarbon impacts can be addressed using the site-wide approach, no further response action for groundwater or documentation for the WDNR will be required. Assuming a site-wide GIS Registry is established for the Terminal, the figures and tables attached to this memo can be used to update the Registry.

Attachments:

Photos	1 through 8
Figure 1	Superior Terminal Site Location
Figure 2	2011-2013 Soil Management Area Site Layout and Soil Characterization Screening and Sampling Locations
Figure 3	Permanent Soil Management Area Site Layout
Figure 4	Udeen Gravel Pit Locations
Table 1	Soil Analytical Data Summary - VOCs/BTEX/DRO/TPH
Table 2	Soil Analytical Data Summary - RCRA Metals
Table 3	Soil Analytical Data Summary - PAHs
Table 4	Soil Management Area Soil Screening Summary Table for Unregulated Off-site Soil Management
Attachment A	WDNR Unregulated Soil Criteria for Off-site Reuse Communication (June 27, 2013)
Attachment B	Enbridge Site Investigation Field Sampling and Screening Logs
Attachment C	Soil Characterization Laboratory Reports
Attachment D	Four Star Soil Trucking Ledgers
Attachment E	Shamrock Landfill Waste Disposal Documentation

Photos:

Photo 1: The SMA prior to permanent Facility construction. The photo was taken facing southwest on October 9, 2012.

Photo 2: The SMA prior to permanent Facility construction. The photo was taken facing northwest on November 13, 2012.

Photo 3: The permanent SMA Facility. The contaminated solid soil stockpile building is on the left and the contaminated slurry soil ramp is on the right. The photo was taken facing west on July 29, 2013.

Photo 4: The permanent SMA Facility unimpacted slurry soil stockpile area. The unimpacted slurry soil solidification roll-off containers are on the right side of the photo; the unimpacted solidified slurry soil stockpiles are on the left. The photo was taken facing northeast on August 12, 2013.

Photo 5

Photo 6

Photo 5: The crude oil impacted soil exposed on the eastern side of the eastern access road road-cut. The photo was taken facing southeast on January 9, 2013.

Photo 6: Deconstruction of the temporary contaminated soil stockpile area prior to permanent SMA Facility construction. The photo was taken facing northwest on August 22, 2013.

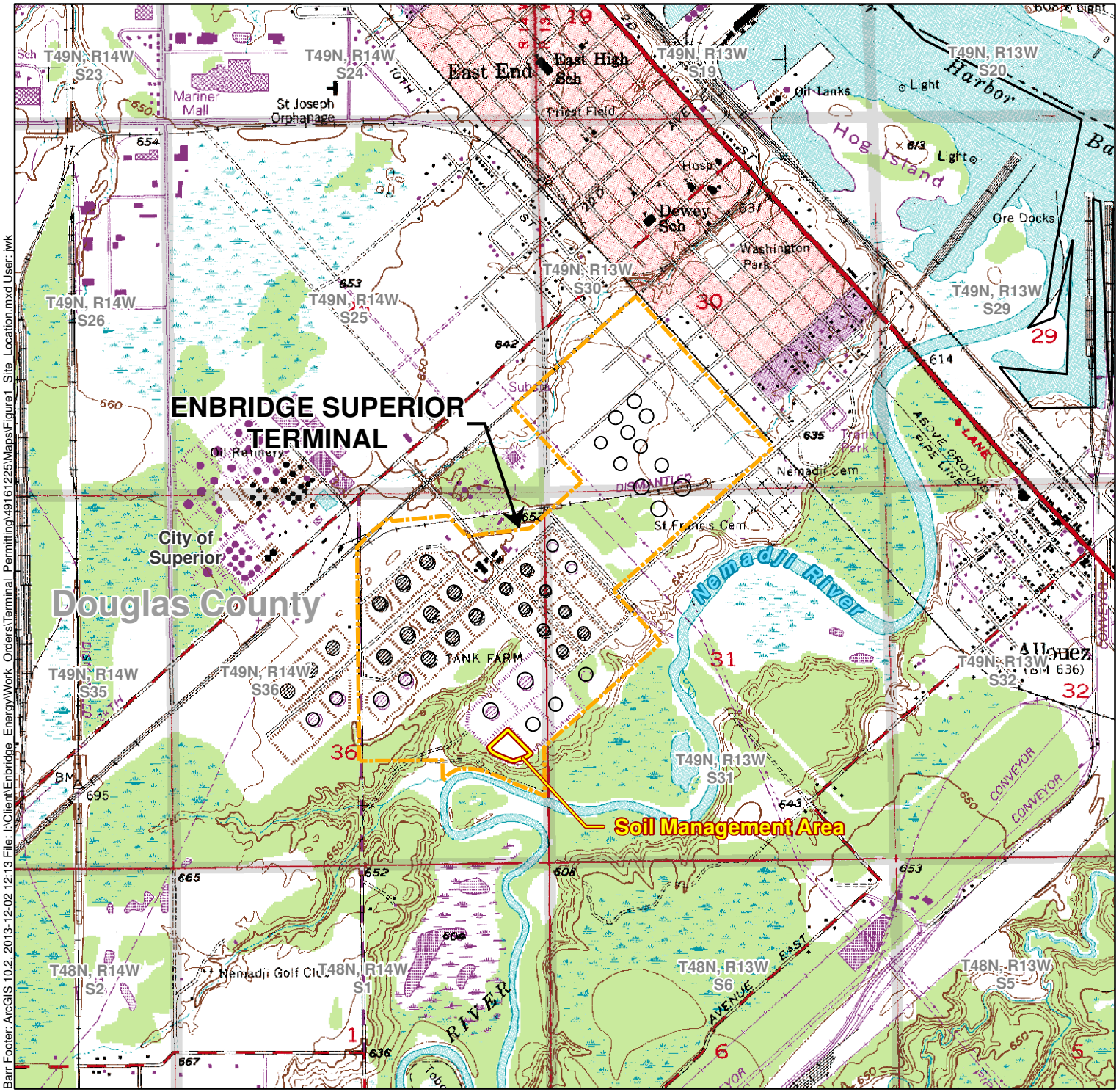
Photo 7

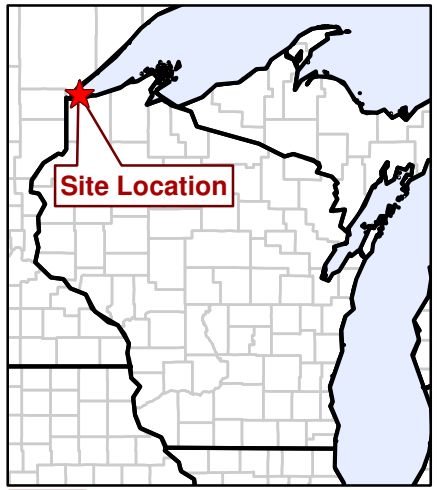
Photo 8

Photo 7: Deconstruction of the temporary contaminated soil stockpile area prior to permanent SMA Facility construction. The photo was taken facing southwest on August 22, 2013.

Photo 8: Impacted soil from the temporary contaminated soil stockpile area deconstruction stockpiled within the permanent SMA Facility contaminated solid material storage building. The photo was taken facing southeast on August 22, 2013.

Figures





Soil Management Area

Terminal Property Boundary

N

0 2,000 4,000

Feet

1 Inch = 2,000 Feet

Figure 1

SUPERIOR TERMINAL SITE LOCATION

Enbridge Energy, L.P.
Superior, Wisconsin

ENBRIDGE

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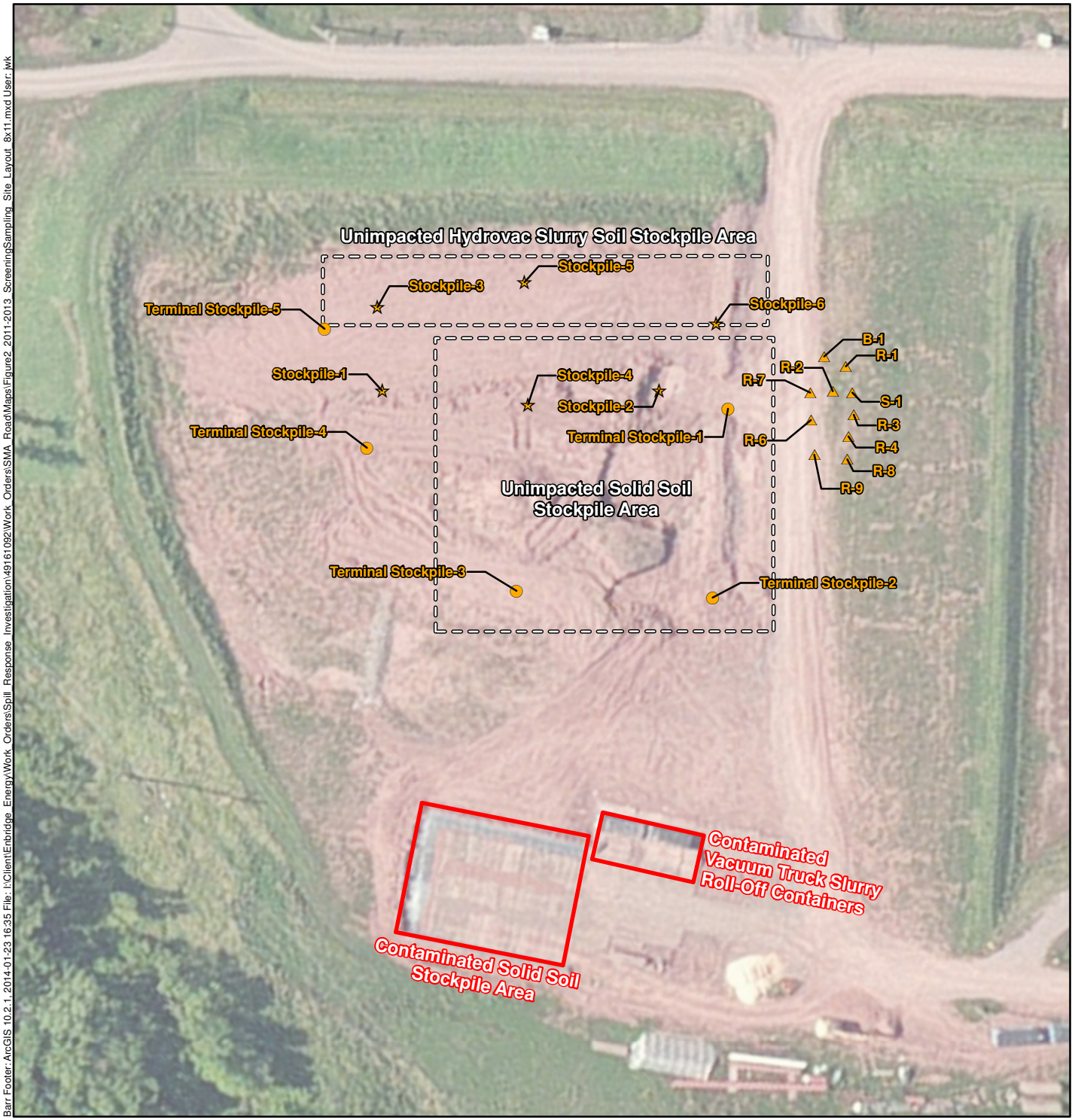
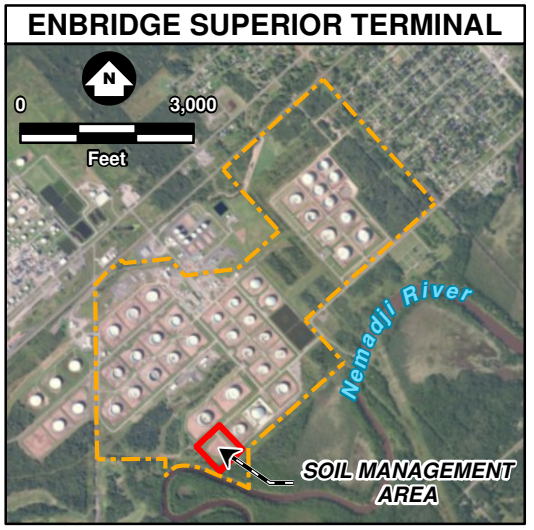




Screening / Sampling Locations
May 17th, 2011

Screening / Sampling Locations
October 9th, 2012

Screening Locations
January 9th, 2013

Unimpacted Soil Stockpile Areas

Contaminated Soil Stockpile Areas

Terminal Property Boundary

0 75 150

Feet

1 Inch = 75 Feet

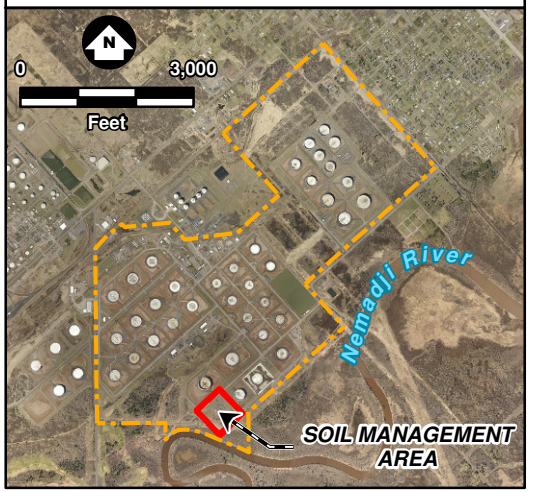
ESRI World Imagery Circa July, 2011

Figure 2

2011 - 2013 SOIL MANAGEMENT AREA
SITE LAYOUT AND SOIL CHARACTERIZATION
SCREENING AND SAMPLE LOCATIONS
SUPERIOR TERMINAL
Enbridge Energy, L.P.
Superior, Wisconsin

ENBRIDGE

ENBRIDGE SUPERIOR TERMINAL



Terminal Property Boundary

Soil Management Area Site Features

As of Summer 2013

- Buildings
- Contaminated Solid Soil Stockpile Area
- Contaminated Slurry Soil Area
- Unimpacted Slurry Soil Area
- Unimpacted Soil Stockpile Area
- Roads and Staging Area

0 75 150

Feet

1 Inch = 75 Feet

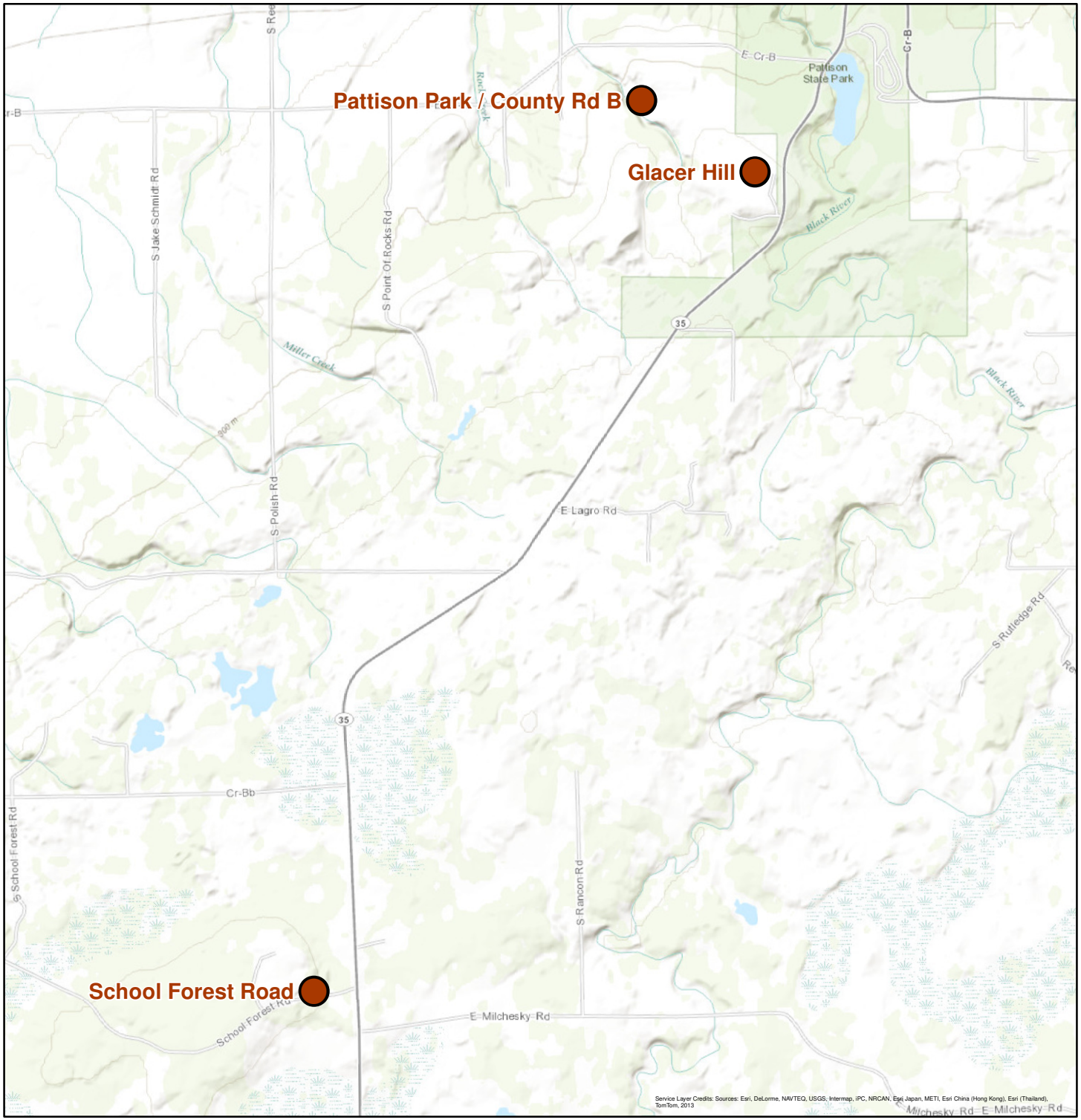
Douglas County Imagery Circa May 2013

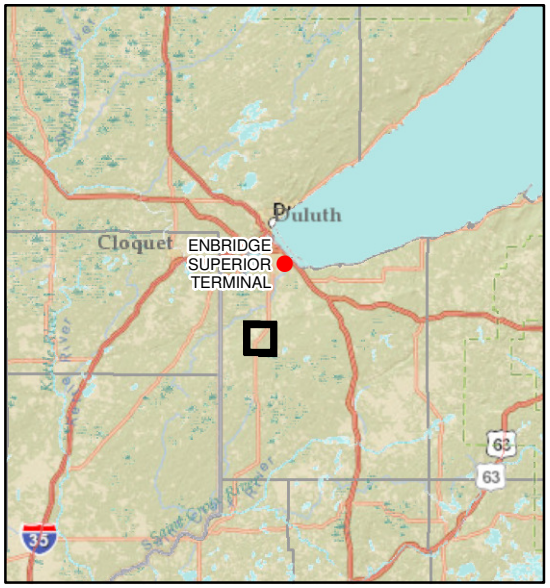
Figure 3

PERMANENT SOIL MANAGEMENT AREA
SITE LAYOUT
SUPERIOR TERMINAL

Enbridge Energy, L.P.
Superior, Wisconsin

ENBRIDGE





N

0 0.5 1

Miles

1 Inch = 3,250 Feet

Figure 4

UDEEN GRAVEL PIT LOCATIONS

Enbridge Energy, L.P.
Superior, Wisconsin

ENBRIDGE

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Tables

Table 1
Soil Analytical Data Summary
VOCs* / BTEX / DRO / GRO
Soil Management Area Soil Characterization
Enbridge Energy Terminal - Superior, Wisconsin
Concentrations in mg/kg

		Parameter	Benzene	Ethyl benzene	Toluene	Xylene, total	Diesel Range Organics	DRO-modified, C10-C28	GRO-modified, C6-C10
	Effective Date	Exceedance Key							
WI Groundwater RCLs		No Exceed	0.0051	0.785	0.5536	1.97 XYL			
Location	Date	Sample Type							
Stockpile 1	5/17/2011	N	< 0.034 h	< 0.034 h	< 0.034 h	< 0.10 h	< 11	--	--
Stockpile 2	5/17/2011	N	< 0.038 h	< 0.038 h	< 0.038 h	< 0.11 h	< 11	--	--
Stockpile 3	5/17/2011	N	< 0.033 h	< 0.033 h	< 0.033 h	< 0.10 h	< 11	--	--
Stockpile 4	5/17/2011	N	< 0.031 h	< 0.031 h	< 0.031 h	< 0.092 h	< 10	--	--
Stockpile 5	5/17/2011	N	< 0.031 h	< 0.031 h	< 0.031 h	< 0.094 h	< 9.0	--	--
Stockpile 6	5/17/2011	N	< 0.029 h	< 0.029 h	< 0.029 h	< 0.088 h	64	--	--
Terminal Stockpile 1	10/09/2012	N	< 0.016	< 0.015	< 0.015	< 0.048	--	< 0.79	< 0.73
Terminal Stockpile 2	10/09/2012	N	< 0.016	< 0.015	< 0.015	< 0.048	--	< 0.86	< 0.72
Terminal Stockpile 3	10/09/2012	N	< 0.016	< 0.015	< 0.015	< 0.047	--	< 0.79	< 0.72
Terminal Stockpile 4	10/09/2012	N	< 0.016	< 0.015	< 0.015	< 0.048	--	< 0.80	< 0.72
Terminal Stockpile 5	10/09/2012	N	< 0.017	< 0.016	< 0.016	< 0.05	--	< 0.81	< 0.77

*Only BTEX compounds are presented on this table. Other VOC compounds were below laboratory reporting limits. For full list of VOC laboratory results, please refer to the attached ALS lab report.

h - EPA recommended sample preservation, extraction or analysis holding time was exceeded. See laboratory report for details.

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

Table 2
Soil Analytical Data Summary
RCRA Metals
Soil Management Area Soil Characterization
Enbridge Energy Terminal - Superior, Wisconsin
Concentrations in mg/kg

		Parameter	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
	Effective Date	Exceedance Key								
WI Groundwater RCLs		Bold	**0.584**	**164.8**	0.752	180000	13.5	0.104	**0.52**	0.4249
Location	Date	Sample Type								
Stockpile 1	5/17/2011	N	**--**	**--**	--	--	--	--	**--**	--
Stockpile 2	5/17/2011	N	**--**	**--**	--	--	--	--	**--**	--
Stockpile 3	5/17/2011	N	**--**	**--**	--	--	--	--	**--**	--
Stockpile 4	5/17/2011	N	**--**	**--**	--	--	--	--	**--**	--
Stockpile 5	5/17/2011	N	**--**	**--**	--	--	--	--	**--**	--
Stockpile 6	5/17/2011	N	**--**	**--**	--	--	--	--	**--**	--
Terminal Stockpile 1	10/09/2012	N	**3.2**	**230**	0.14	50	11	0.029	**1.7**	0.062
Terminal Stockpile 2	10/09/2012	N	**2.9**	**240**	0.18	44	10	0.023	**1.4**	0.050
Terminal Stockpile 3	10/09/2012	N	**2.6**	**220**	0.18	43	10	0.020	**1.4**	0.050
Terminal Stockpile 4	10/09/2012	N	**2.7**	**190**	0.16	42	9.9	0.019	**1.2**	0.042
Terminal Stockpile 5	10/09/2012	N	**2.6**	**230**	0.18	45	10	0.021	**1.4**	0.050

Table 3
Soil Analytical Data Summary
PAHs
Soil Management Area Soil Characterization
Enbridge Energy Terminal - Superior, Wisconsin
Concentrations in mg/kg

		Parameter	1-Methyl naphthalene	2-Chloro naphthalene	2-Methyl naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene
	Effective Date	Exceedance Key															
WI Groundwater RCLs		No Exceed						196.7442		0.47	0.48			0.0725		44.4089	7.4074
Location	Date	Sample Type															
Stockpile 1	5/17/2011	N	--	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Stockpile 2	5/17/2011	N	--	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Stockpile 3	5/17/2011	N	--	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Stockpile 4	5/17/2011	N	--	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45
Stockpile 5	5/17/2011	N	--	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Stockpile 6	5/17/2011	N	--	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
Terminal Stockpile 1	10/09/2012	N	< 0.012	--	< 0.013	< 0.012	< 0.013	< 0.014	< 0.016	< 0.021	< 0.022	< 0.032	< 0.018	< 0.015	< 0.023	< 0.016	< 0.012
Terminal Stockpile 2	10/09/2012	N	< 0.012	--	< 0.013	< 0.012	< 0.012	< 0.013	0.03 j	0.023 j	0.031 j	< 0.031	0.024 j	0.04 j	< 0.022	0.11	< 0.011
Terminal Stockpile 3	10/09/2012	N	< 0.012	--	< 0.013	< 0.012	< 0.012	< 0.013	< 0.016	< 0.02	< 0.021	< 0.031	< 0.018	< 0.015	< 0.022	< 0.015	< 0.011
Terminal Stockpile 4	10/09/2012	N	< 0.012	--	< 0.013	< 0.012	< 0.013	< 0.013	< 0.016	< 0.02	< 0.021	< 0.031	< 0.018	< 0.015	< 0.023	< 0.016	< 0.012
Terminal Stockpile 5	10/09/2012	N	< 0.013	--	< 0.014	< 0.013	< 0.013	< 0.014	< 0.017	< 0.022	< 0.023	< 0.033	< 0.019	< 0.016	< 0.024	< 0.017	< 0.012

j - Reported value is less than the stated laboratory quantitation limit
and is considered an estimated value.

Table 3
Soil Analytical Data Summary
PAHs
Soil Management Area Soil Characterization
Enbridge Energy Terminal - Superior, Wisconsin
Concentrations in mg/kg

Parameter			Indeno(1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
	Effective Date	Exceedance Key				
WI Groundwater RCLs		No Exceed		0.3294		27.2362
Location	Date	Sample Type				
Stockpile 1	5/17/2011	N	< 0.45	< 0.45	< 0.45	< 0.45
Stockpile 2	5/17/2011	N	< 0.45	< 0.45	< 0.45	< 0.45
Stockpile 3	5/17/2011	N	< 0.44	< 0.44	< 0.44	< 0.44
Stockpile 4	5/17/2011	N	< 0.45	< 0.45	< 0.45	< 0.45
Stockpile 5	5/17/2011	N	< 0.43	< 0.43	< 0.43	< 0.43
Stockpile 6	5/17/2011	N	< 0.42	< 0.42	< 0.42	< 0.42
Terminal Stockpile 1	10/09/2012	N	< 0.026	< 0.012	< 0.041	< 0.017
Terminal Stockpile 2	10/09/2012	N	< 0.025	< 0.011	0.083 j	0.077
Terminal Stockpile 3	10/09/2012	N	< 0.025	< 0.011	< 0.039	< 0.016
Terminal Stockpile 4	10/09/2012	N	< 0.025	< 0.011	< 0.04	< 0.016
Terminal Stockpile 5	10/09/2012	N	< 0.027	< 0.012	< 0.042	< 0.018

j - Reported value is less than the stated laboratory quantitation limit and is considered an estimated value.

Table 4
Soil Management Area Soil Screening Summary Table
for Unregulated Off-site Soil Management
Enbridge Energy Terminal - Superior, Wisconsin

Date	Number of Truckloads Hauled Offsite	Number of Field Screen Samples	Maximum Headspace	Minimum Headspace
12/17/2012	18	15	1.4	0
1/29/2013	27	13	1.3	0
2/6/2013	33	13	2.3	0.3
2/7/2013	32	12	4.0	0.7
2/8/2013	31	11	5.1	1.0
2/13/2013	28	17	4.8	0.4
2/14/2013	32	17	1.3	0.5
2/15/2013	31	17	0.8	0.2
2/18/2013	32	16	2.3	0.6
2/19/2013	35	20	5.3	0.7
2/20/2013	45	16	3.2	0.1
2/21/2013	39	15	0.8	0.2
2/22/2013	0	17	0.8	0.1
2/25/2013	44	18	4.1	0.2
2/26/2013	34	16	9.4	0.7
2/27/2013	45	21	7.8	0.5
2/28/2013	44	15	1.0	0.1
3/6/2013	37	18	7.0	1.0
3/7/2013	36	16	3.2	1.0
3/8/2013	6	4	2.1	1.3
3/14/2013	42	16	0.7	0.1
3/15/2013	50	17	1.4	0.2
3/19/2013	38	16	0.6	0.1
3/20/2013	-	11	1.3	0.3
3/21/2013	29	14	1.7	0
3/25/2013	26	13	0.7	0.3
3/26/2013	38	18	1.8	0.3
3/27/2013	32	12	0.4	0.1
5/3/2013	19	15	2.2	0
5/9/2013	12	20	1.3	0.3
5/13/2013	6	-	-	-
5/14/2013	12	-	-	-
5/16/2013	10	15	2.8	0.1
5/17/2013	10	15	1.0	0.1
5/22/2013	4	15	0.9	0.1
5/23/2014	19	-	-	-
5/24/2014	5	-	-	-

Total Field Screening Days = 33
Total Field Screeing Points = 504

Total Truck Loads* = 981
Total Soil Volume *(assuming 15 cubic yards per load)* **= 14,715 cubic yards**

* *Based on information gathered from Barr field notes and Four Star hauling ledgers*

Attachment A

Wisconsin Department of Natural Resources (WDNR)
Unregulated Soil Criteria for Off-site Reuse Communication
(June 27, 2013)

Laura E. Novitzki

From: Ryan E. Erickson
Sent: Friday, June 28, 2013 10:52 AM
To: 'Endsley, Erin A - DNR'
Cc: ENB Paul Turner (paul.turner@enbridge.com); karl.beaster@enbridge.com; Alex.Smith@enbridge.com; Hans Wronka; Jon Aspie; Lynette M. Carney; Karma Hughes
Subject: RE: WDNR unregulated soil criteria for off-site reuse

Erin,
As a follow-up to your email and our conversation on June 27, 2013, I am writing to confirm the criteria for the off-site reuse of unregulated fill.

- The soil is believed to be clean based on knowledge of the excavation area and observations made during the excavation and soil management activities.
- PVOC analyte detections from stockpile confirmation sampling are below NR720.09 (Table 1) groundwater standards.
- Stockpile field screening headspace readings of 10 ppm or less and no obvious petroleum staining or odor.
- Enbridge will track the sites receiving soil (currently Udeens gravel pits south of Superior).

Please let me know if you have any questions or comments. Have a great weekend.

Ryan E. Erickson, PG

Geologist
Duluth office: 218.529.7112
fax: 218.529.8202
cell: 612.418.0166
rerickson@barr.com
www.barr.com

From: Endsley, Erin A - DNR [mailto:Erin.Endsley@wisconsin.gov]
Sent: Monday, June 24, 2013 10:45 AM
To: Ryan E. Erickson
Cc: ENB Paul Turner (paul.turner@enbridge.com); karl.beaster@enbridge.com; Alex.Smith@enbridge.com; Hans Wronka; Jon Aspie; Lynette M. Carney; Karma Hughes
Subject: RE: WDNR unregulated soil criteria for off-site reuse

Hello Ryan –

Based on the information you provided, we would not have any concerns about off-site unregulated reuse of soil meeting the criteria listed below.

I did follow up on the silica gel clean-up for DRO, and here is the response from one of the chemists in the Science Services program:

"DRO is a method defined parameter. Laboratories could do silica gel treatment, but the parameter name cannot contain anything related to "DRO" or "Diesel Range Organics", since this has always been included as part of the method.
Some technical issues are:
The silica gel changes everything. The method name itself tells what we are looking for: organics in the diesel range. We KNOW that there can be F.O.G. in there as well. Plus the silica gel CAN remove things that we DO want to see… like partially biodegraded petroleum products.
The silica gel cleanup for WI DRO has come up a number of times now but it is important to keep in mind then that we have no idea then WHAT is being reported. What if there's petroleum in the active stages of being bio-remediated? That could cause the saturated hydrocarbons to become unsaturated and they could be removed by the silica gel. This treatment could be instituting low bias when we really need to know the extent of what's out there."

One option for future sampling for these scenarios could be to sample for PVOCs, and eliminate DRO and GRO testing. If you have any other questions, please let me know. Thanks!

Erin

From: Ryan E. Erickson [mailto:RErickson@barr.com]
Sent: Monday, June 24, 2013 10:13 AM
To: Endsley, Erin A - DNR
Cc: ENB Paul Turner (paul.turner@enbridge.com); karl.beaster@enbridge.com; Alex.Smith@enbridge.com; Hans Wronka; Jon Aspie; Lynette M. Carney; Karma Hughes
Subject: WDNR unregulated soil criteria for off-site reuse

Erin,
I am following up on the clean soil handling conversation that we had on June 20, 2013.

Based on what we discussed, Enbridge is proposing that the following criteria be met for the off-site unregulated reuse of soil:

- No sources of potential hydrocarbon releases are observed during excavation activities.
- Analyte concentrations from stockpile confirmation sampling: DRO less than 100 mg/kg; GRO and BTEX concentrations are below detection limits.
- Stockpile field screening headspace readings of 10 ppm or less and no obvious petroleum staining or odor.
- Enbridge will track the sites receiving soil (currently Udeens gravel pits south of Superior).

Please also let us know what you learn about the DRO silica gel clean-up method. Barr can provide additional information on the method as well if you would like.

Ryan E. Erickson, PG

Geologist
Duluth office: 218.529.7112
fax: 218.529.8202
cell: 612.418.0166
rerickson@barr.com
www.barr.com

Attachment B

Enbridge Site Investigation Field Sampling and Screening Logs

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 5/17/11

Location: *Milepost or Facility* Superior Terminal SMA Stockpile Characterization

Sampler: REE

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

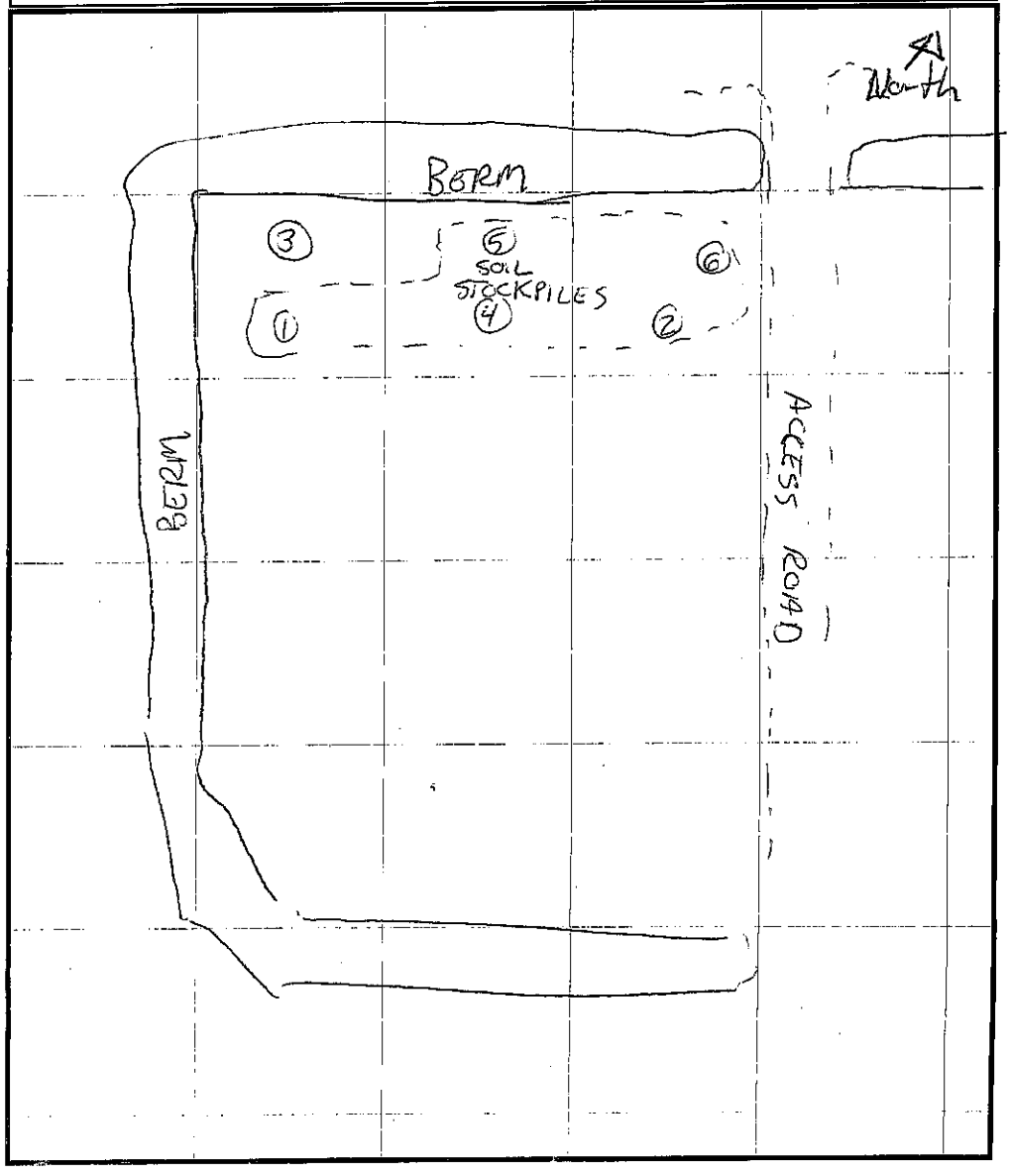
Calibration Time: _____

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

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
Stockpile -1	1		CL	Reddish Brown	N/N	0.0
-2	1		"	"	"	0.0
-3	1		"	"	"	0.0
-4	1		"	"	"	0.0
-5	1		"	"	"	0.0

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 100 FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 10/9/12

Location: *Milepost or Facility* Superior Terminal SWMA Soil Characterization

Sampler: RCE

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace:_____ppm

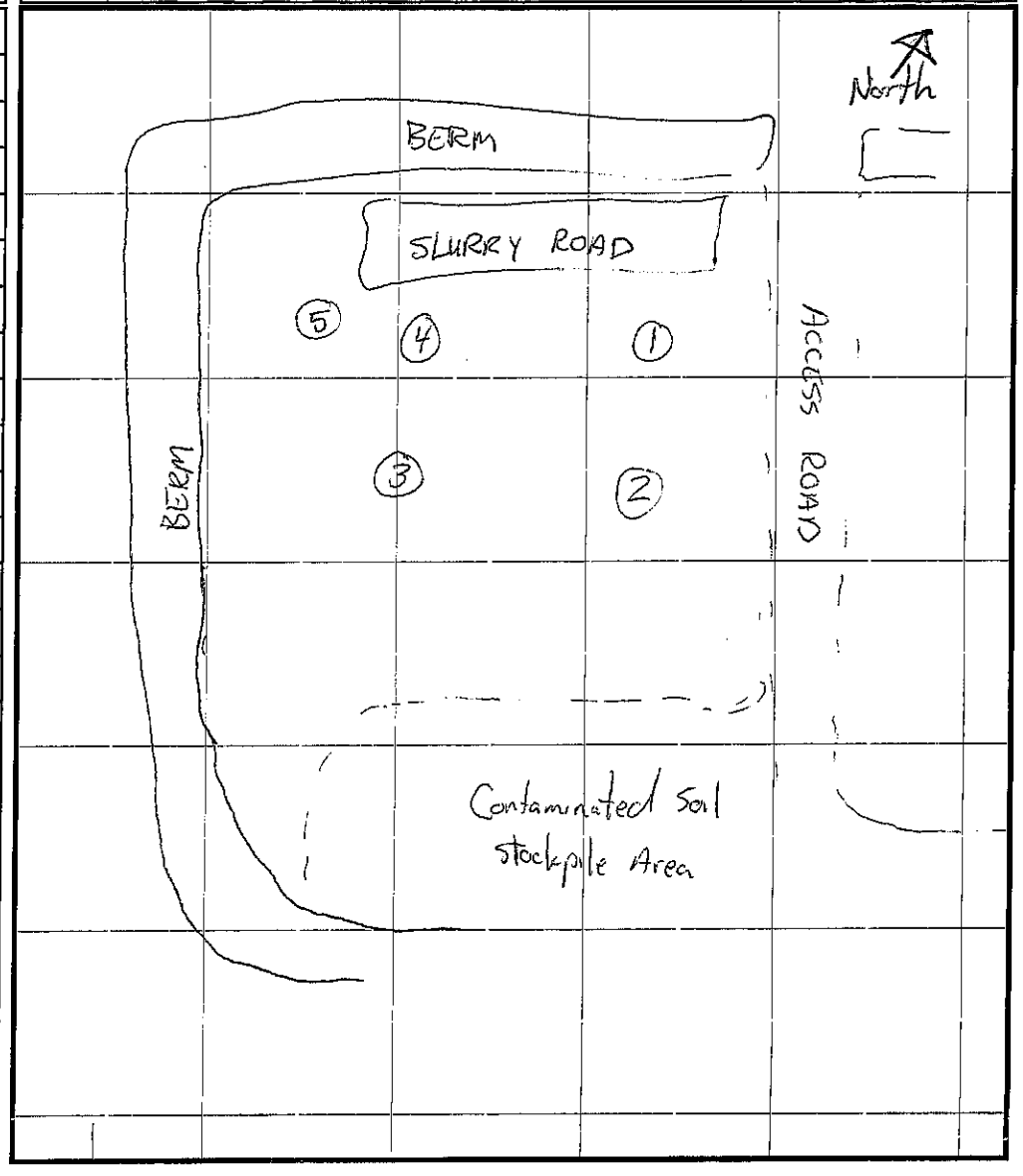
Calibration Time: _____

Sample Nomenclature *(Location - sample type - #)*: Terminal Stockpile-#

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
stockpile-1	2	1425	CL	Reddish brown	N/N	1.3
-2	2	1435	↓	↓	↓	1.7
-3	3	1445	↓	↓	↓	1.6
-4	3	1455	↓	↓	↓	1.5
-5	2.5	1515	↓	↓	↓	1.5

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 100 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Stockpile Area

Equipment used: 10.6 *-ionization detector with* 3000 *eV lamp*

Background Headspace: 0.1 ppm(max)

Sample Nomenclature *(Location - sample type - #)*: SmA-Stockpile-#

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

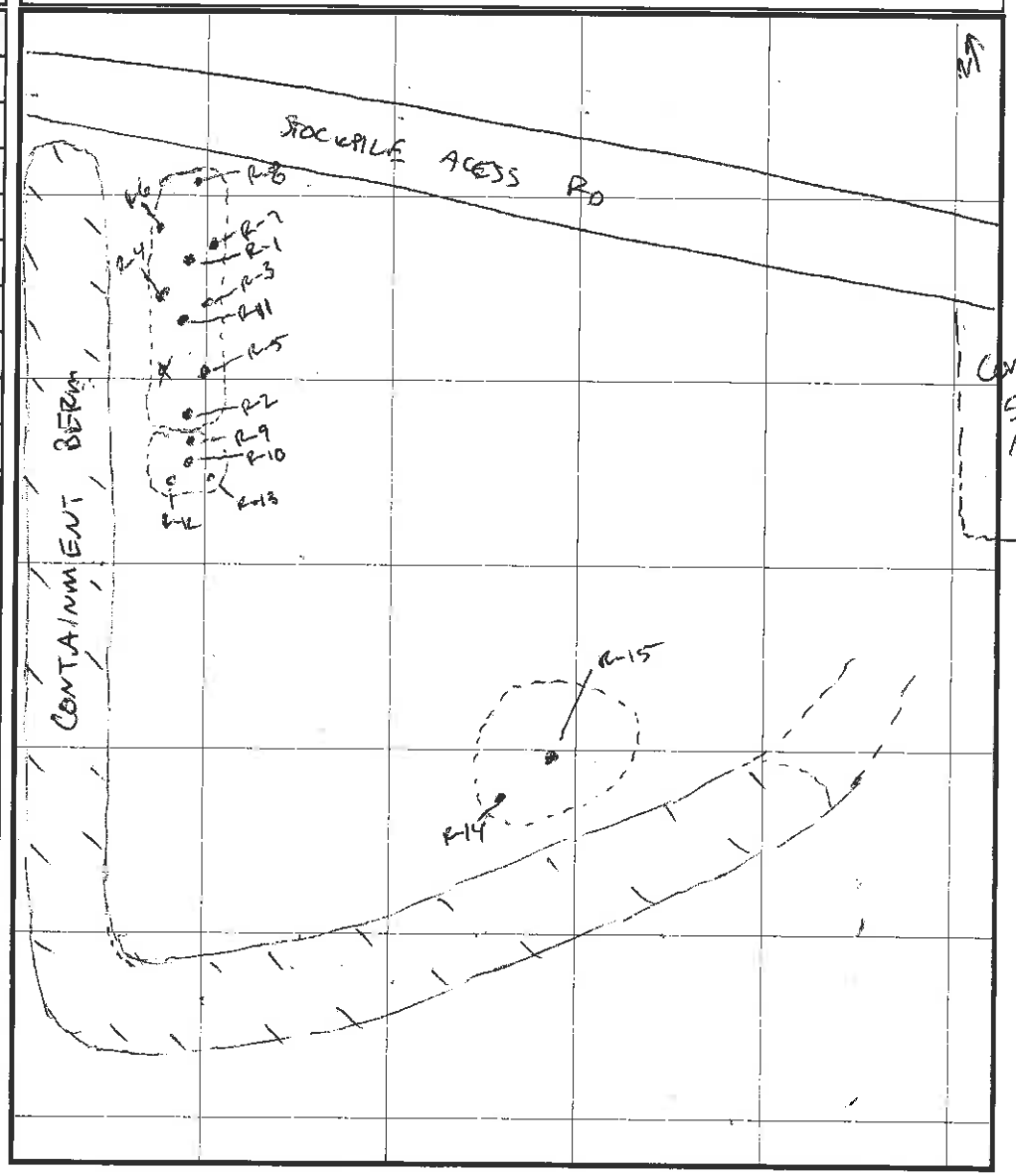
Date: 12/17/2012

Sampler: GTF

Calibration Time: 845

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R-1			(Fill) CL	Red	N/N	0/0
R-2						.2/0
R-3						0/0
R-4						.2/0
R-5						0/0
R-6						.1/0
R-7						0/0
R-8						0/.1
R-9						.1/0
R-10						.1/.1
R-11						.1/0
R-12						0/0
R-13						0/0
R-14						1.4/.1
R-15			▼	▼	▼	.5/.1

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 50 ***FEET***



SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Page__of__

Location: *Milepost or Facility* SMA Road

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace: ___ ppm Date: 1/9/13

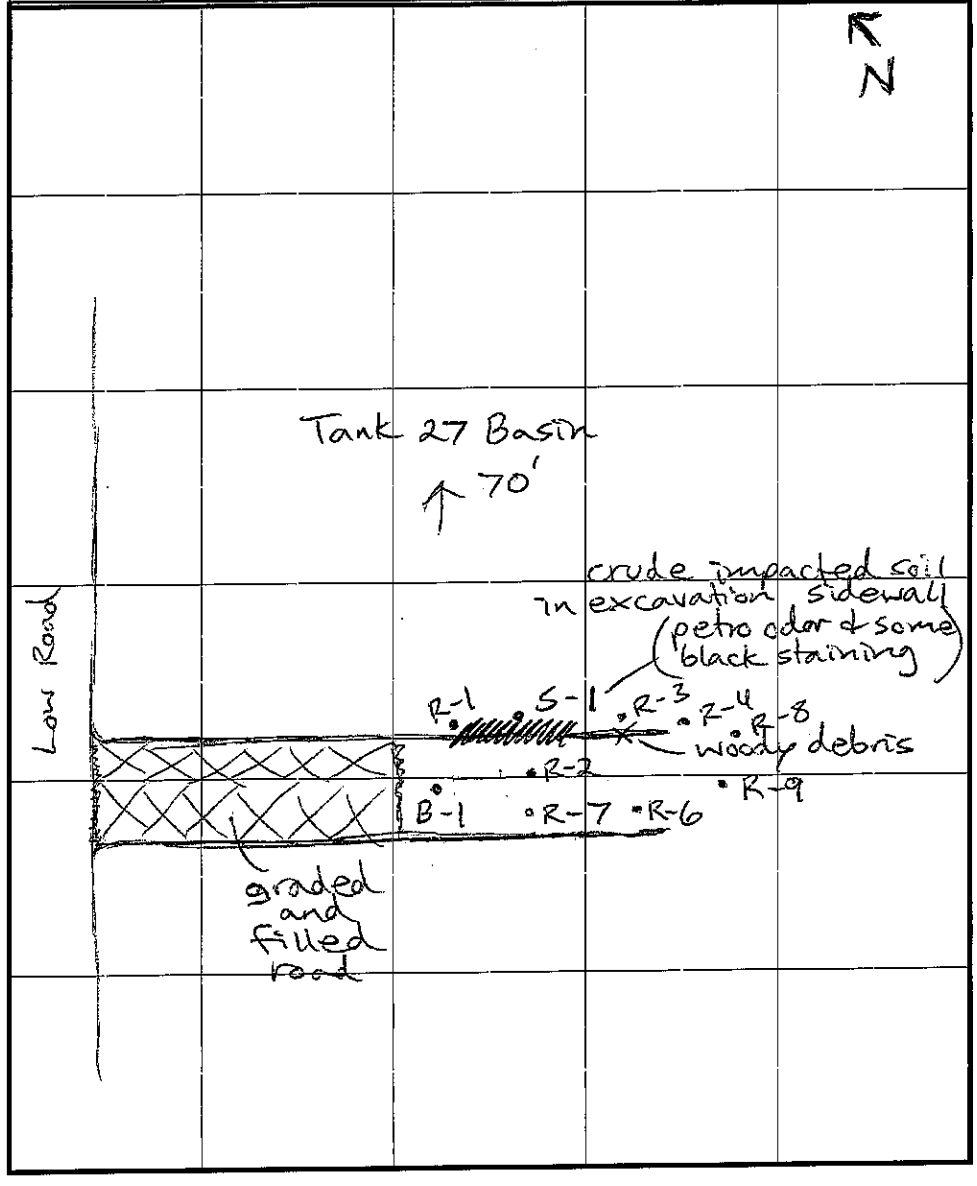
Sample Nomenclature *(Location - sample type - #):* _____ Sampler: CTF

Soil Sample Types: **R** = *Removed Sample* ; **S** = *Sidewall Sample* ; **B** = *Bottom Sample* ; **Stockpile** = *Stockpile Sample* Calibration Time: _____

BARR

Sample ID	Depth (FT)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: Stockpile-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1	3	8:52	CL Fill		Y/N/N	3.5
R-2	2	8:53	"		N/N/N	2.9
R-3	1	8:54	"		Y/Y/	3.1
S-1	2	9:50	"		Y/N/Y	32.0
B-1	3.5	9:55	"		N/N/N	2.0
R-4	1	10:05	"		N/N/N	3.6
R-5	Not collected - broken bag					—
R-6	2	10:10	"		N/N/N	2.5
R-7	3	10:11	"		N/N/N	3.0
R-8	3	11:50	"		N/N/N	5.6
R-9	0.5	11:55	"		N/N/N	4.0

SITE SKETCH: *north is up; excavation extents & depths, impacted areas, sample locations, borings, wells, structures, utilities, natural features...* ***1 inch/grid =*** 60 ***FEET***



11

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 1/29/13

Location: *Milepost or Facility* Clean Soil Stockpile, Superior Terminal

Sampler: CSG2

Equipment used: PID -*ionization detector with* 10 *eV lamp* min:RK 2000

Background Headspace: 0.0 ppm 1.0 @ B10

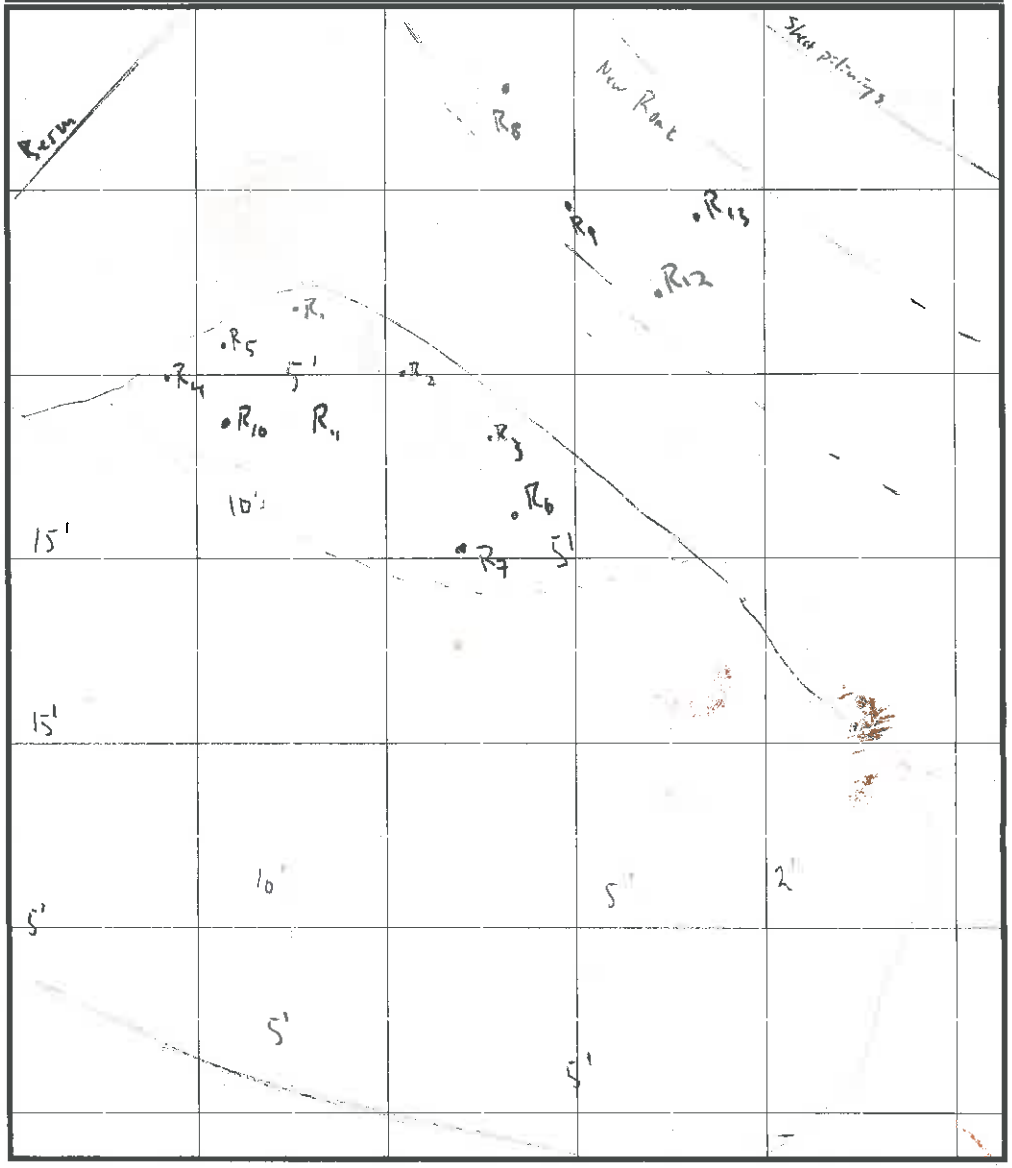
Calibration Time: 705

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)
Example. R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1	–	810	CL	Red brown	–	0.0
R-2	–	810	CL	Dark Red brown	–	0.3
R-3	–	810	CL	Red brown	–	0.0
R-4	–	940	CL	Red brown	–	0.3
R-5	–	940	CL	Red brown	–	0.1
R-6	–	1035	CL	Red brown	–	0.4
R-7	–	1035	CL	Red brown	–	0.6
R-8	2	1120	CL	Red Brown	–	0.1
R-9	2	1120	CL	Red Brown	–	0.2
R-10	–	1155	CL	Red brown	–	0.7
R-11	–	1155	CL	Red brown	–	0.5
R-12	2	1310	CL	Red brown	–	1.0
R-13	2	1310	CL	Red Brown	–	1.3
* R-8,	R-9 were from	road, collected in stockpile			"	
R-12	R-13 "					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 15 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Enbridge Superior Terminal Clean Soil stockpile Screening

Date: 2/6/13

Sampler: CJG/2

Equipment used: Photo *-ionization detector with* 10 *eV lamp* Background Headspace: 0.2 ppm

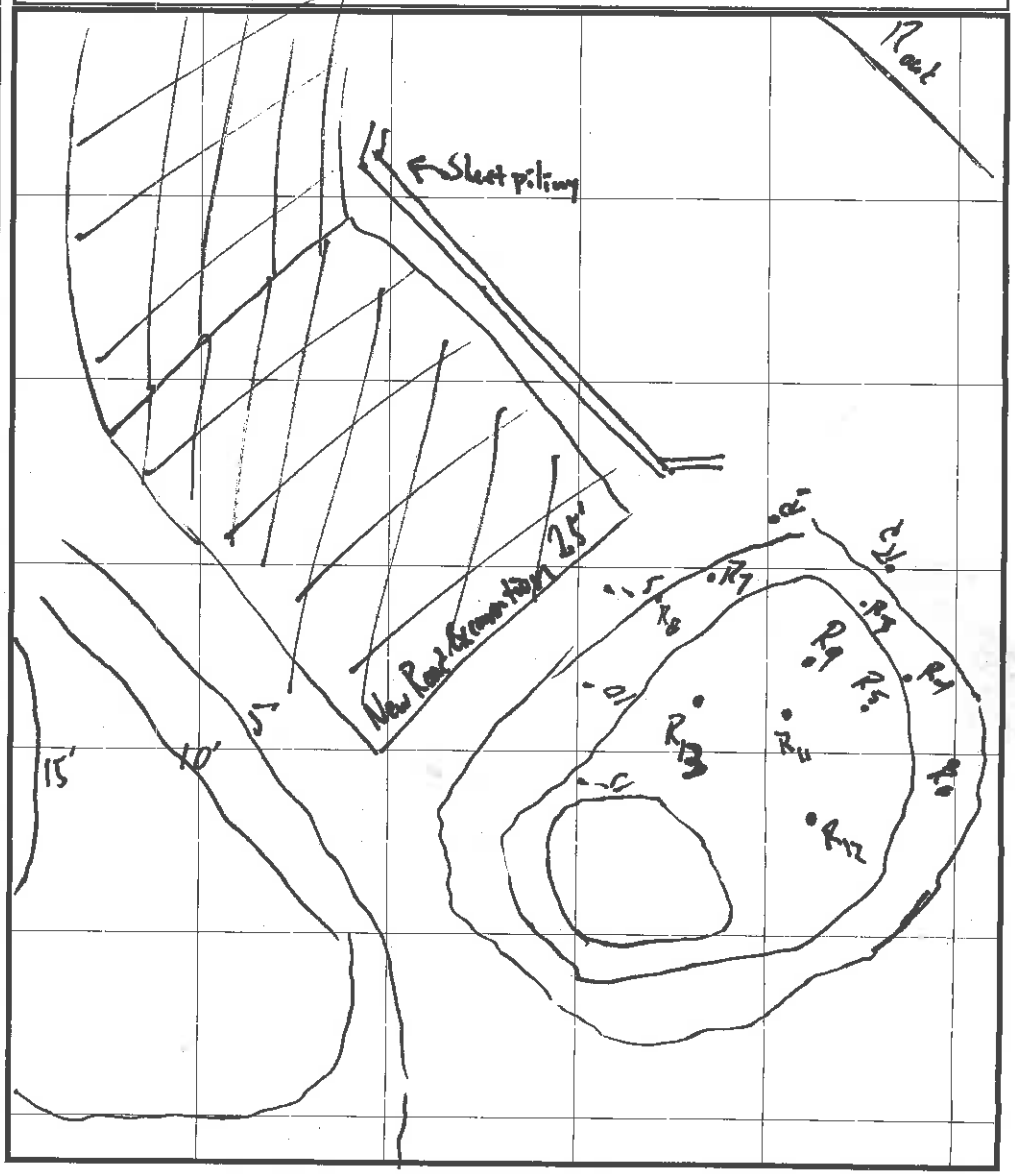
Calibration Time: 740

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)
Example: R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R-1	-	815	CL	Red brown	-	0.8
R-2	-	815	CL	Red brown	-	0.3
R-3	-	850	CL	Red brown	-	1.1
R-4	-	850	CL	Red brown	-	0.6
R-5	-	925	CL	Red brown	-	1.2
R-6	-	925	CL	Red brown	-	0.4
R-7	-	955	CL	Red brown	-	1.1
R-8	-	1100	CL	Red brown	-	0.3
R-9	-	1130	CL	Red brown	-	2.1
R-10	-	1210	CL	Red brown	-	2.0
R-11	-	1255	CL	Red brown	-	2.3
R-12	-	1400	CL	Red brown	-	1.5
R-13	-	1440	CL	Red brown	-	2.0

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 15' FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 2/7/13

Location: *Milepost or Facility* Superior Terminal Clean soil stockpile

Sampler: CSG2

Equipment used: Photo -*ionization detector with* 10 *eV lamp* MiniRAE 2000 Background Headspace: 0.5 ppm

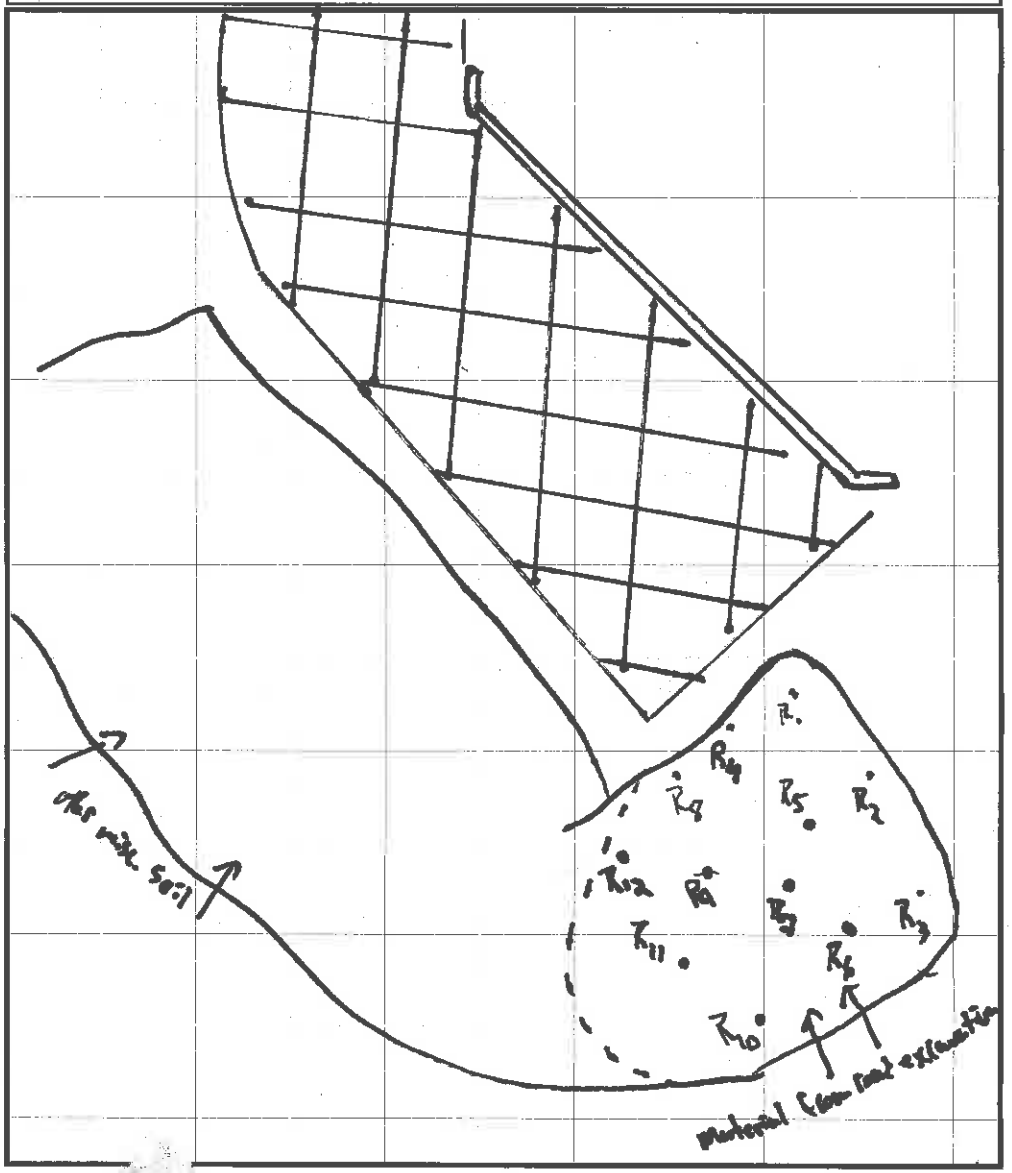
Calibration Time: 7:30

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)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R-1	—	8:05	CL	Red brown	—	4.0
R-2	—	8:05	CL	Red brown	—	3.7
R-3	—	8:05	CL	Red brown	—	2.8
R-4	—	8:45	CL	Red brown	—	0.7
R-5	—	9:20	CL	Red brown	—	1.1
R-6	—	9:55	CL	Red brown	—	0.8
R-7	—	10:30	CL	Red brown	—	1.2
R-8	—	1210	CL	Red brown	—	0.9
R-9	—	1210	CL	Red brown	—	1.7
R-10	—	1210	CL	Red brown	—	0.7
R-11	—	1315	CL	Red brown	—	1.0
R-12	—	1350	CL	Red brown	—	0.7

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 15 FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG (OFFICE COPY)

Location: *Milepost or Facility* Soil mgmt Area: Superior Terminal

Equipment used: ~~PID~~ Photo *-ionization detector with* 10.6 *eV lamp*

Background Headspace: .4 ppm (max)

Date: 2/8/2013

Sampler: GTF

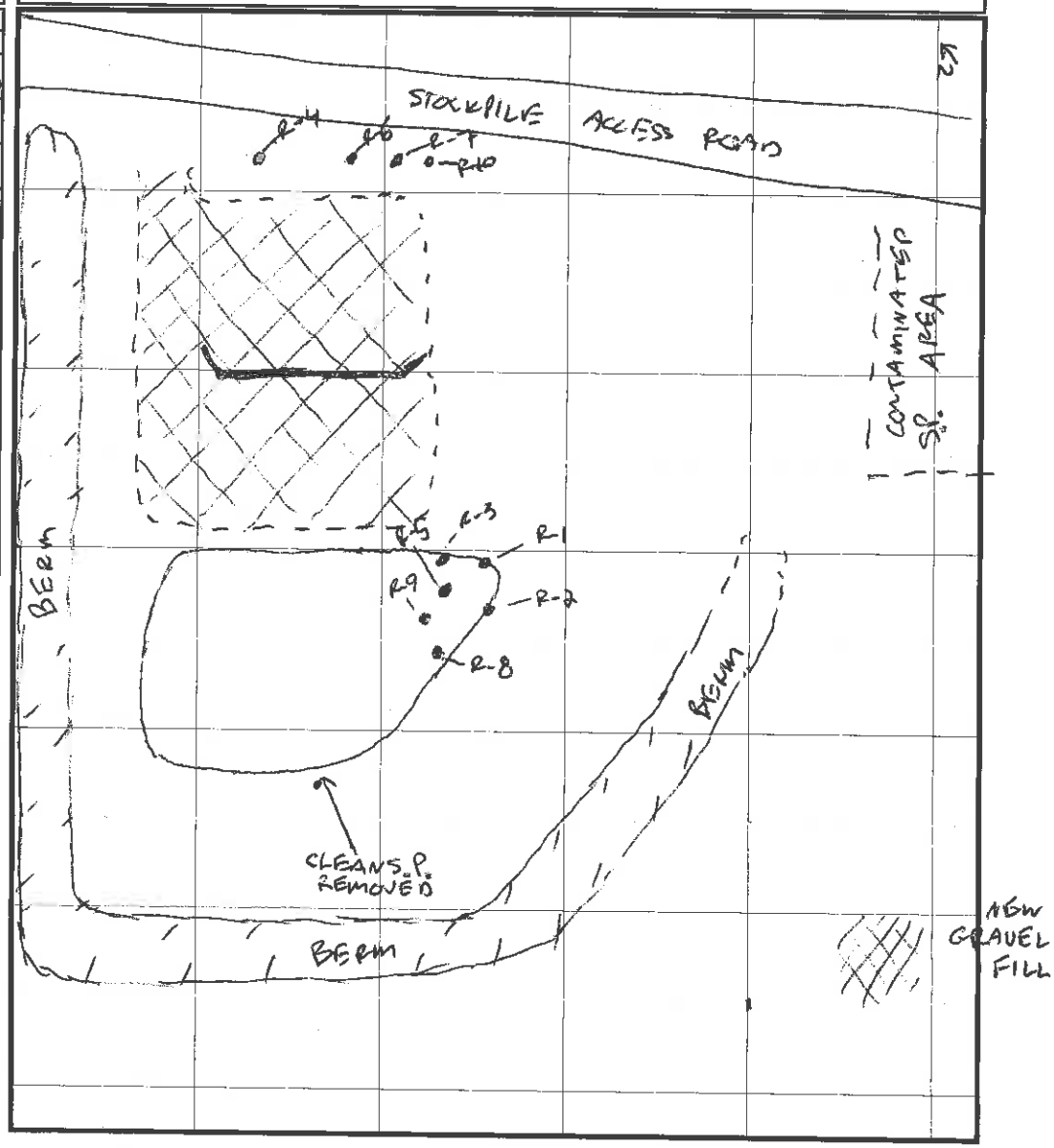
Calibration Time: 700

Sample Nomenclature *(Location - sample type - #):* SMA-Stockpile-

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275/bkgd
R-1	Composite	840	CL-Fill Frozen	Brn/N	N/N	1.0/.0
R-2		930			N/N	39/.3
R-3		1000			N/N	1.3/.2
R-4	0-2'	1020			N/N	4.1/.2
R-5		1100			N/N	3.4/.3
R-6	0-1'	1014			N/N	5.1/.2
R-7	0-2'	1044			N/N	4.9/.4
R-8		1120			N/N	5.0/.2
R-9		1245			N/N	1.3/0.0
R-10	0-2'	1309			N/N	3.8/.2
R-11	"	1430	"	"	N/N	NOT RECORDED

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 50.0 FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Enbridge Superior Terminal

Equipment used: photo *-ionization detector with* 10.6 *eV lamp*

Background Headspace: 0.0 ppm

Date: 2/13/13

Sampler: BJL2

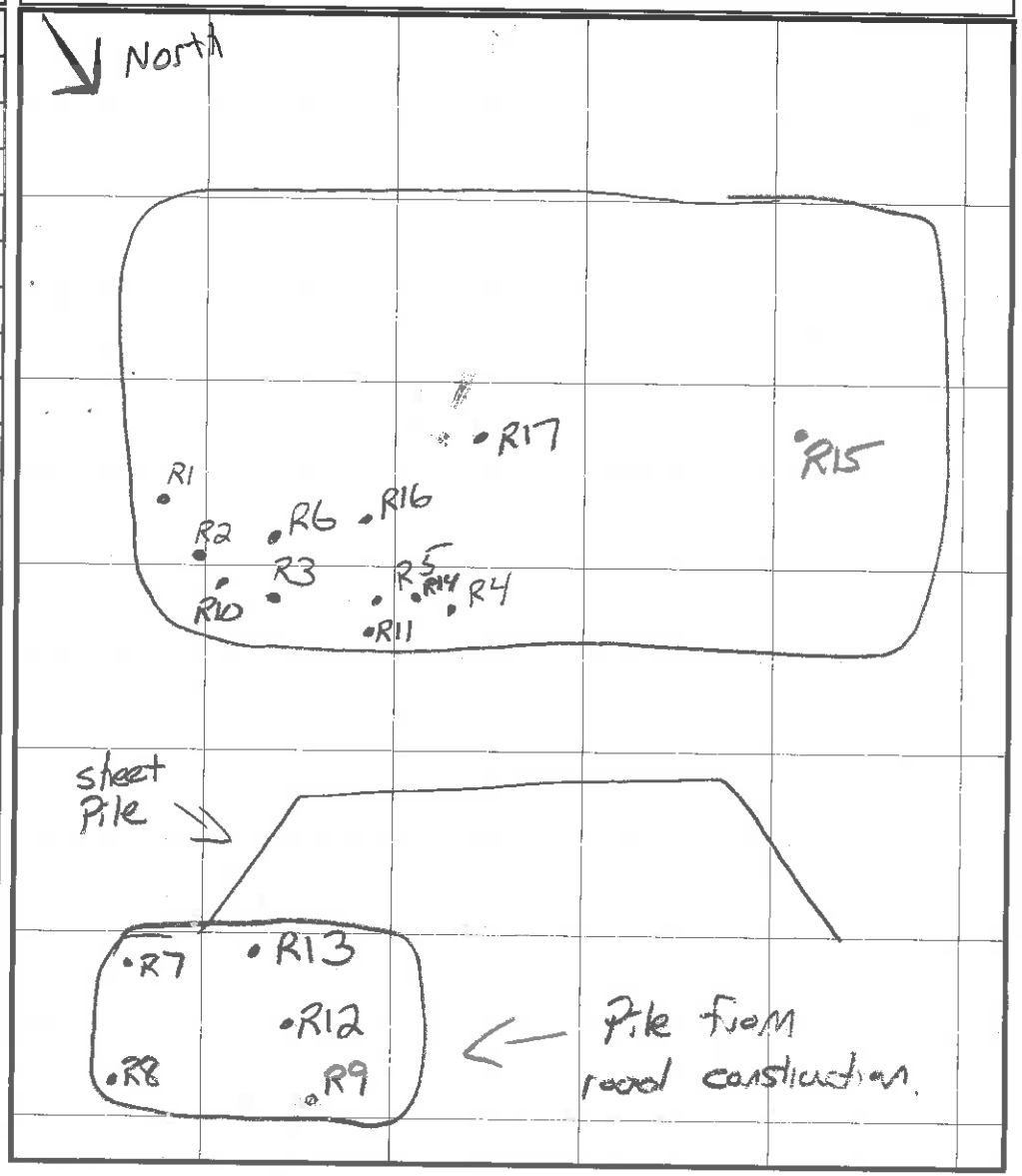
Calibration Time: 0815

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)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	Surface	0830	CL	reddish brown	NIN	1.0
R2	surface	0830	CL	"	NIN	0.8
R3	Surface	0830	CL	"	N/N	0.6
R4	Surface	0915	CL	"	N/N	0.8
R5	surface	0915	CL	"	N/N	0.5
R6	Surface	0915	CL	"	N/N	0.4
R7	Surface	1045	CL	"	NIN	1.5
R8	Surface	1045	CL	"	NIN	1.2
R9	Surface	1045	CL	"	NIN	1.1
R10	Surface	1145	CL	"	N/N	1.8
R11	Surface	1145	CL	"	NIN	1.7
R12	Surface	1230	CL	"	NIN	3.5
R13	Surface	1230	CL	"	NIN	4.8
R14	Surface	1330	CL	"	NIN	2.0
R15	Surface	1330	CL	"	NIN	1.5
R16	Surface	1440	CL	"	NIN	2.4
R17	Surface	1440	CL	"	NIN	2.5

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Enbridge Superior Terminal

Equipment used: photo -*ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

Date: 2/14/13

Sampler: BJL2

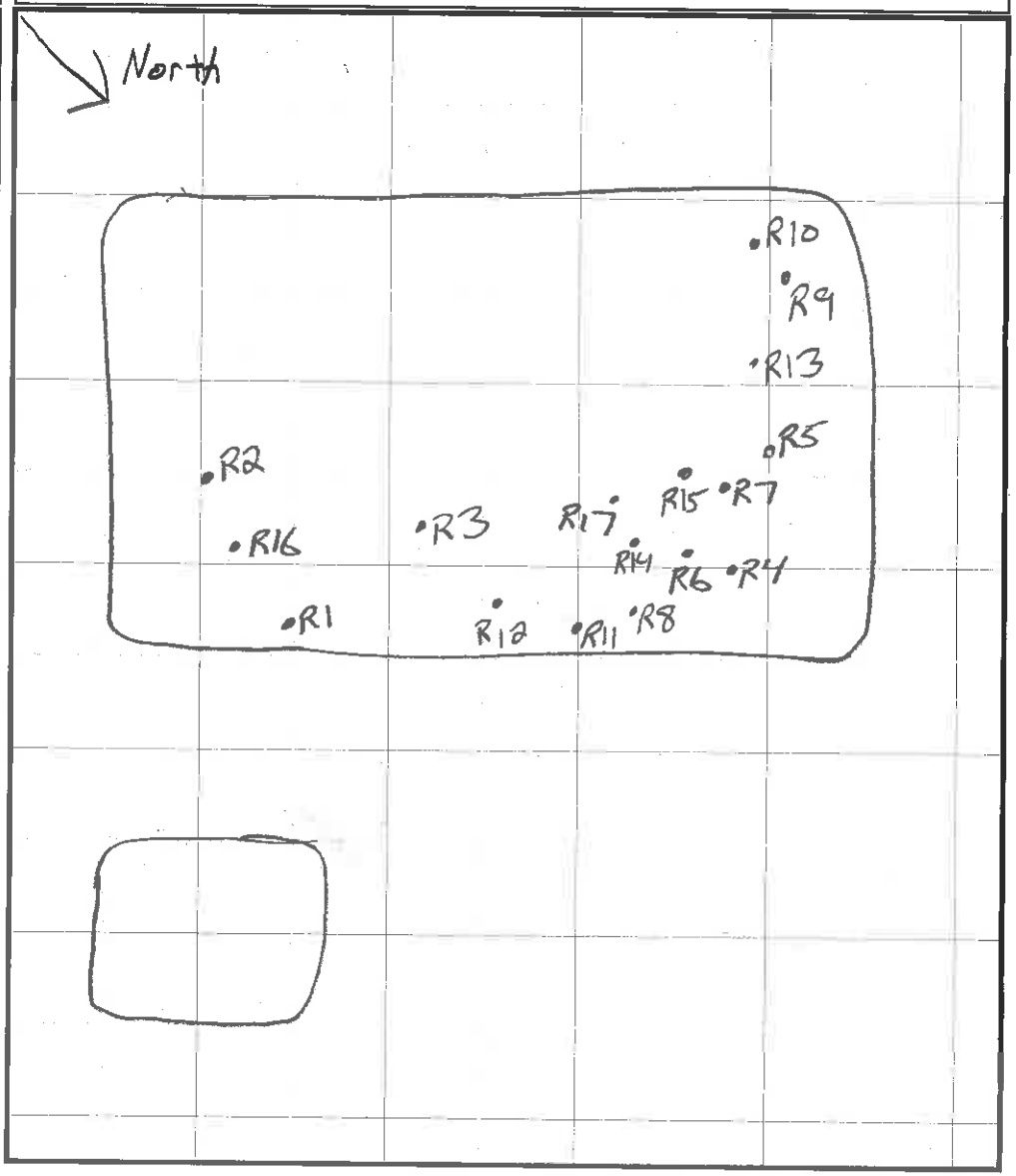
Calibration Time: 0815

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)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	Surface	0835	CL	reddish brown	NIN	0.8
R2	Surface	0835	CL	"	NIN	0.6
R3	Surface	0835	CL	"	NIN	0.8
R4	Surface	0930	CL	"	NIN	1.0
R5	Surface	0930	CL	"	NIN	1.0
R6	Surface	1020	CL	"	NIN	0.9
R7	Surface	1020	CL	"	NIN	0.8
R8	Surface	1110	CL	"	NIN	1.3
R9	Surface	1110	CL	"	NIN	1.2
R10	Surface	1210	CL	"	NIN	0.9
R11	Surface	1210	CL	"	NIN	0.8
R12	Surface	1315	CL	"	NIN	1.0
R13	Surface	1315	CL	"	NIN	0.8
R14	Surface	1410	CL	"	NIN	0.5
R15	Surface	1410	CL	"	NIN	0.5
R16	Surface	1450	CL	"	NIN	0.8
R17	Surface	1450	CL	"	NIN	0.7

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Enbridge Superior Terminal

Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

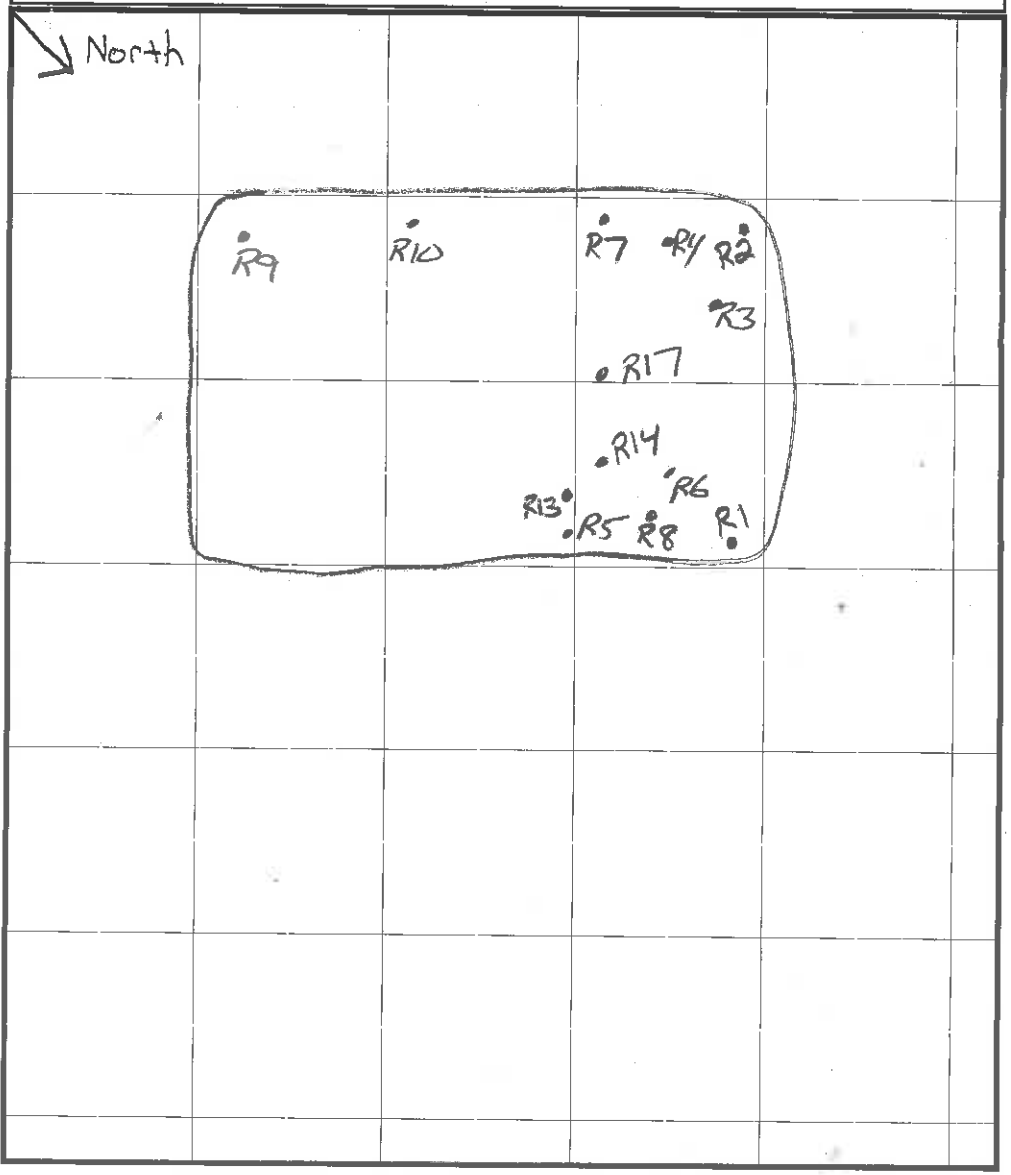
Date: 2/15/13
Sampler: BTLB
Calibration Time: 0820

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)
Example: R-1	4	16.30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0840	CL	reddish brown	NIN	0.8
R2	Surface	0840	CL	"	NIN	0.7
R3	Surface	0930	CL	"	NIN	0.5
R4	Surface	0930	CL	"	NIN	0.3
R5	Surface	0935	CL	"	NIN	0.6
R6	Surface	0935	CL	"	NIN	0.5
R7	Surface	1030	CL	"	NIN	0.2
R8	Surface	1030	CL	"	NIN	0.4
R9	Surface	1120	CL	"	NIN	0.4
R10	Surface	1120	CL	"	NIN	0.5
R11	Surface	1210	CL	"	NIN	0.5
R12	Surface	1210	CL	"	NIN	0.5
R13	Surface	1320	CL	"	NIN	0.7
R14	Surface	1320	CL	"	NIN	0.4
R15	Surface	1410	CL	"	NIN	0.5
R16	Surface	1410	CL	"	NIN	0.7
R17	Surface	1450	CL	"	NIN	—

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Enbridge Superior Terminal

Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

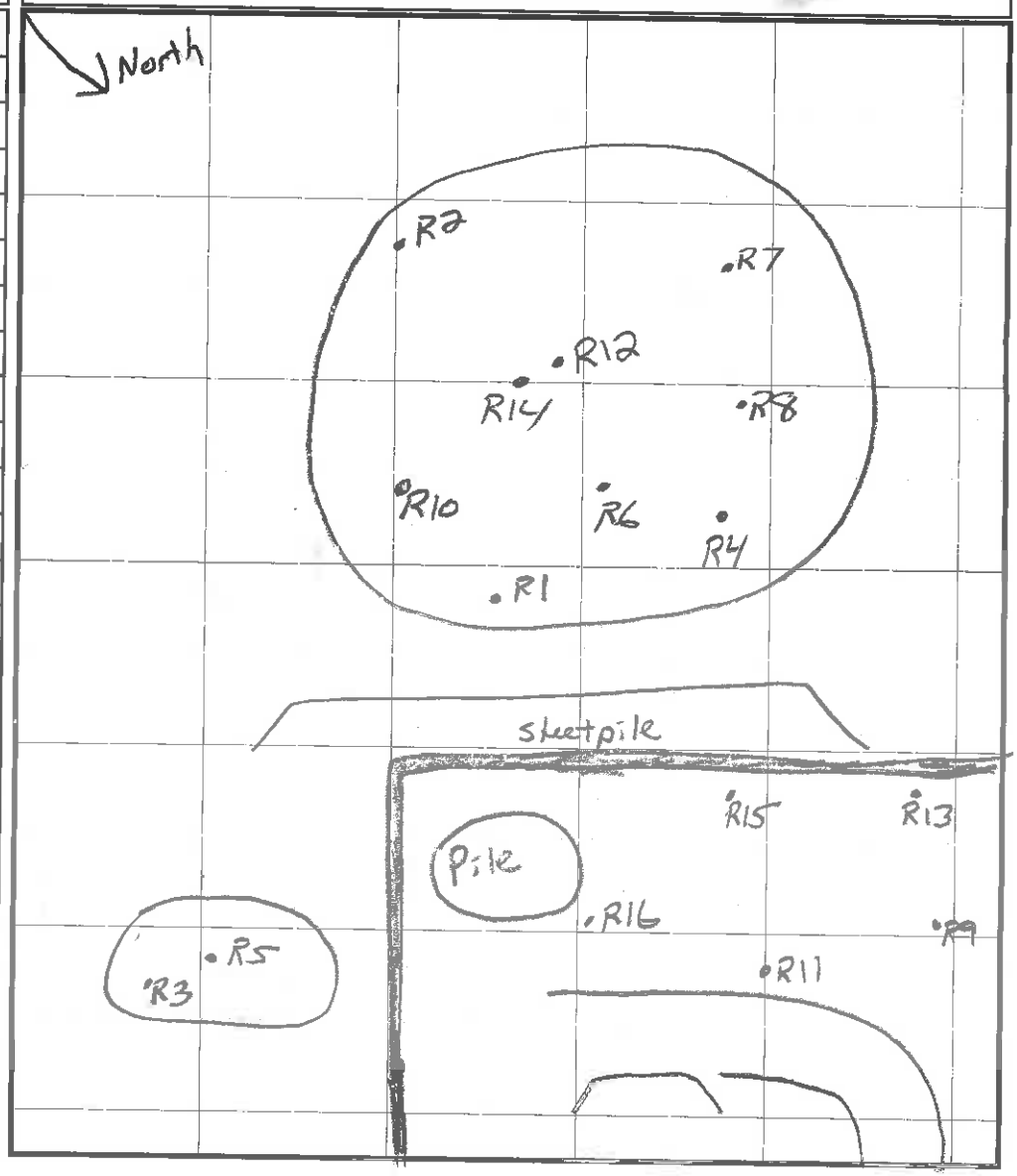
Date: 8/18/13
Sampler: BKD
Calibration Time: 08/15

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)
Example R-1	*4*	*16 30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	Surface	0830	CL	reddish brown	N/N	2.3
R2	Surface	0830	CL	"	N/N	0.6
R3	Surface	0830	CL	"	N/N	1.1
R4	Surface	0920	CL	"	N/N	1.3
R5	Surface	1040	CL	"	N/N	1.3
R6	Surface	1040	CL	"	N/N	1.5
R7	Surface	1140	CL	"	N/N	1.6
R8	Surface	1140	CL	"	N/N	1.5
R9	0-1	1210	CL	"	N/N	1.8
R10	Surface	1210	CL	"	N/N	2.1
R11	0-1	1300	CL	"	N/N	1.8
R12	Surface	1300	CL	"	N/N	2.1
R13	0-1	1350	CL	"	N/N	2.0
R14	Surface	1350	CL	"	N/N	1.9
R15	0-1	1430	CL	"	N/N	2.1
R16	0-1	1430	CL	"	N/N	1.7

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 12 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 2/19/13

Location: *Milepost or Facility* Enbridge Superior Terminal

Sampler: BSB

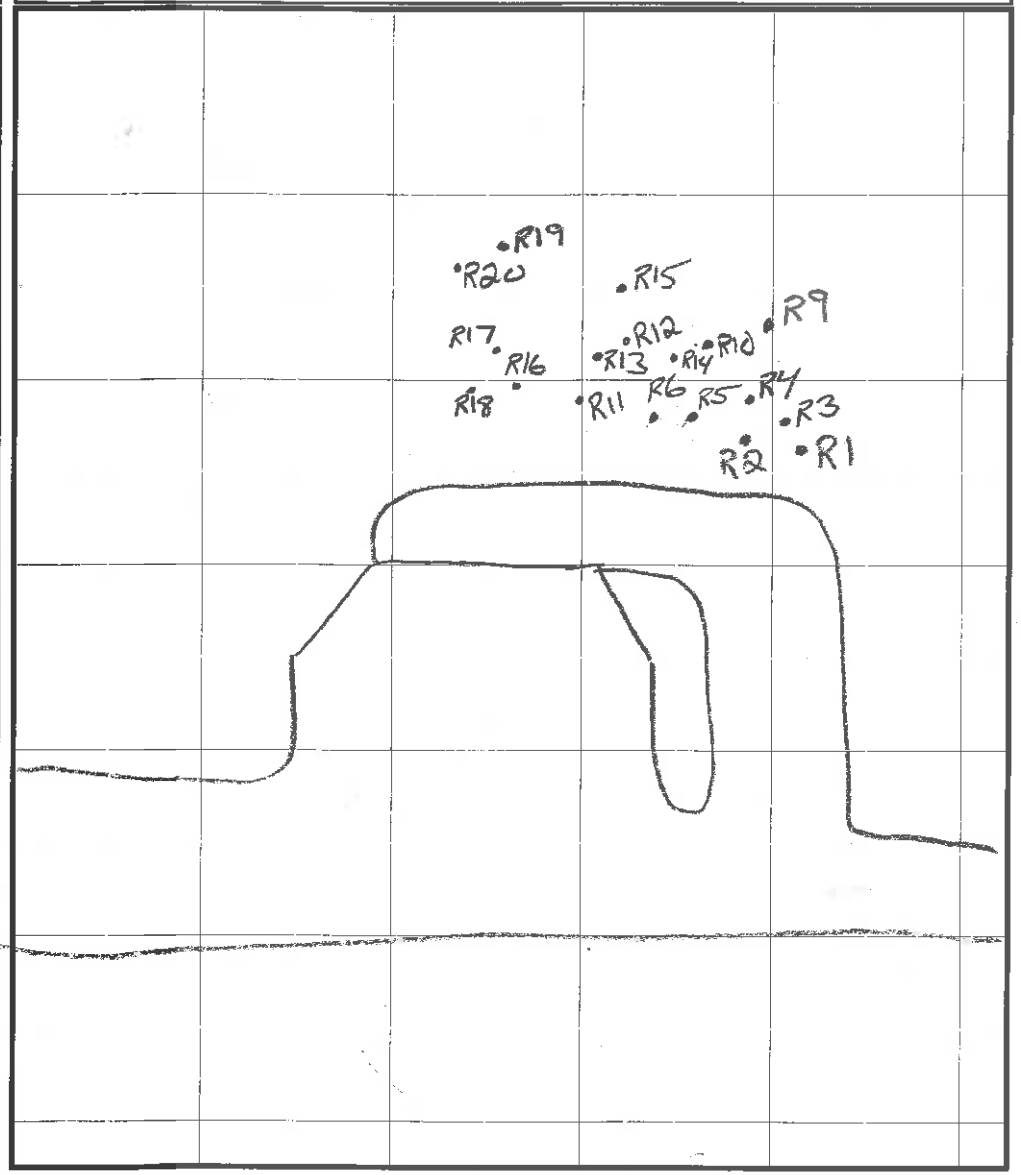
Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm Calibration Time: 0830

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)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	Surface	0835	CL	reddish brown	N/N	3.5
R2	Surface	0835	CL	"	N/N	5.3
R3	Surface	0855	CL	"	N/N	2.8
R4	Surface	0855	CL	"	N/N	2.9
R5	Surface	0915	CL	"	N/N	4.7
R6	Surface	0915	CL	"	N/N	4.4
R7	Surface	0935	CL	"	N/N	2.1
R8	Surface	0935	CL	"	N/N	1.8
R9	Surface	0950	CL	"	N/N	1.9
R10	Surface	0950	CL	"	N/N	1.6
R11	Surface	1015	CL	"	N/N	1.8
R12	Surface	1015	CL	"	N/N	1.5
R13	Surface	1050	CL	"	N/N	0.9
R14	Surface	1115	CL	"	N/N	0.9
R15	Surface	1145	CL	"	N/N	2.1
R16	Surface	1215	CL	"	N/N	1.8
R17	Surface	1245	CL	"	N/N	1.5
R18	Surface	1315	CL	"	N/N	1.6
R19	Surface	1345	CL	"	N/N	1.8
R20	Surface	1420	CL	"	N/N	0.7

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid*** = 25 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Enbridge Superior Terminal

Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

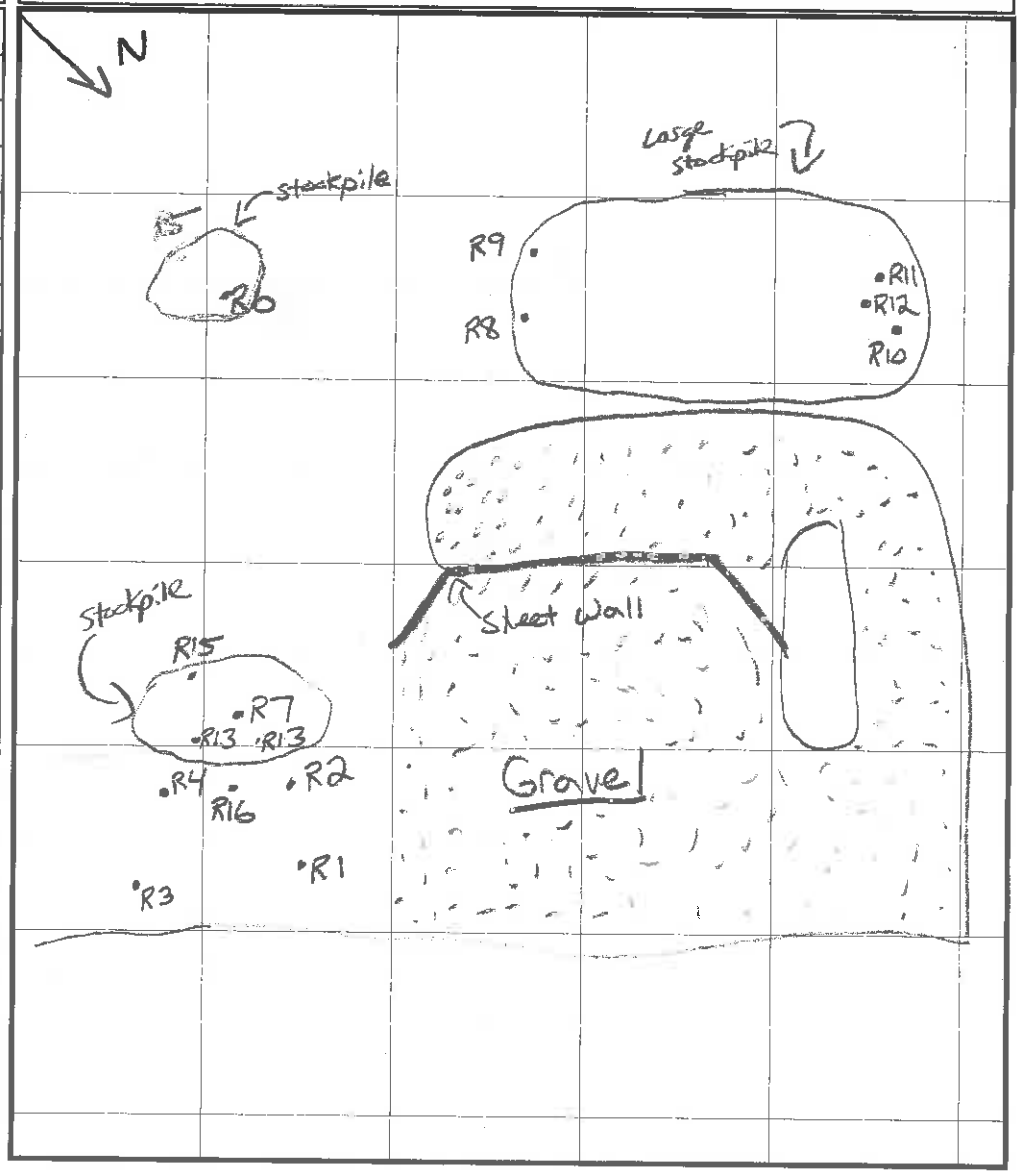
Date: 2/20/13
Sampler: BJL2
Calibration Time: 0815

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)
Example R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	0-1	0830	CL	reddish brown	N/N	1.6
R2	0-1	0830	CL	"	N/N	1.3
R3	0-1	0850	CL	"	N/N	2.3
R4	0-1	0850	CL	"	N/N	1.5
R5	Surface	0920	CL	"	N/N	1.7
R6	Surface	0930	CL	"	N/N	2.6
R7	0-1	0955	CL	"	N/N	3.2
R8	Surface	1030	CL	"	N/N	1.3
R9	Surface	1030	CL	"	N/N	1.5
R10	Surface	1100	CL	"	N/N	2.0
R11	Surface	1100	CL	"	N/N	1.5
R12	Surface	1150	CL	"	N/N	0.8
R13	Surface	1300	CL	"	N/N	0.3
R14	Surface	1300	CL	"	N/N	0.1
R15	Surface	1350	CL	"	N/N	0.4
R16	Surface	1430	CL	"	N/N	0.3
	-Only removed soil from the large stockpile.					
	Trucks Loaded: 32					
	-All soil dumped @ Udeen's Gravel Pit.					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 30 FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 2/21/13

Location: *Milepost or Facility* Superior Terminal

Sampler: BJL2

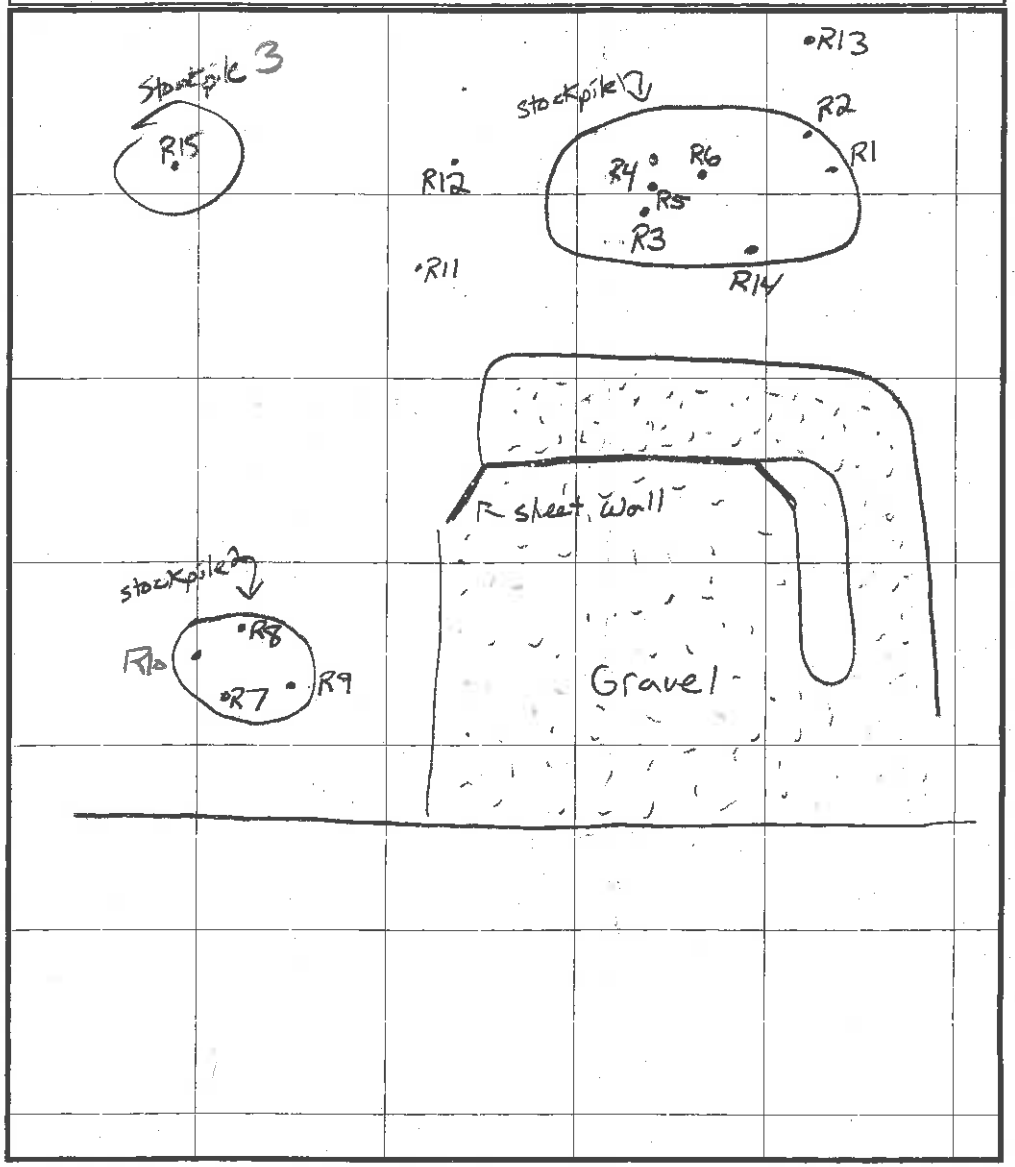
Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm Calibration Time: 0815

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0900	CL	Reddish brown	N/N	0.4
R2	Surface	0900	CL	"	N/N	0.2
R3	Surface	0950	CL	"	N/N	0.4
R4	Surface	0950	CL	"	N/N	0.2
R5	Surface	1100	CL	"	N/N	0.5
R6	Surface	1100	CL	"	N/N	0.4
R7	Surface	1200	CL	"	N/N	0.4
R8	Surface	1200	CL	"	N/N	0.2
R9	Surface	1250	CL	"	N/N	0.2
R10	Surface	1250	CL	"	N/N	0.2
R11	2-3	1350	CL	"	N/N	0.8
R12	2-3	1350	CL	"	N/N	0.4
R13	2-3	1430	CL	"	N/N	0.4
R14	Surface	1430	CL	"	N/N	0.2
R15	Surface	1500	CL	"	N/N	0.4
- 31 Truck loads of soil was removed.						
- Stockpiles 1 and 2 have been removed.						
- No additional dirt was excavated today.						

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal

Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

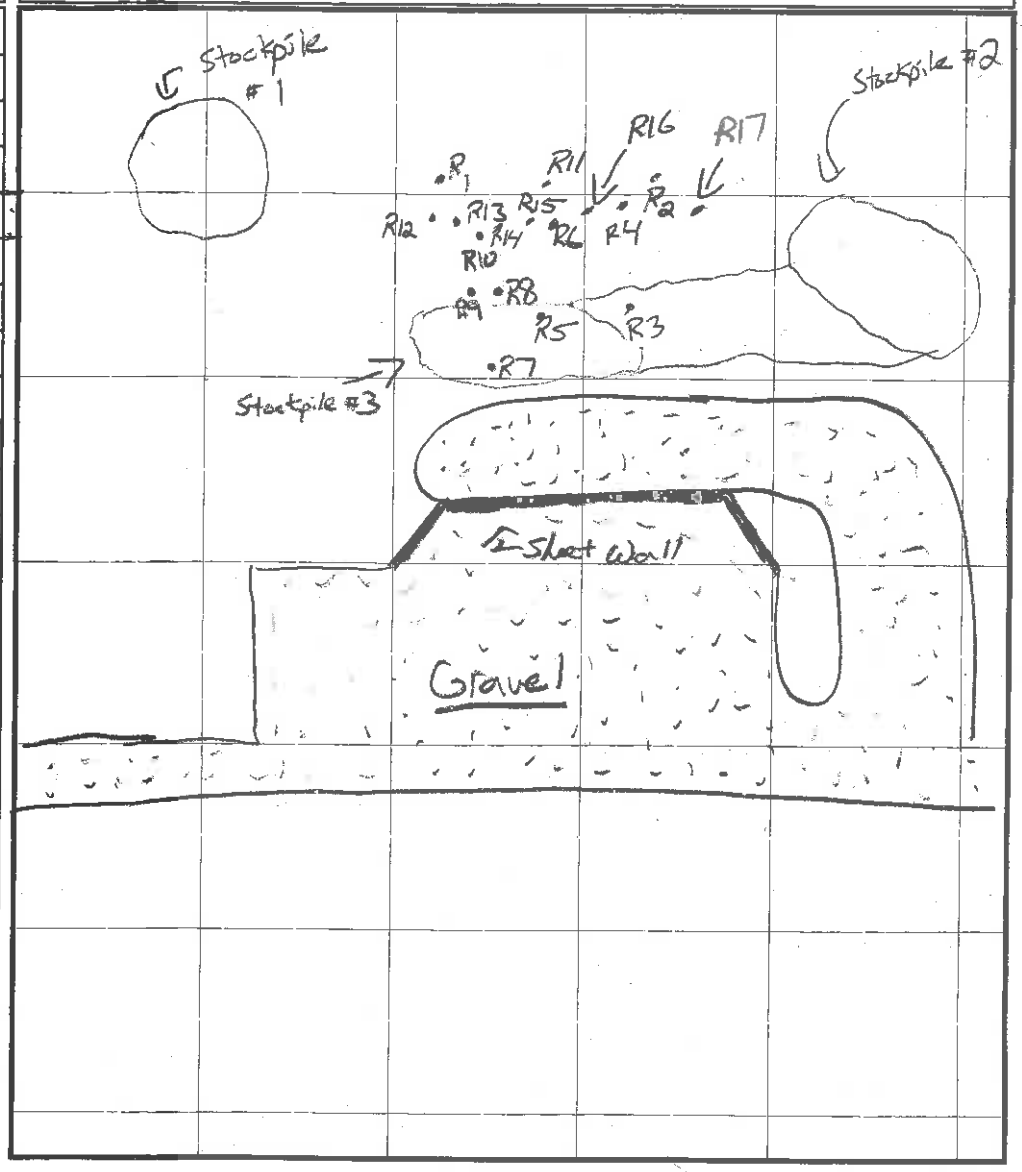
Date: 2/22/13
Sampler: BJL2
Calibration Time: 0810

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)
Example: R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	1-2	0815	CL	Reddish brown	N/N	0.1
R2	1-2	0815	CL	"	N/N	0.2
R3	1-2	0905	CL	"	N/N	0.4
R4	1-2	0905	CL	"	N/N	0.3
R5	2-3	0940	CL	"	N/N	0.8
R6	2-3	0940	CL	"	N/N	0.7
R7	2-3	1040	CL	"	N/N	0.7
R8	2-3	1040	CL	"	N/N	0.7
R9	2-3	1140	CL	"	N/N	0.4
R10	2-3	1140	CL	"	N/N	0.1
R11	2-3	1200	CL	"	N/N	0.1
R12	4-5	1305	CL	"	N/N	0.1
R13	4-5	1305	CL	"	N/N	0.1
R14	4-5	1355	CL	"	N/N	0.4
R15	4-5	1355	CL	"	N/N	0.4
R16	4-5	1430	CL	"	N/N	0.2
R17	4-5	1430	CL	"	N/N	0.3
	-No trucks hauled today.					
	-All excavated soil was placed in					
	Stockpile #3 today.					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal

Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

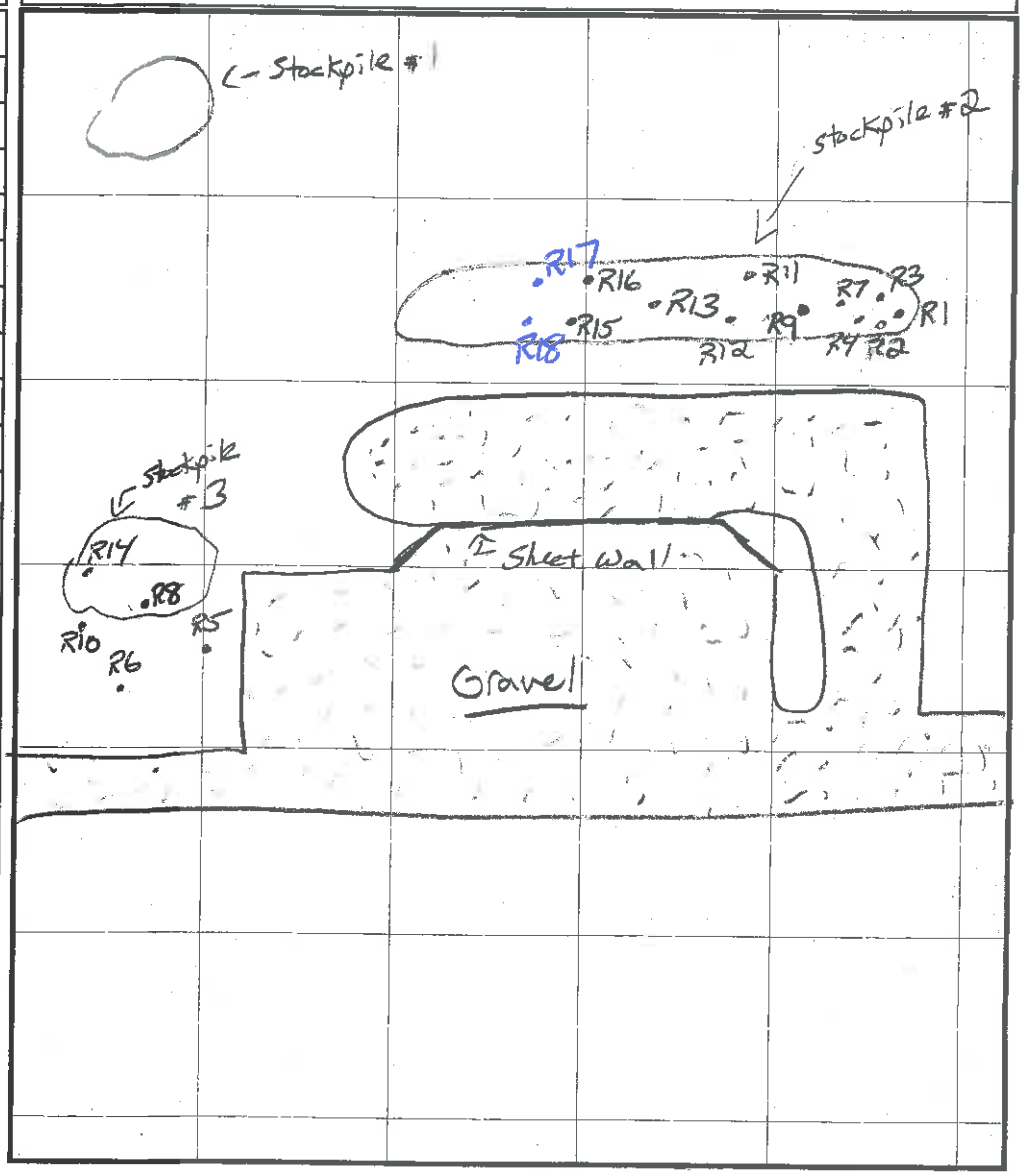
Date: 2/25/13
Sampler: BJL2
Calibration Time: 0810

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0810	CL	reddish brown	NIN	0.4
R2	Surface	0810	CL	"	NIN	0.3
R3	Surface	0900	CL	"	NIN	0.5
R4	Surface	0900	CL	"	NIN	0.3
R5	0-1	0950	CL	"	NIN	4.1
R6	0-1	0950	CL	"	NIN	0.7
R7	Surface	1000	CL	"	NIN	0.4
R8	Surface	1050	CL	"	NIN	1.0
R9	Surface	1050	CL	"	NIN	0.4
R10	Surface	1110	CL	"	NIN	0.5
R11	Surface	1150	CL	"	NIN	0.4
R12	Surface	1150	CL	"	NIN	0.2
R13	Surface	1250	CL	"	NIN	0.4
R14	Surface	1250	CL	"	NIN	0.3
R15	Surface	1340	CL	"	NIN	0.2
R16	Surface	1340	CL	"	NIN	0.4
R17	Surface	1500	CL	"	NIN	0.4
R18	Surface	1500	CL	"	NIN	0.4
	- Created Stockpile #3 and removed most of Stockpile #2. Stock pile #1 was combined with Stockpile #2.					
-	44 truck loads were removed today.					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Stockpile Screening

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace: .2 ppm

Date: 2/26/13

Sampler: REE

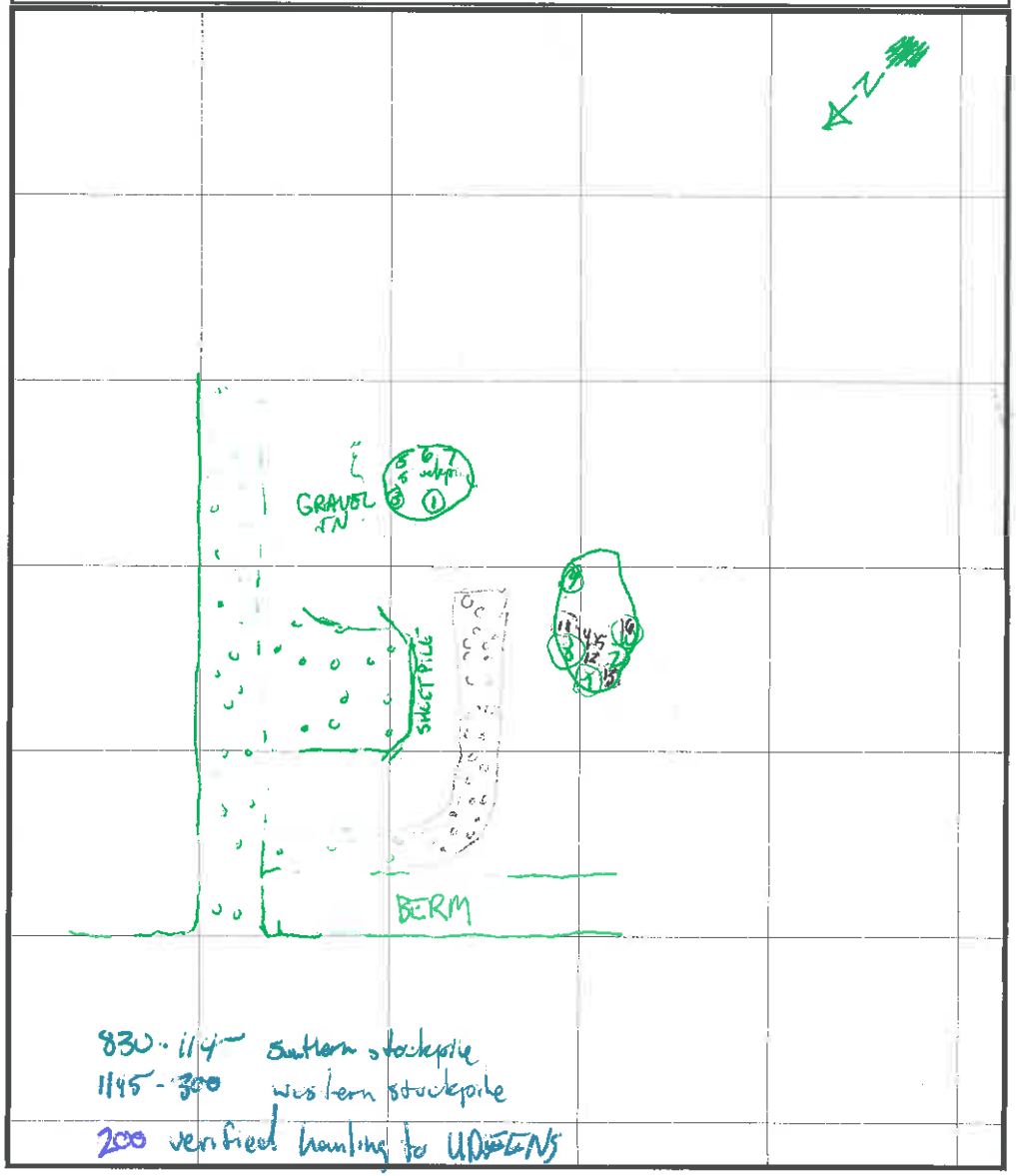
Calibration Time: 830

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)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R-1	—	830	CL	Red Brown	N/-	0.7
2	—	840	CL		N/-	1.0
3		920	CL		N/-	1.3
4		930	CL		N/-	6.0
5		1000	CL		N/-	6.2
6		1010	CL		N/-	8.6
7		1020	CL		N/-	9.0
8		1130	CL		N/-	5.1
9		1140	CL		N/-	9.4
10		1150	CL		N/-	6.8
11		100	CL		N/-	5.2
12		110	CL		N/-	4.1
13		120	CL		N/-	3.7
14		240	CL		N/-	4.2
15		250	CL		N/-	6.1
16		230	CL		N/-	3.2
Gravel in & Clay out to Updegrs						
TRUCKS	IIII	IIII IIII	IIII IIII	IIII IIII	Total 34	

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 100 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal stockpile Screening

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.1 ppm

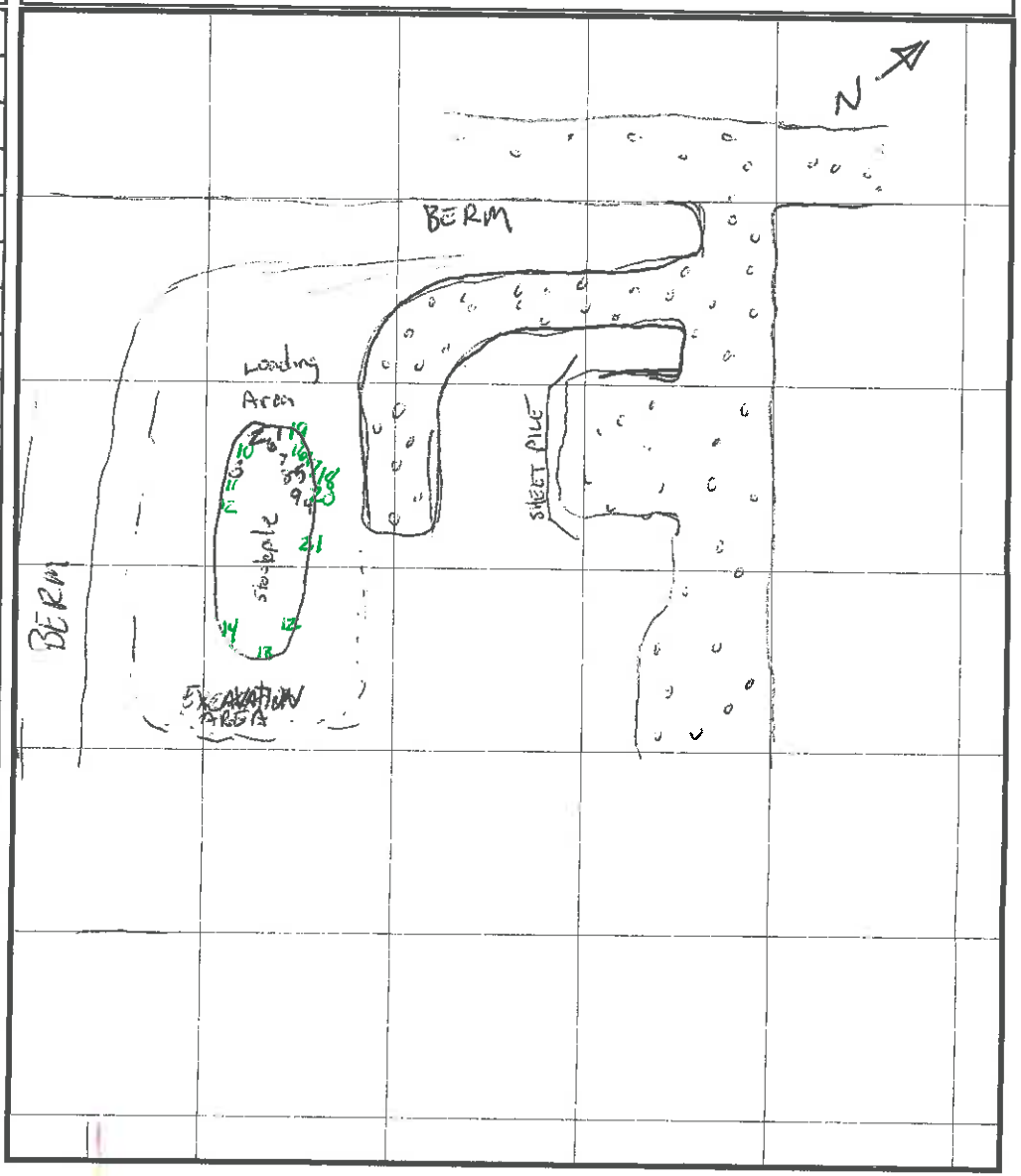
Date: 7/27/13
Sampler: RDB
Calibration Time: 745

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)
Example: R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R-1	-	830	CL	Red brown/N	N/	1.0
2	-	835				1.0
3	-	840				1.0
4	-	930				.7
5	-	935				.6
6	-	940				7.8
7		1040				.9
8		1045				1.2
9		1050				.9
10		1130				2.3
11		1135				3.7
12		1140				1.0
13		1240				.9
14		1245				.5
15		1250				.7
16		1350				1.0
17		1355				2.4
18		1400				.4
19		1440				.7
20		1445				1.1
21		1450				.6
1200 Verified trucks dumping @ UDEEN						
Trucks only hauling soil out						
TRUCK COUNT						Total 45

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Clean Soil Stockpile

Equipment used: Photo *-ionization detector with* 10.6 *eV lamp* Rae 3000 Background Headspace: 0.2 ppm

Date: 12/28/13

Sampler: CSG2

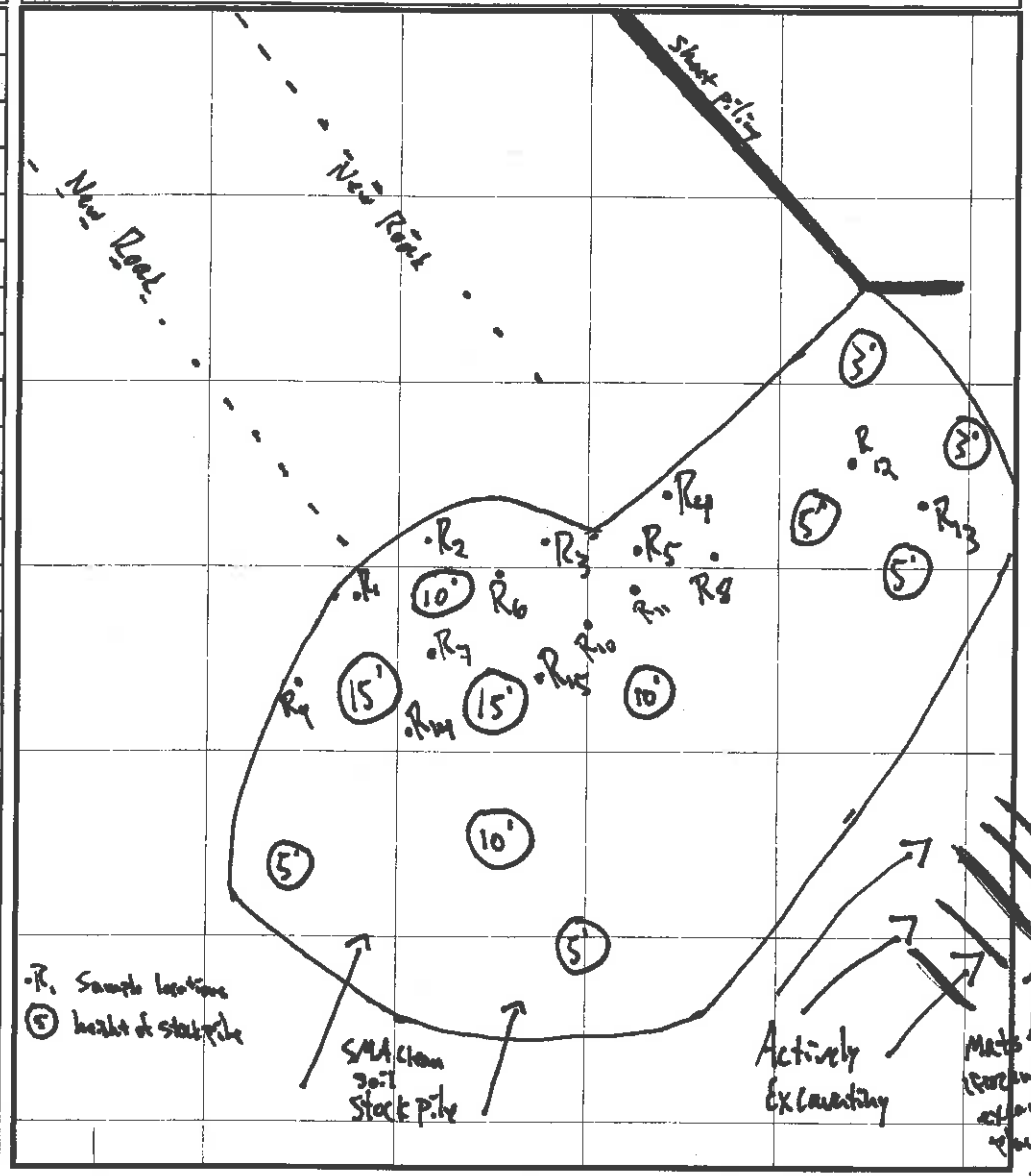
Calibration Time: 735

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)
Example: R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R-1	–	805	CL	Red brown	–	0.2
R-2	–	805	CL	Red brown	–	0.3
R-3	–	855	CL	Red brown	–	0.3
R-4	–	855	CL	Red brown	–	0.2
R-5	–	940	CL	Red brown	–	0.3
R-6	–	940	CL	Red brown	–	0.4
R-7	–	1045	CL	Red brown	–	0.1
R-8	–	1145	CL	Red brown	–	0.2
R-9	–	1145	CL	Red brown	–	0.2
R-10	–	1230	CL	Red brown	–	0.2
R-11	–	1230	CL	Red brown	–	0.4
R-12	–	1315	CL	Red brown	–	1.0
R-13	–	1315	CL	Red brown	–	0.7
R-14	–	1400	CL	Red brown	–	0.4
R-15	–	1400	CL	Red brown	–	0.7

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Clean Soil Stockpile

Equipment used: Photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 1.0 ppm

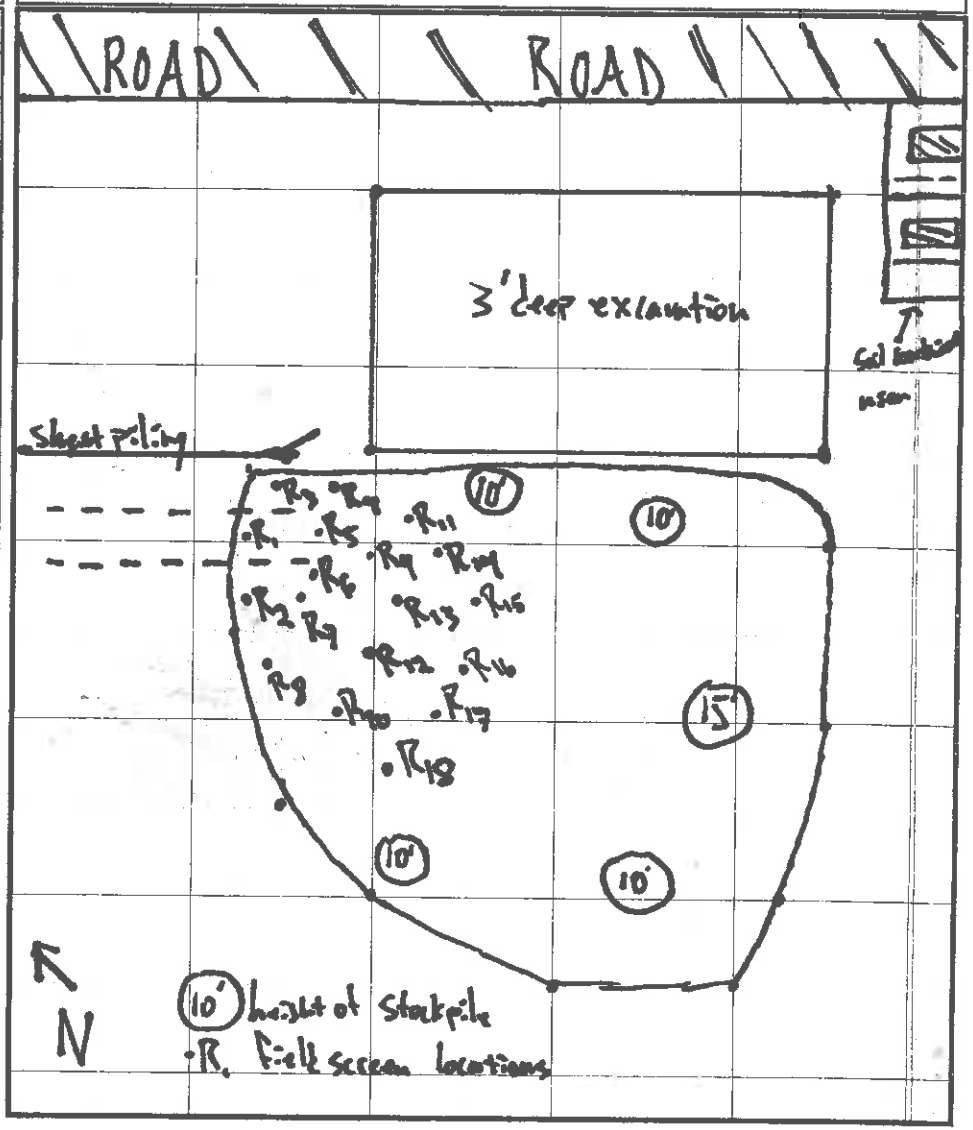
Date: 3/6/13
Sampler: CSG2
Calibration Time: 730

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1	↓	805	CL	Red brown	None	1.5
R-2		805				1.8
R-3		945				1.0
R-4		845				1.7
R-5		930				2.3
R-6		930				3.1
R-7		1015				5.0
R-8		1015				3.5
R-9		1115				3.7
R-10		1115				2.4
R-11		1200				3.1
R-12		1200				7.0
R-13		1245				2.5
R-14		1245				1.7
R-15		1330				1.3
R-16		1330				2.7
R-17		1415				1.5
R-18	↓	1415	↓	↓	↓	1.8
			Total	number of	loads:	37

SITE SKETCH: ~~north is up~~ *excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 50 FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Clean Soil Stock Pile

Equipment used: Photo *-ionization detector with* 10.6 *eV lamp* miniRAE 3000 Background Headspace: 1.0 ppm

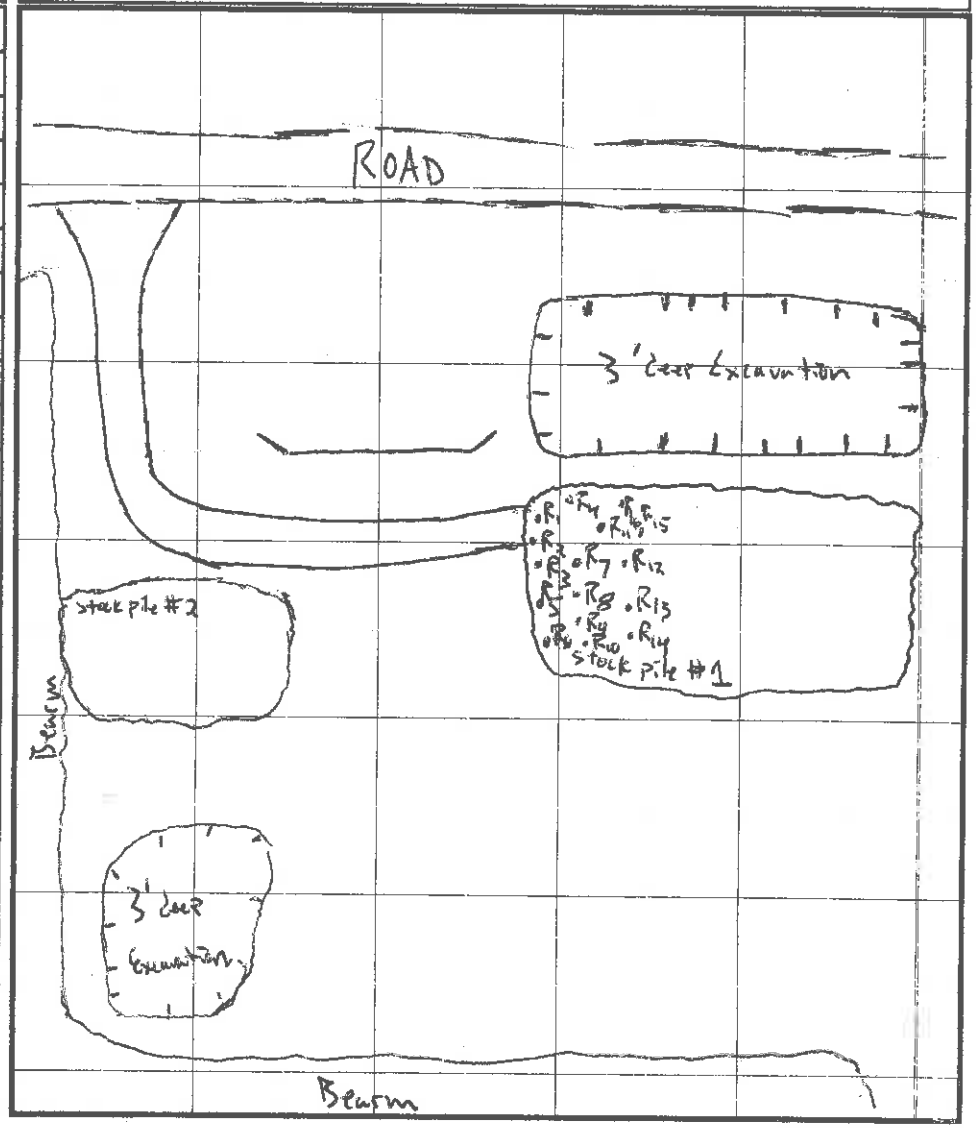
Date: 3/7/13
Sampler: CJG2
Calibration Time: 7:30

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1		800	CL	Red brown	-	2.0
2		800				3.2
3		845				2.4
4		845				1.5
5		930				2.4
6		930				2.8
7		1030				1.5
8		1030				1.8
9		1115				2.2
10		1115				1.2
11		1200				1.3
12		1200				1.8
13		1300				1.2
14		1300				1.0
15		1400				1.1
16		1400				1.5

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 50 ***FEET***



37 loads of clean soil hauled off site on 3/7/13

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Clean soil Stockpile / Screening

Equipment used: Photo -*ionization detector with* 10.6 *eV lamp* RAE 3000 Background Headspace: 1.0 ppm

Date: 3/8/13

Sampler: CSG 2

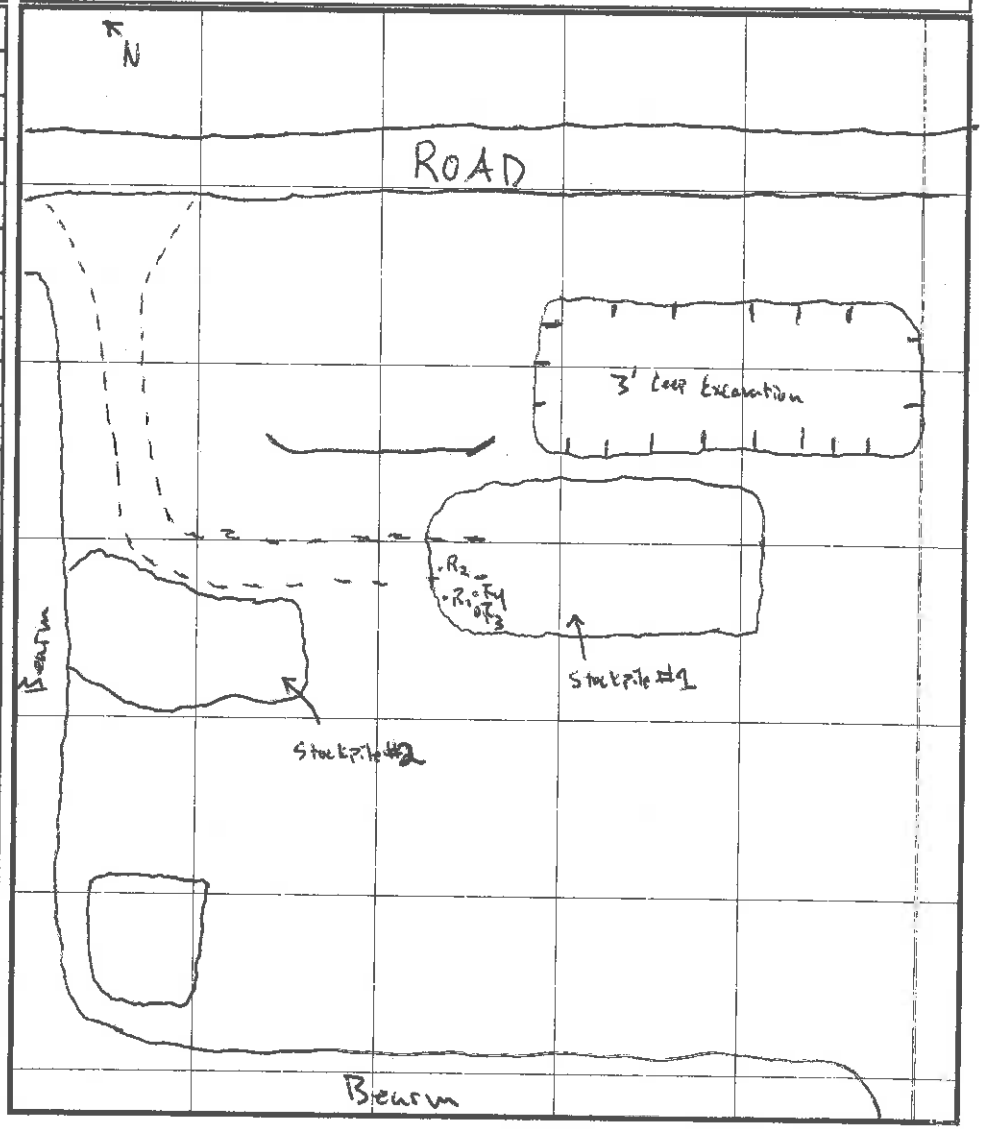
Calibration Time: 715

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1		805	CL	Red brown	—	2.1
R-2		805	↓	↓	↓	1.3
R-3		900	↓	↓	↓	1.8
R-4		900	↓	↓	↓	1.5

SITE SKETCH: ~~*north is up,*~~ *excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid = 50 FEET***



6 loads of clean soil hauled off site on 3/8/13

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 3/14/13

Location: *Milepost or Facility* Superior Terminal SMA

Sampler: BJL2

Equipment used: photo -*ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

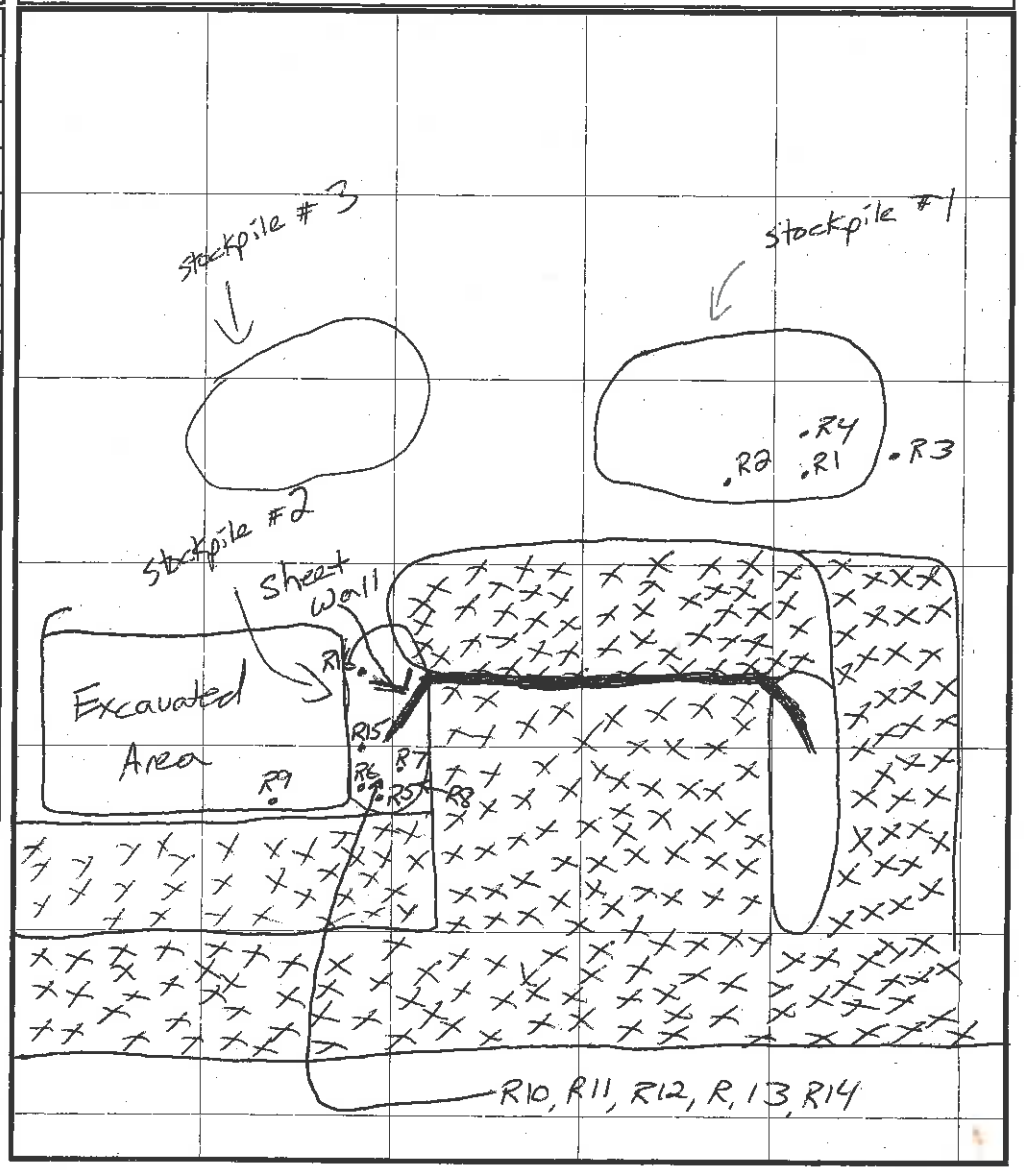
Calibration Time: 0815

Sample Nomenclature *(Location - sample type - #)*: R= removed

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0830	CL	reddish brown	N/N	0.3
R2	"	0830	CL	"	N/N	0.3
R3	"	0930	CL	"	N/N	0.2
R4	"	0930	CL	"	N/N	0.1
R5	"	1000	CL	"	N/N	0.2
R6	"	1040	CL	"	N/N	0.5
R7	"	1040	CL	"	N/N	0.5
R8	"	1135	CL	"	N/N	0.7
R9	"	1135	CL	"	N/N	0.7
R10	"	1230	CL	"	N/N	0.5
R11	"	1230	CL	"	N/N	0.3
R12	"	1315	CL	"	N/N	0.3
R13	"	1315	CL	"	N/N	0.2
R14	"	1350	CL	"	N/N	0.2
R15	"	1430	CL	"	N/N	0.3
R16	"	1445	CL	"	N/N	0.6
	~40 truck loads were hauled today.					
	- Excavated area for the SMA building was deepened w/ truck loads being hauled off site from stockpile #2					
	- About ½ of stockpile #1 was hauled off site today.					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal SMA

Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

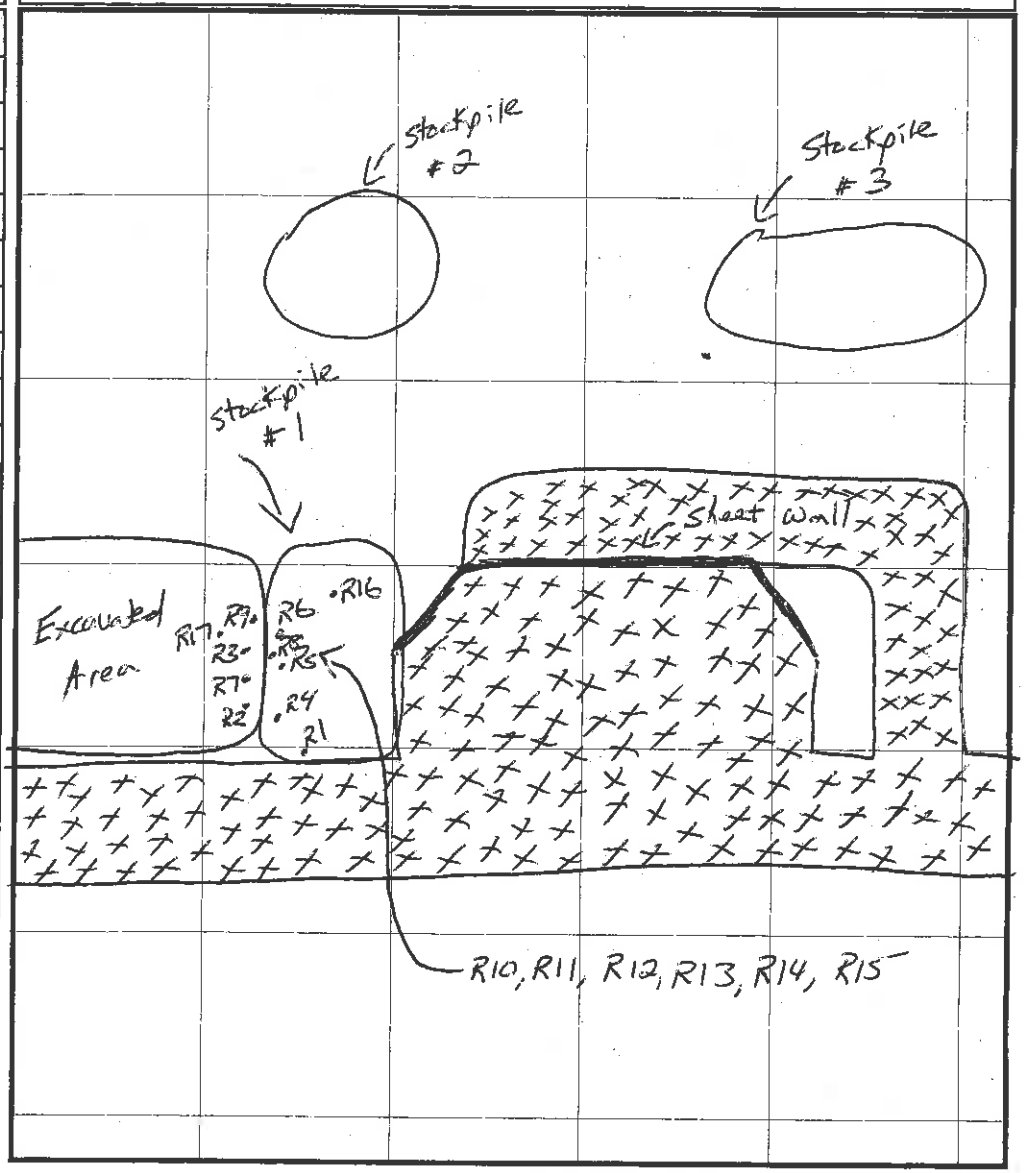
Sample Nomenclature *(Location - sample type - #):* R= removed

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

Date: 3/15/13
Sampler: BJL2
Calibration Time: 0800

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16.30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0805	CL	Reddish brown	N/N	0.6
R2	Surface	0850	CL	"	N/N	0.9
R3	Surface	0850	CL	"	N/N	0.7
R4	Surface	0930	CL	"	N/N	0.4
R5	Surface	0930	CL	"	N/N	0.5
R6	Surface	1030	CL	"	N/N	0.7
R7	Surface	1030	CL	"	N/N	0.6
R8	Surface	1110	CL	"	N/N	0.2
R9	Surface	1110	CL	"	N/N	0.2
R10	Surface	1215	CL	"	N/N	0.5
R11	Surface	1215	CL	"	N/N	0.4
R12	Surface	1315	CL	"	N/N	0.3
R13	Surface	1315	CL	"	N/N	0.2
R14	Surface	1400	CL	"	N/N	1.0
R15	Surface	1400	CL	"	N/N	0.5
R16	Surface	1445	CL	"	N/N	0.9
R17	Surface	1445	CL	"	N/N	1.4
– Excavated Area was deepened						
– Trucks were hauled from Stockpile #1						
– 46 truck loads were removed.						

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 3/19/13

Location: *Milepost or Facility* Superior Terminal SMA

Sampler: BSR

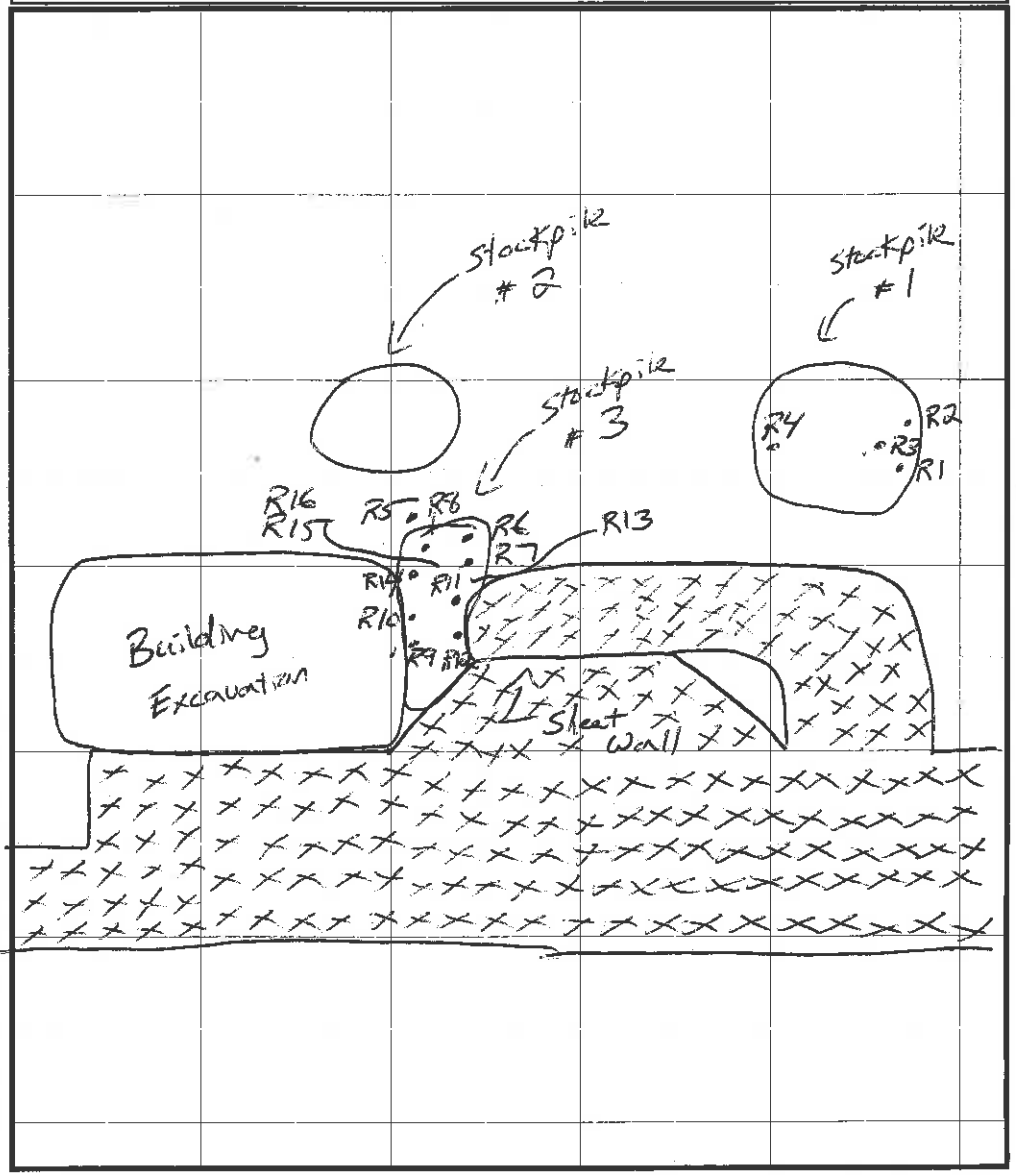
Equipment used: photo *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm Calibration Time: 0900

Sample Nomenclature *(Location - sample type - #)*: R= removed

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	Surface	0810	CL	Reddish Brown	N/N	0.2
R2	Surface	0810	CL	"	N/N	0.3
R3	Surface	0910	CL	"	N/N	0.6
R4	Surface	0910	CL	"	N/N	0.4
R5	Surface	0955	CL	"	N/N	0.5
R6	Surface	0955	CL	"	N/N	0.4
R7	Surface	1050	CL	"	N/N	0.2
R8	Surface	1050	CL	"	N/N	0.1
R9	Surface	1130	CL	"	N/N	0.6
R10	Surface	1130	CL	"	N/N	0.5
R11	Surface	1230	CL	"	N/N	0.3
R12	Surface	1230	CL	"	N/N	0.4
R13	Surface	1400	CL	"	N/N	0.4
R14	Surface	1400	CL	"	N/N	0.3
R15	Surface	1500	CL	"	N/N	0.2
R16	Surface	1500	CL	"	N/N	0.3
	-38 truckloads removed today.					
	- Dirt was trucked from Stockpiles					
	#1 and #3 today.					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal SMA

Equipment used: PID -*ionization detector with* 10.6 *eV lamp*

Background Headspace: 0.0 ppm

Date: 3/20/13

Sampler: BJR2

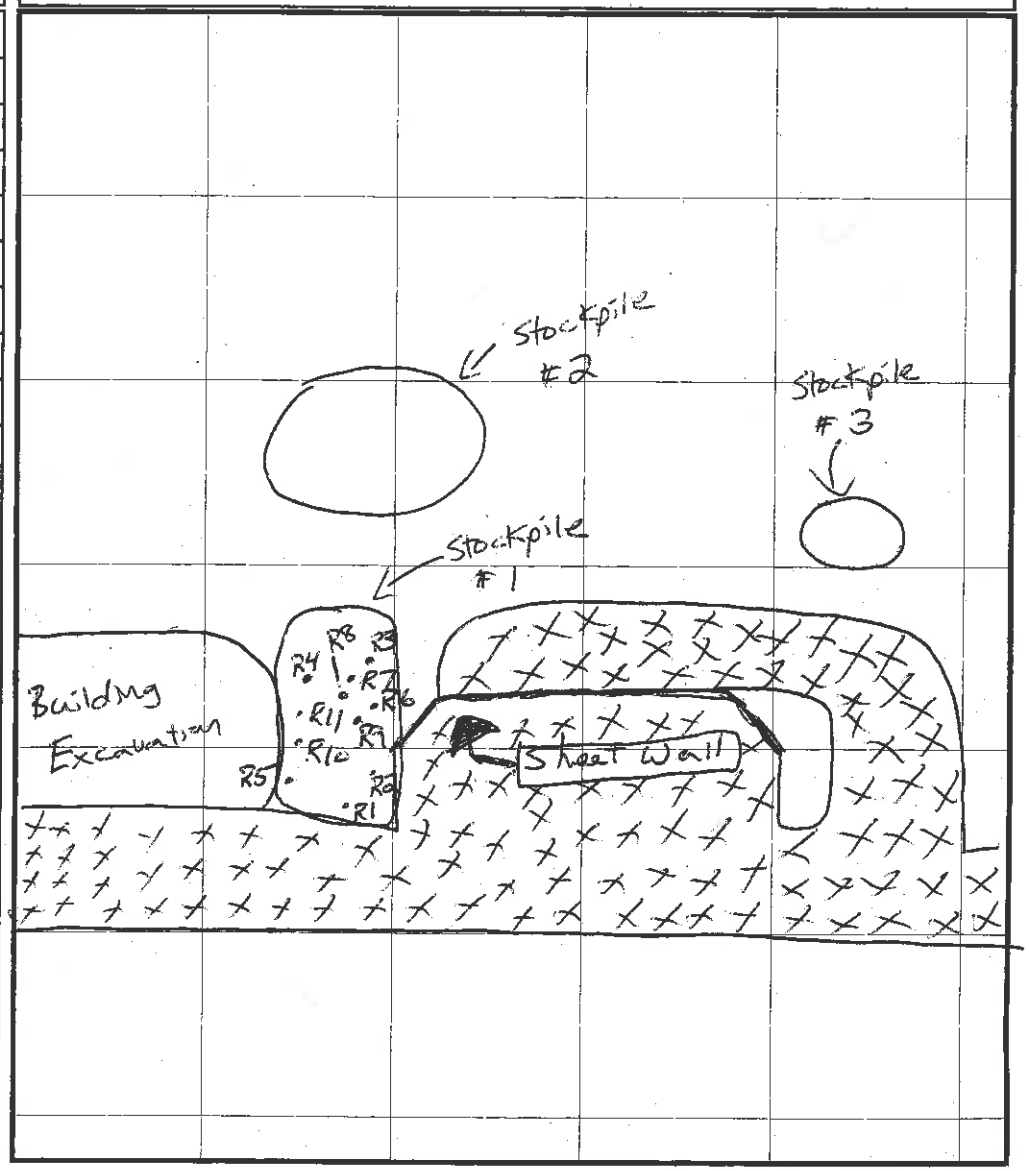
Calibration Time: NA

Sample Nomenclature *(Location - sample type - #)*: R=removed

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0820	CL	reddish brown	NIN	1.3
R2	Surface	0830	CL	"	NIN	0.8
R3	Surface	0935	CL	"	NIN	1.0
R4	Surface	0935	CL	"	NIN	0.6
R5	Surface	0945	CL	"	NIN	0.6
R6	Surface	1100	CL	"	NIN	0.4
R7	Surface	1100	CL	"	NIN	0.3
R8	Surface	1200	CL	"	NIN	0.6
R9	Surface	1200	CL	"	NIN	0.4
R10	Surface	1330	CL	"	NIN	0.6
R11	Surface	1330	CL	"	NIN	0.4

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal SMA

Equipment used: photo -*ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

Sample Nomenclature *(Location - sample type - #):* R= removed.

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

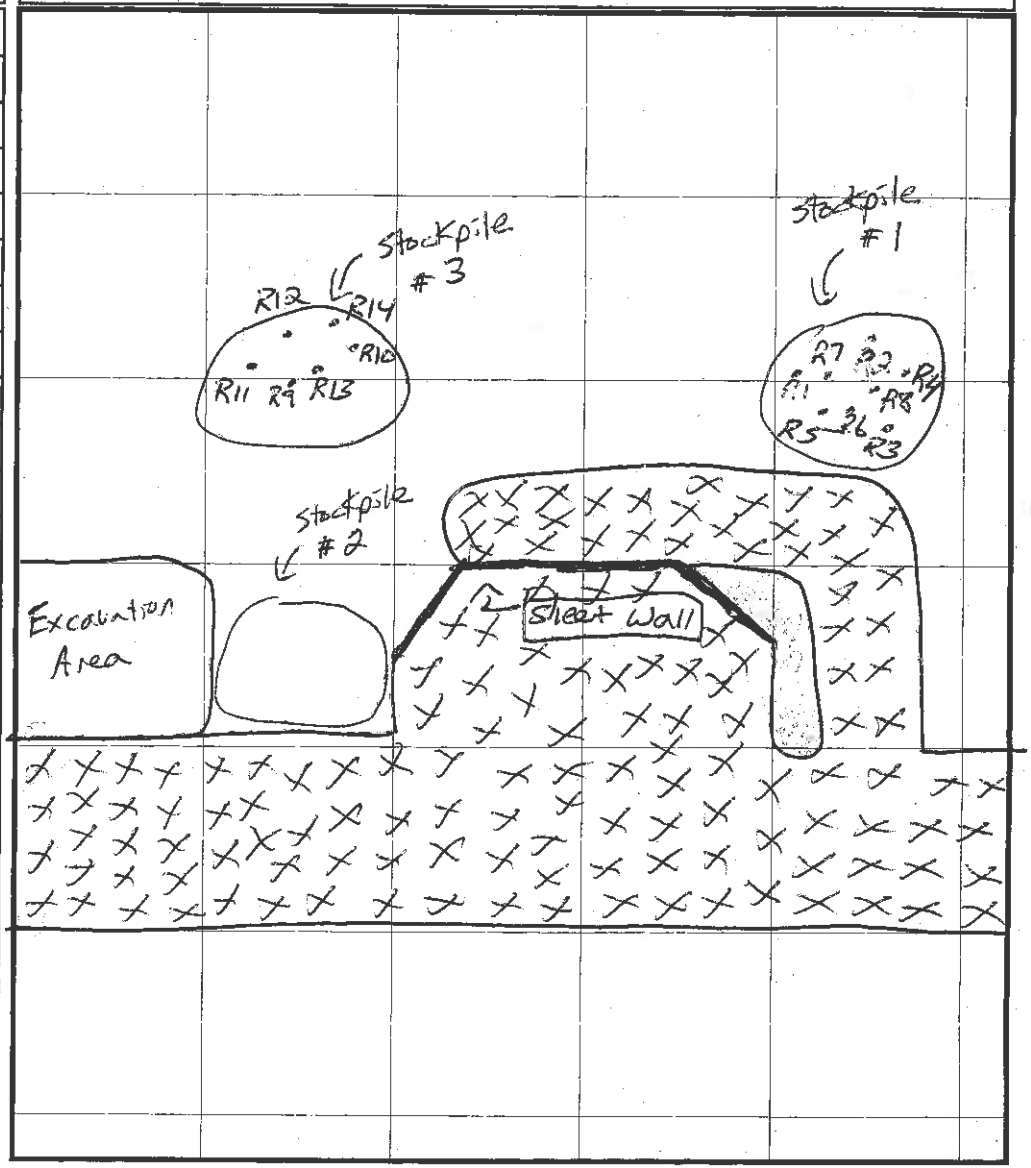
Date: 3/21/13

Sampler: BJL2

Calibration Time: No gas

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R1	Surface	0830	CL	Reddish brown	NIN	0.0
R2	"	0930	"	"	NIN	0.0
R3	"	1000	"	"	NIN	0.2
R4	"	1000	"	"	NIN	0.2
R5	"	1000	"	"	NIN	0.2
R6	"	1100	"	"	NIN	1.7
R7	"	1100	"	"	NIN	0.7
R8	"	1100	"	"	NIN	0.3
R9	"	1150	"	"	NIN	0.3
R10	"	1150	"	"	NIN	0.4
R11	"	1300	"	"	NIN	0.2
R12	"	1300	"	"	NIN	0.4
R13	"	1430	"	"	NIN	0.2
R14	"	1430	"	"	NIN	0.2
- Stockpile #1 and 2 were removed today						
- Trucks began hauling stockpile #1						
- 29 truckloads were removed today.						

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Soil Containment Area

Equipment used: Photo -*ionization detector with* 10.6 *eV lamp* Mini RAE 3000 Background Headspace: 0.4 ppm

Date: 3/25/13

Sampler: CSG2

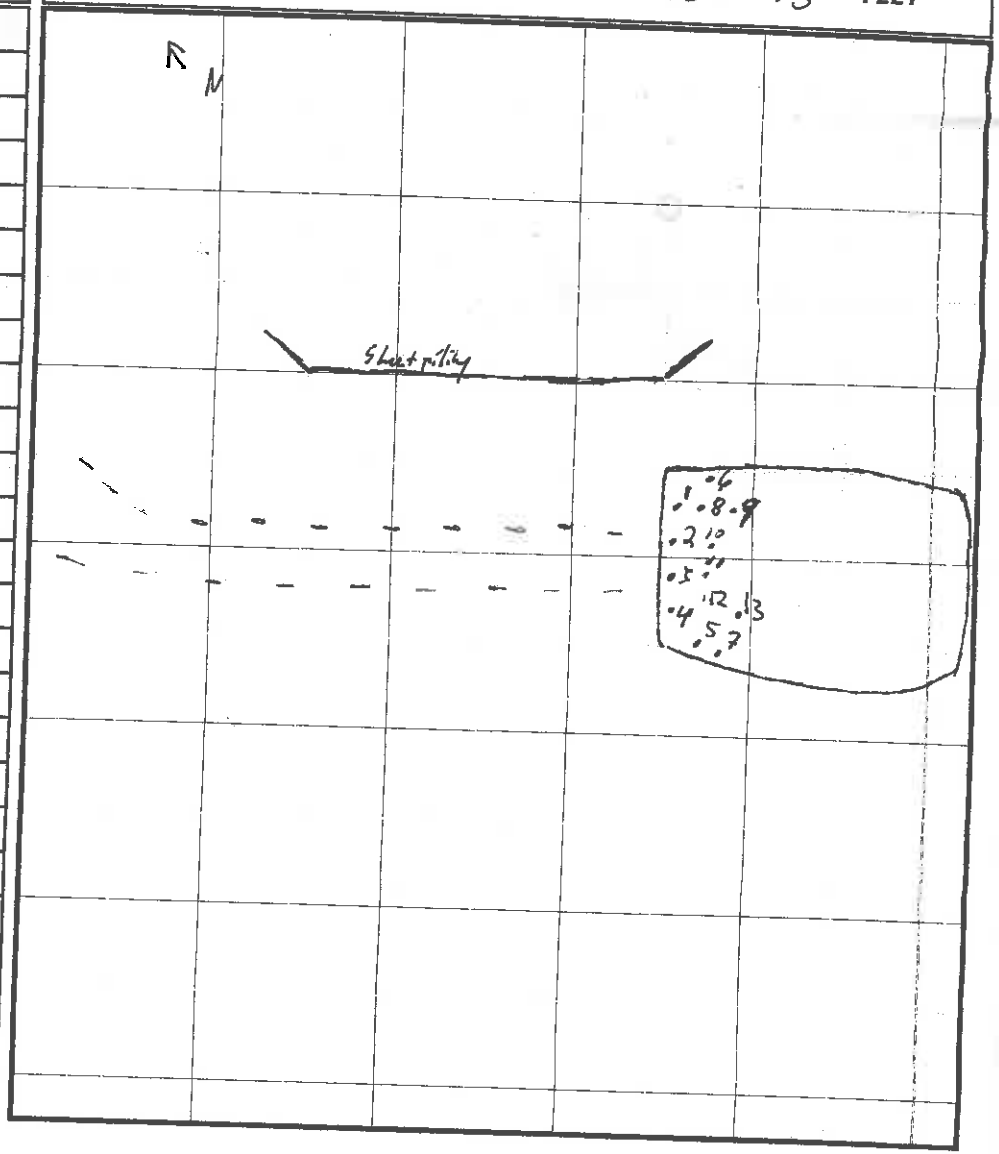
Calibration Time: 900

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1		815	CL	Reddish brown	-/-	0.4
R-2		815				0.4
R-3		815				0.4
R-4		910				0.5
R-5		910				0.6
R-6		1010				0.4
R-7		1010				0.4
R-8		1120				0.4
R-9		1120				0.7
R-10		1230				0.3
R-11		1230				0.4
R-12		1340				0.3
R-13		1340	↓	↓	↓	0.3

SITE SKETCH: ~~*northern up*~~*; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 15 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 3/26/13

Location: *Milepost or Facility* Superior Terminal SMA

Sampler: RCC

Equipment used: PID *-ionization detector with* 10.6 *eV lamp*

Background Headspace: .2 ppm

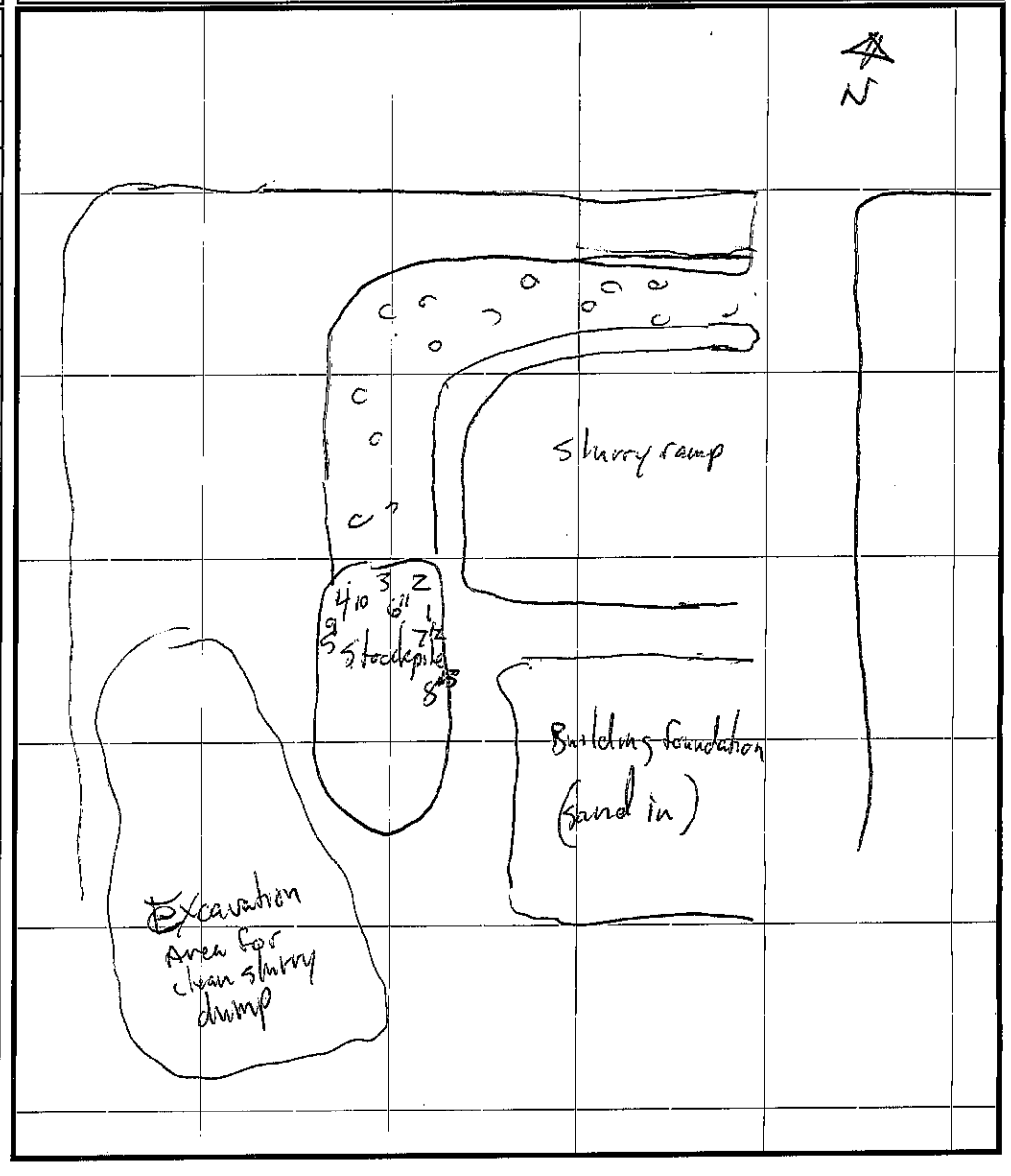
Calibration Time: 730

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1		800	CL	Reddish brown	N/N	.2
R-2		802				.2
R-3		804				.3
R-4		806				.2
R-5		808				.3
R-6		1000				.2
R-7		1002				.2
R-8		1004				.2
R-9		1058				.1
R-10		1100				.2
R-11		1102				.2
R-12		1104				.3
R-13		1106				.3

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** Not to Scale ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal SMA

Equipment used: photo *-ionization detector with* 10.6 *eV lamp*

Background Headspace: 0.2-0.4 ppm

Sample Nomenclature *(Location - sample type - #)*: R= removed.

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

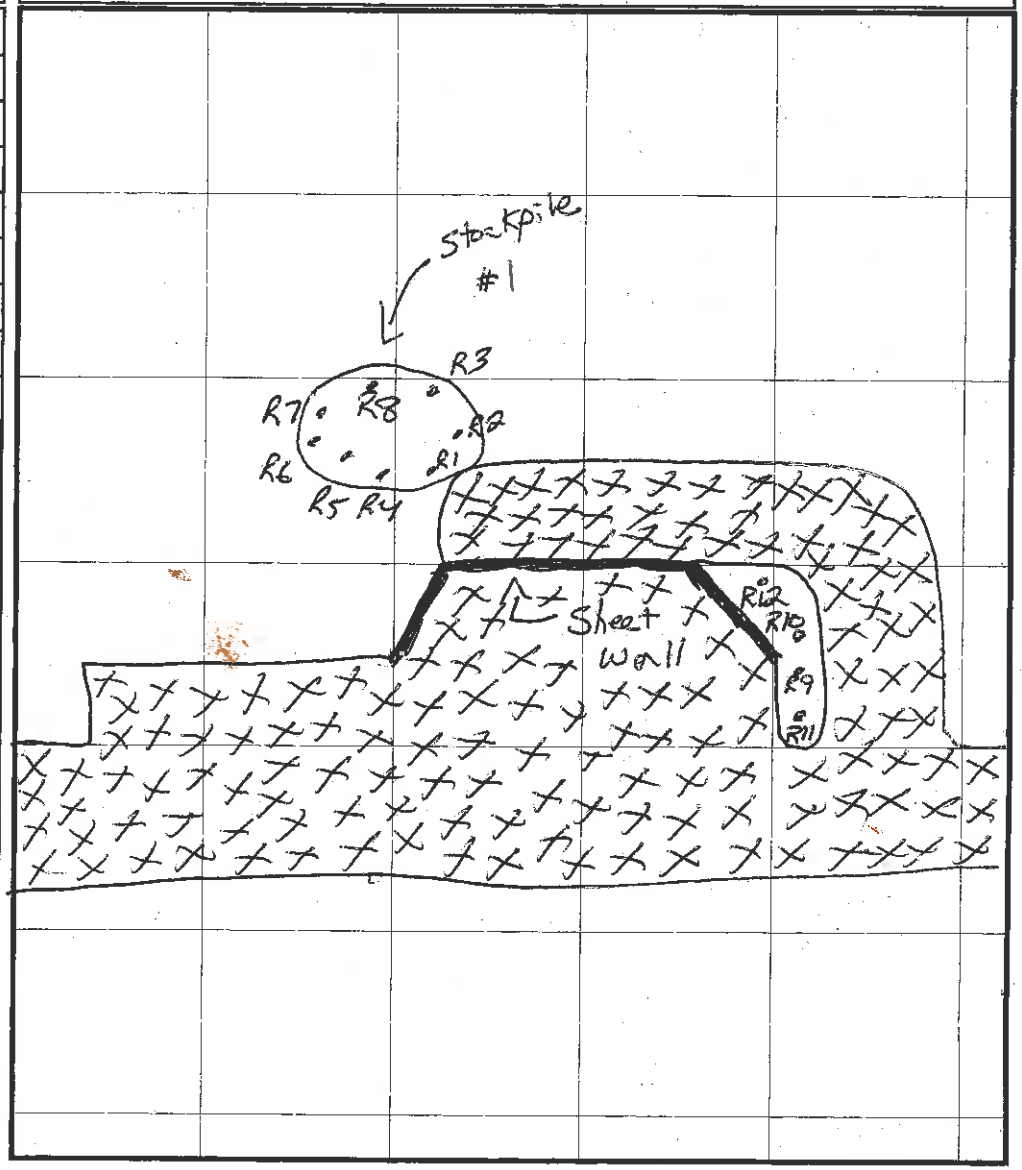
Date: 3/27/13

Sampler: BJ2

Calibration Time: 0800

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	*4*	*16:30*	*CL*	*Reddish brown*	*Petroleum/ Rainbow*	*275*
R1	Surface	0900	CL	reddish brown	MN	0.4
R2	Surface	0900	CL	"	MN	0.3
R3	Surface	0900	CL	"	MN	0.4
R4	Surface	1020	CL	"	MN	0.3
R5	Surface	1020	CL	"	MN	0.3
R6	Surface	1020	CL	"	MN	0.4
R7	Surface	1020	CL	"	MN	0.3
R8	Surface	1020	CL	"	MN	0.4
R9	Surface	1100	CL	"	MN	0.1
R10	Surface	1100	CL	"	MN	0.2
R11	Surface	1100	CL	"	MN	0.2
R12	Surface	1100	CL	"	MN	0.2
	- will complete removal of stockpile #1 today and then proceed to dig on west side of sheet wall					
	- ~8-10 trucks hauled in the morning. Little digging activity today and screened soil ahead of ~~the~~ excavation should be fine for rest of ~~day~~ afternoon. BJ2, 3/26/13, 1100					

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 30 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal Clean Soil Area

Equipment used: Photo -*ionization detector with* 10.6 *eV lamp* Background Headspace: 0.0 ppm

Date: 5/3/13

Sampler: CJG2

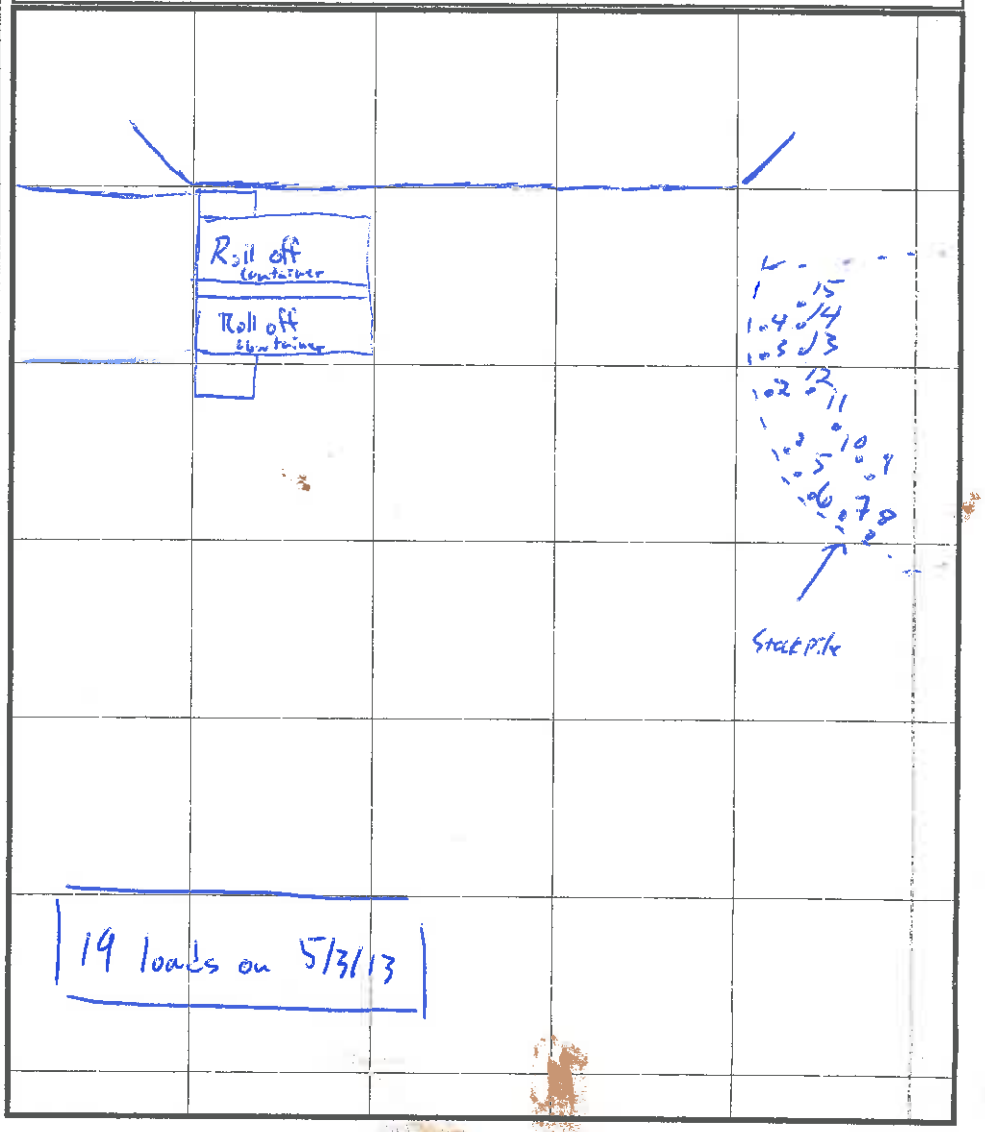
Calibration Time: 720

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1	-	810	CL	Red brown	-/-	0.0
R-2	-	810	CL	Red brown	-/-	0.0
R-3	-	915	CL	Red brown	-/-	0.0
R-4	-	915	CL	Red brown	-/-	0.2
R-5	-	1035	CL	Red brown	-/-	0.8
R-6	-	1035	CL	Red brown	-/-	2.2
R-7	-	1150	CL	Red brown	-/-	0.2
R-8	-	1150	CL	Red brown	-/-	0.3
R-9	-	1150	CL	Red brown	-/-	0.1
R-10	-	1320	CL	Red brown	-/-	0.6
R-11	-	1320	CL	Red brown	-/-	1.1
R-12	-	1320	CL	Red brown	-/-	1.2
R-13	-	1435	CL	Red brown	-/-	0.7
R-14	-	1435	CL	Red brown	-/-	0.5
R-15	-	1435	CL	Red brown	-/-	0.8

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* _____

Equipment used: _____ *-ionization detector with* _____ *eV lamp* Background Headspace: 0.2 ppm

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

Date: 5/9/13

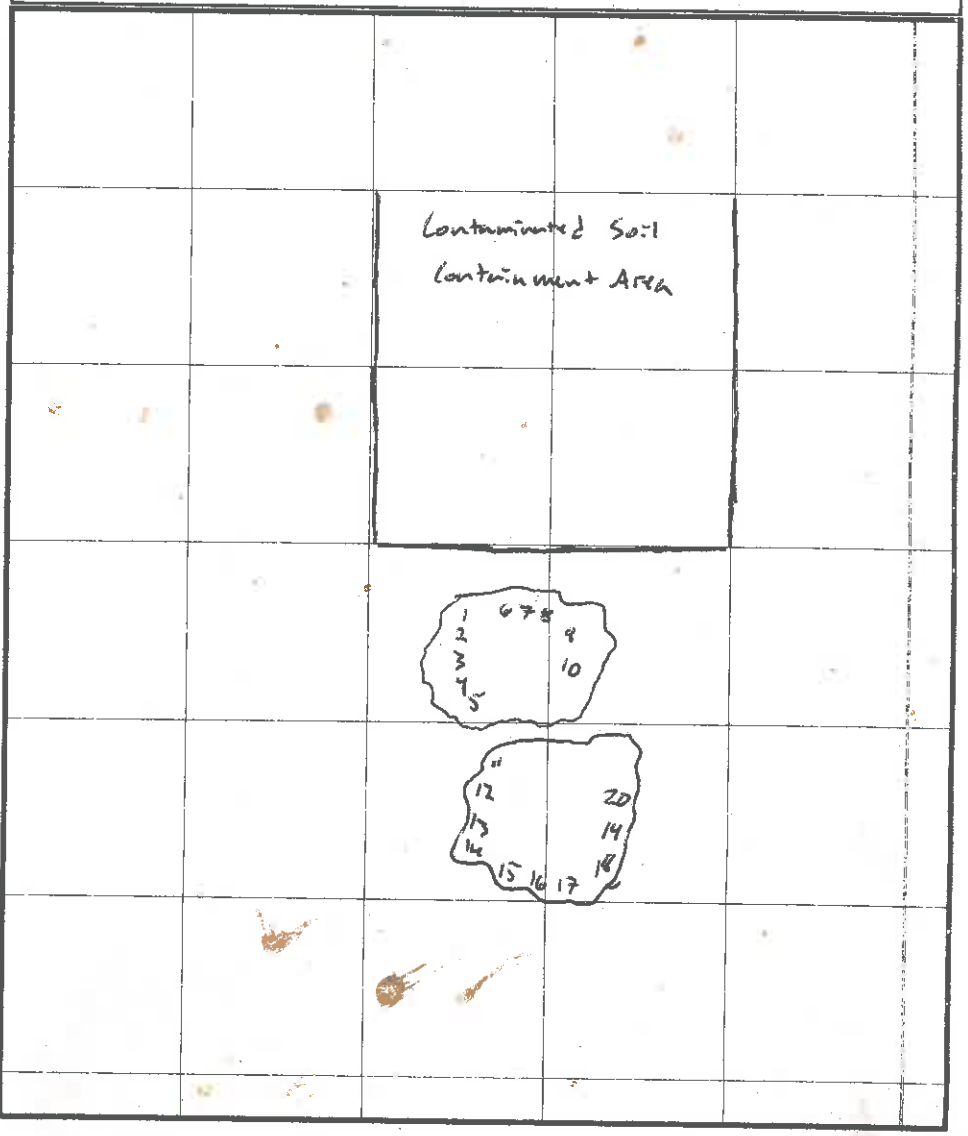
Sampler: CTG 2

Calibration Time: 7220

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
1	—	930	CL	Red/Brown	—/—	0.8
2						1.3
3						0.6
4						0.7
5						1.1
6						1.2
7						0.9
8						0.5
9						0.8
10		↓	↓	↓	↓	1.0
11		1325	CL	Red/Brown	—/—	0.2
12						0.3
13						0.7
14						0.8
15						0.3
16						1.2
17						0.4
18						0.3
19						0.3
20	↓	↓	↓	↓	↓	0.5

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Technical SMA

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* mini RAE 3000 Background Headspace: 0.4 ppm

Date: 5/16/13

Sampler: CJG2

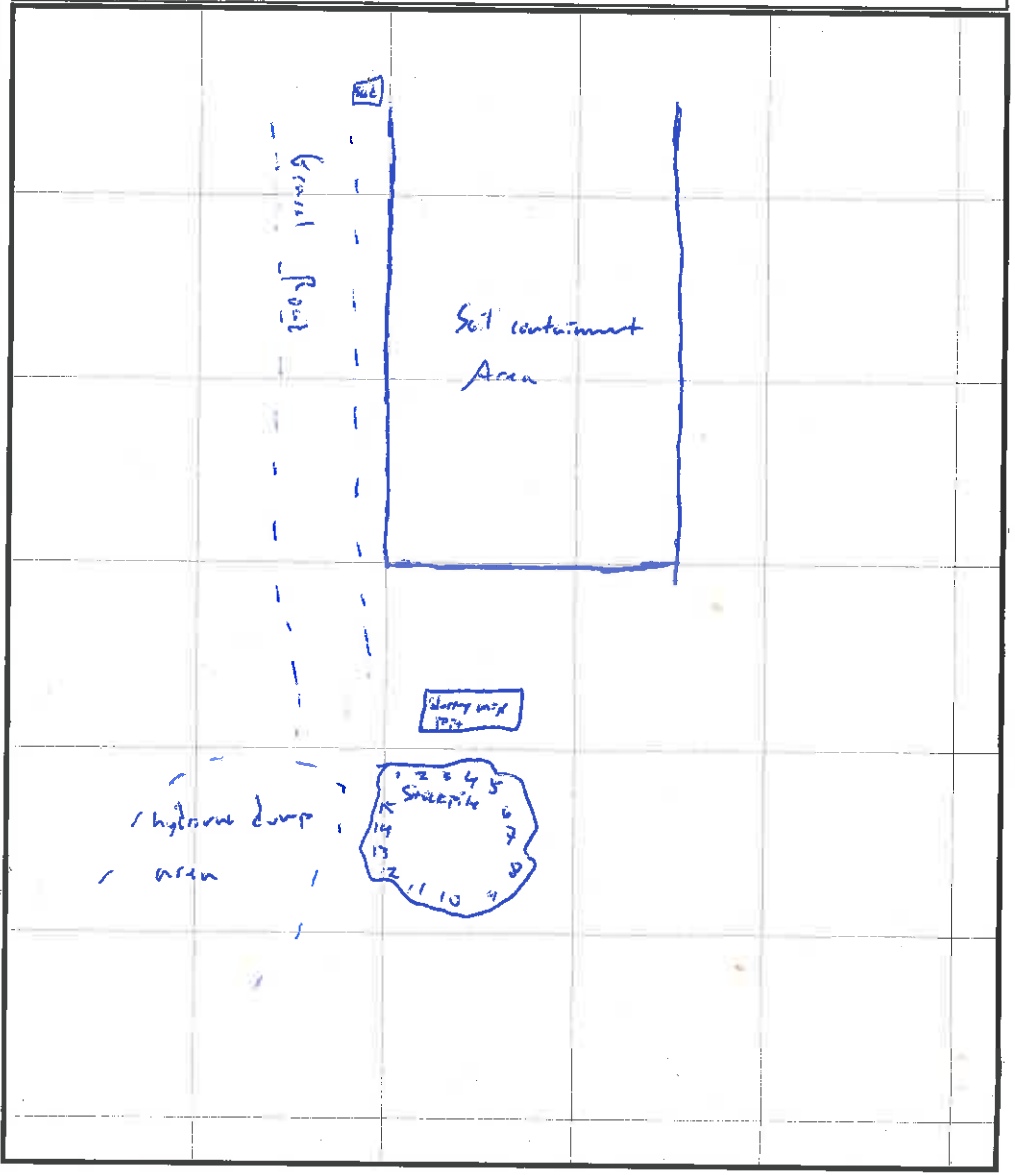
Calibration Time: 725

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)
Example: R-1	4	16.30	CL	Reddish brown	Petroleum/ Rainbow	275
1	—	830	CL	Red brown	—/—	0.4
2						1.3
3						0.8
4						0.7
5						0.6
6						1.0
7						1.4
8						1.0
9						2.8*
10						1.4
11						0.6
12						0.3
13						2.4*
14						1.0
15						1.1
						* Samples had high amounts of moisture

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior Terminal SMA Slurry

Equipment used: Photo -*ionization detector with* 10.6 *eV lamp* Minirae 3000 Background Headspace: 0.1 ppm

Date: 9/17/13

Sampler: CJG2

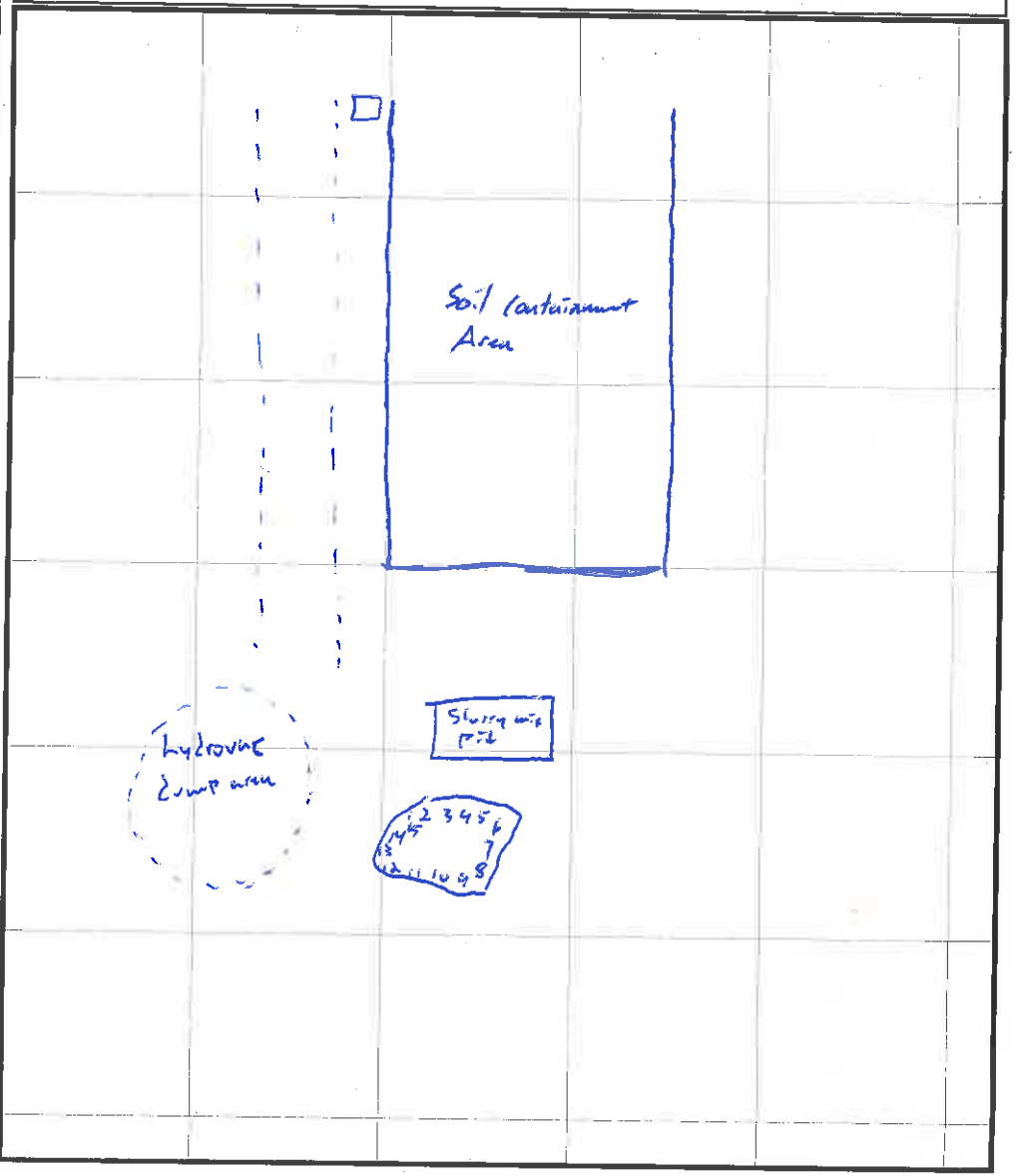
Calibration Time: 735

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)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
1	—	820	CL	Red brown	—/—	0.4
2						0.9
3						0.2
4						1.4
5						0.5
6						0.8
7						0.4
8						0.1
9						0.2
10						2.0
11						0.5
12						1.0
13						0.3
14						0.7
15		↓	↓	↓	↓	1.5

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Location: *Milepost or Facility* Superior SMA

Equipment used: PID -ionization detector with 10.6 eV lamp (minimum RAE 3000) Background Headspace: 0.4 ppm

Date: 7/22/13

Sampler: CJG2

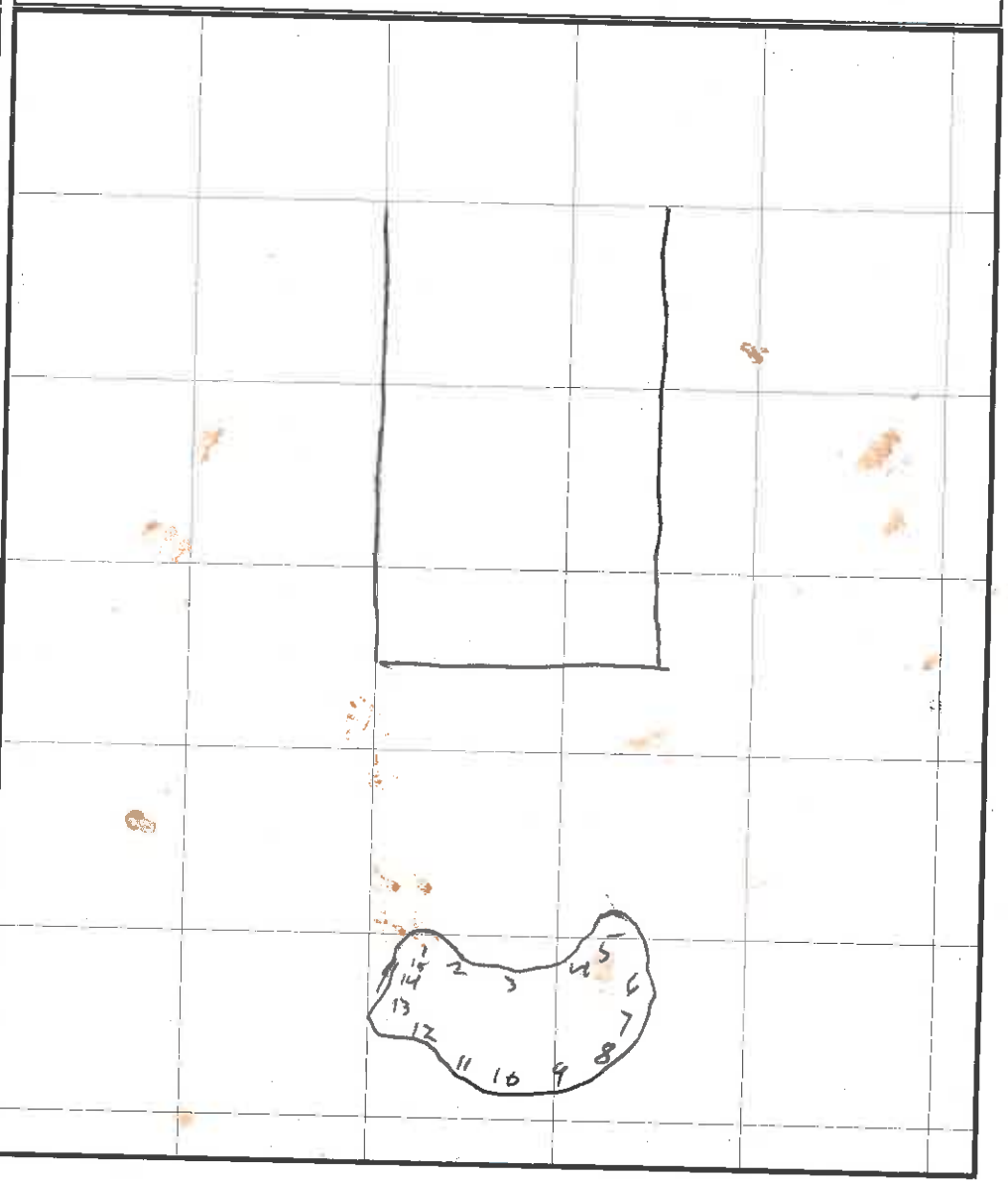
Calibration Time: 13 30

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)
Example. R-1	4	16 30	CL	Reddish brown	Petroleum/ Rainbow	275
1	—	1430	CL	Red/brown	—/—	0.5
2						0.8
3						0.6
4						0.5
5						0.2
6						0.1
7						0.2
8						0.1
9						0.3
10						0.5
11						0.3
12						1.0
13						0.2
14						0.2
15						0.9

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



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 8/22/13

Location: *Milepost or Facility:* Contaminated SMA Deconstruction (old stockpile area) Sampler: LEN

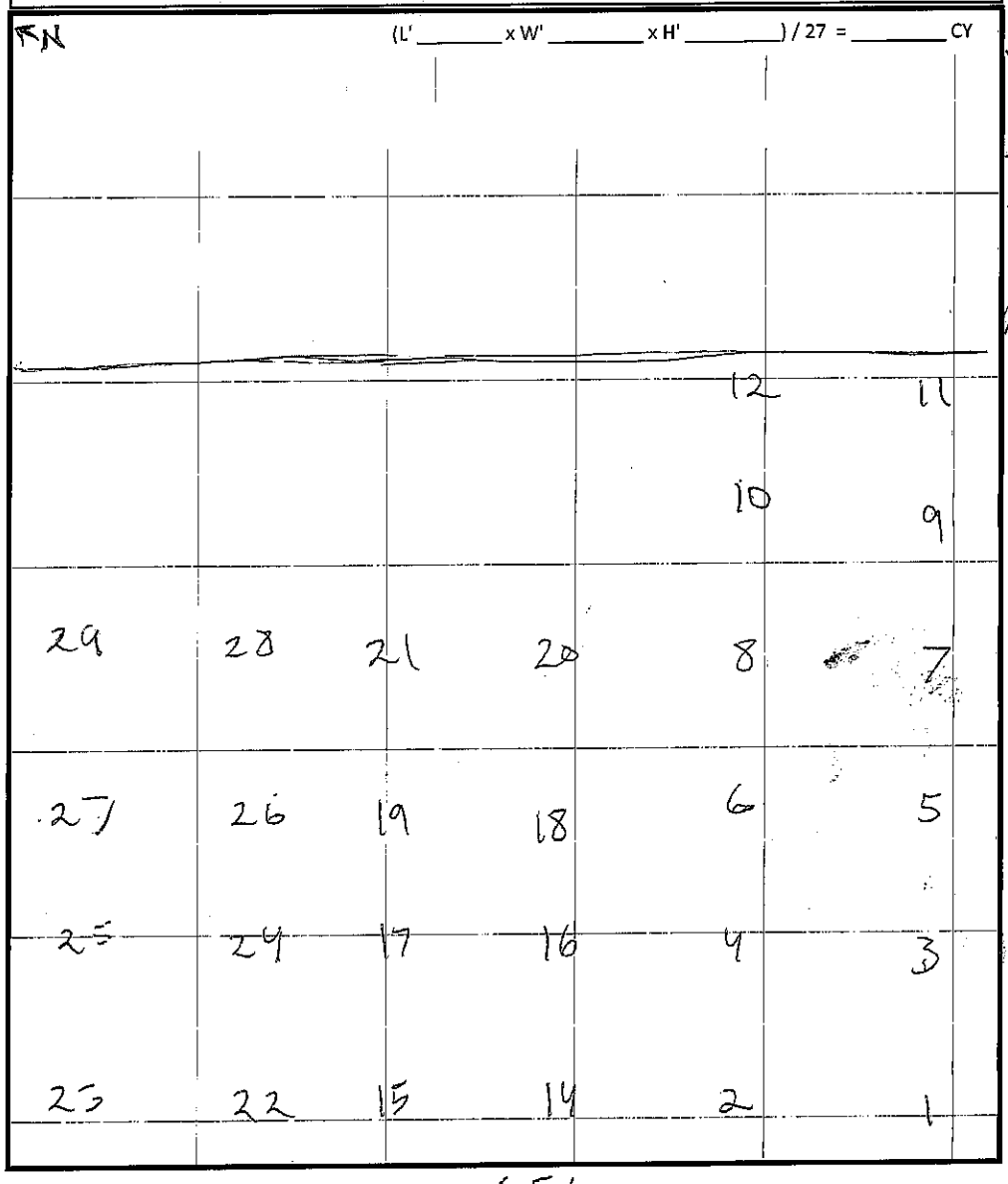
Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.5 ppm Calibration Time: 8:00 a.m

Sample Nomenclature *(Location - sample type - #):* SMA Stockpile -

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-1	-	9:00	CL	Reddish brown	normal	0.4
R-2	-					0.4
R-3	-					0.3
R-4	-					0.4
R-5	-					0.4
R-6	-					0.3
R-7	-	9:30				0.1
R-8	-					0.1
R-9	-					0.1
R-10	-					2.2
R-11	-					0.4
R-12	-					0.3
R-13	-					-0.3
R-14	-	12:15				0.3
R-15	-					0.3
R-16	-					0.3
R-17	-					0.3
R-18	-	1:15				0.5
R-19	-					0.7
R-20	-					0.7
R-21						0.7
R-22		4:20				0.2
R-23						0.2
R-24						1.0

SITE SKETCH: *north is up; excavation extents and depths, sample locations, structures, utilities, boring locations, wells, natural features...* ***1 inch/grid =*** 13 ***FEET***



ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 8/22/13

Location: *Milepost or Facility:* Contaminated SMA Deconstruction (old stockpile area) Sampler: LEN

Equipment used: PID *-ionization detector with* 10.6 *eV lamp* Background Headspace: 0.5 ppm Calibration Time: 8:00 a.m.

Sample Nomenclature *(Location - sample type - #):* SMA Stockpile -

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

Sample ID	Depth (ft)	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
R-25	-	4:20	CL	Reddish brown	normal	0.6
R-26	-	"	"	"	"	0.7
R-27	-	"	"	"	"	0.7
R-28	-	"	"	"	"	0.8
R-29	-	"	"	"	"	0.7
R-6	-					
R-7	-					
R-8	-					
R-9	-					
R-10	-					
R-11	-					
R-12	-					
R-13	-					
R-14	-					
R-15	-					
R-16	-					
R-17	-					
R-18	-					
R-19	-					
R-20	-					
R-21						
R-22						
R-23						
R-24						

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

(L' _____ x W' _____ x H' _____) / 27 = _____ CY

See pg 1

ENBRIDGE SITE INVESTIGATION FIELD SAMPLING AND SCREENING LOG

Date: 8/23/13

Location: *Milepost or Facility* Superior Terminal SAA

Sampler: CSG2/TTB

Equipment used: Photo -*ionization detector with* 10.6 *eV lamp* mini RAE 3000 Background Headspace: 0.1 ppm

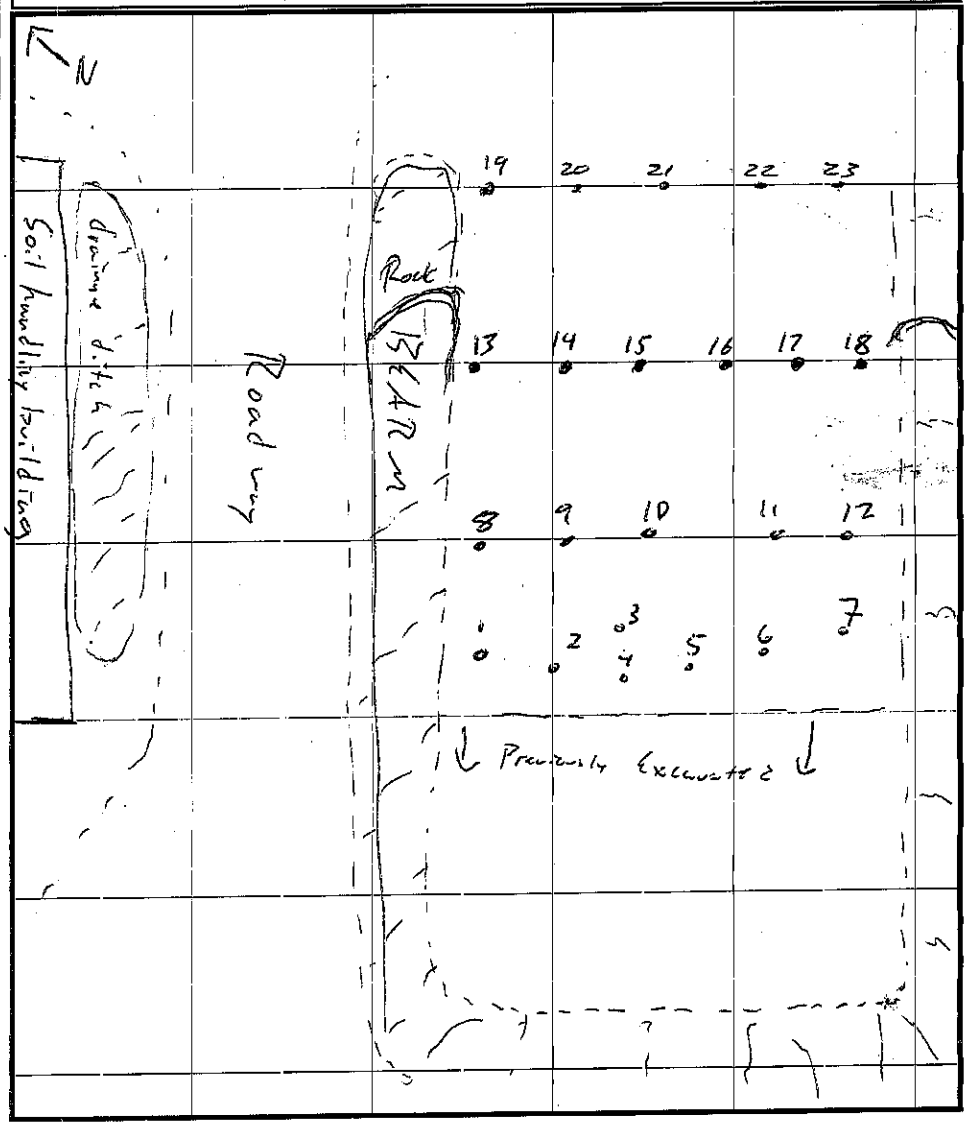
Calibration Time: 815

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

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

Sample ID	Depth (ft) below liner	Time (military)	Soil Type (USCS)	Color/ Discolor	Odor/ Sheen	Headspace Reading (ppm)
Example: R-1	4	16:30	CL	Reddish brown	Petroleum/ Rainbow	275
1	1.0	945	SP	Red brown	-/-	0.7
2	1.0	↓	CL	"	"	0.2
3	1.0	↓	CL	"	"	0.1
4	1.0	1005	CL	"	"	0.6
5	1.0	↓	CL	"	"	0.9
6	1.0	↓	SP	"	"	1.9
7	1.0	↓	SP	"	"	1.7
8	0.5	1250	SP	"	"	0.3
9	0.5	↓	SP	"	"	0.1
10	0.5	↓	CL	"	"	0.1
11	0.5	↓	CL	"	"	0.2
12	0.5	↓	CL	"	"	0.1
13	0.5	1340	CL	"	"	0.3
14	0.5	↓	CL	"	"	0.3
15	0.5	↓	SP	"	"	0.7
16	0.5	↓	SP	"	"	0.5
17	0.5	↓	CL	"	"	0.6
18	0.5	↓	SP	"	"	0.2
19	0.5	1400	CL	"	"	0.8
20	0.5	1435	CL	"	"	0.6
21	1.0	↓	CL	"	"	0.2
22	0.5	↓	CL	"	"	0.9
23	0.5	↓	GP	"	"	0.7

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



Attachment C

Soil Characterization Laboratory Reports

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

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

May 20, 2011

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

Work Order Number: 1102144
RE: 49161092

Enclosed are the results of analyses for samples received by the laboratory on 05/18/11. 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

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

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

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile-1	1102144-01	Soil	05/17/11 13:40	05/18/11 08:35
Stockpile-2	1102144-02	Soil	05/17/11 13:45	05/18/11 08:35
Stockpile-3	1102144-03	Soil	05/17/11 13:50	05/18/11 08:35
Stockpile-4	1102144-04	Soil	05/17/11 13:55	05/18/11 08:35
Stockpile-5	1102144-05	Soil	05/17/11 14:00	05/18/11 08:35
Stockpile-6	1102144-06	Soil	05/17/11 14:05	05/18/11 08:35
Trip Blank	1102144-07	Methanol	05/17/11 00:00	05/18/11 08:35

Shipping Container Information

Default Cooler Temperature (°C): 13.5

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:

Recoveries for 8270 matrix spike compounds fluoranthene and phenanthrene were below laboratory limits in the batch B1E1910 MS. The MS/MSD %RPDs were outside laboratory limits for several compounds in the batch. The MS/MSD source sample was not associated with this work order. All target analytes were within limits in the LCS/MSD

The DRO chromatograms are attached for sample Stockpile -6.

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

DRO/8015B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1102144-01) Soil	**Sampled: 05/17/11 13:40**		**Received: 05/18/11 8:35**							
Diesel Range Organics	<11	11	1.9	mg/kg dry	1	B1E1911	05/19/11	05/20/11	WI(95) DRO	
Surrogate: C-30	*99.5*			*70-130 %*		"	"	"	"	
Stockpile-2 (1102144-02) Soil	**Sampled: 05/17/11 13:45**		**Received: 05/18/11 8:35**							
Diesel Range Organics	<11	11	1.8	mg/kg dry	1	B1E1911	05/19/11	05/20/11	WI(95) DRO	
Surrogate: C-30	*99.0*			*70-130 %*		"	"	"	"	
Stockpile-3 (1102144-03) Soil	**Sampled: 05/17/11 13:50**		**Received: 05/18/11 8:35**							
Diesel Range Organics	<11	11	1.7	mg/kg dry	1	B1E1911	05/19/11	05/20/11	WI(95) DRO	
Surrogate: C-30	*95.2*			*70-130 %*		"	"	"	"	
Stockpile-4 (1102144-04) Soil	**Sampled: 05/17/11 13:55**		**Received: 05/18/11 8:35**							
Diesel Range Organics	<10	10	1.6	mg/kg dry	1	B1E1911	05/19/11	05/20/11	WI(95) DRO	
Surrogate: C-30	*97.8*			*70-130 %*		"	"	"	"	
Stockpile-5 (1102144-05) Soil	**Sampled: 05/17/11 14:00**		**Received: 05/18/11 8:35**							
Diesel Range Organics	<9.0	9.0	1.5	mg/kg dry	1	B1E1911	05/19/11	05/20/11	WI(95) DRO	
Surrogate: C-30	*95.3*			*70-130 %*		"	"	"	"	
Stockpile-6 (1102144-06) Soil	**Sampled: 05/17/11 14:05**		**Received: 05/18/11 8:35**							
Diesel Range Organics	**64**	10	1.7	mg/kg dry	1	B1E1911	05/19/11	05/20/11	WI(95) DRO	L1
Surrogate: C-30	*98.9*			*70-130 %*		"	"	"	"	

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1102144-01) Soil	**Sampled: 05/17/11 13:40**		**Received: 05/18/11 8:35**							
Benzene	<0.034	0.034	0.0051	mg/kg dry	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
Ethylbenzene	<0.034	0.034	0.0064	mg/kg dry	1	"	"	"	"	
Toluene	<0.034	0.034	0.0032	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.10	0.10	0.016	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*92.6*			*80-150 %*		"	"	"	"	
Stockpile-2 (1102144-02) Soil	**Sampled: 05/17/11 13:45**		**Received: 05/18/11 8:35**							
Benzene	<0.038	0.038	0.0058	mg/kg dry	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
Ethylbenzene	<0.038	0.038	0.0071	mg/kg dry	1	"	"	"	"	
Toluene	<0.038	0.038	0.0036	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.11	0.11	0.018	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*93.7*			*80-150 %*		"	"	"	"	
Stockpile-3 (1102144-03) Soil	**Sampled: 05/17/11 13:50**		**Received: 05/18/11 8:35**							
Benzene	<0.033	0.033	0.0051	mg/kg dry	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
Ethylbenzene	<0.033	0.033	0.0063	mg/kg dry	1	"	"	"	"	
Toluene	<0.033	0.033	0.0032	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.10	0.10	0.016	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*96.8*			*80-150 %*		"	"	"	"	
Stockpile-4 (1102144-04) Soil	**Sampled: 05/17/11 13:55**		**Received: 05/18/11 8:35**							
Benzene	<0.031	0.031	0.0047	mg/kg dry	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
Ethylbenzene	<0.031	0.031	0.0058	mg/kg dry	1	"	"	"	"	
Toluene	<0.031	0.031	0.0030	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.092	0.092	0.015	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*93.7*			*80-150 %*		"	"	"	"	
Stockpile-5 (1102144-05) Soil	**Sampled: 05/17/11 14:00**		**Received: 05/18/11 8:35**							
Benzene	<0.031	0.031	0.0047	mg/kg dry	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
Ethylbenzene	<0.031	0.031	0.0059	mg/kg dry	1	"	"	"	"	
Toluene	<0.031	0.031	0.0030	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.094	0.094	0.015	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*93.0*			*80-150 %*		"	"	"	"	
Stockpile-6 (1102144-06) Soil	**Sampled: 05/17/11 14:05**		**Received: 05/18/11 8:35**							
Benzene	<0.029	0.029	0.0045	mg/kg dry	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
Ethylbenzene	<0.029	0.029	0.0055	mg/kg dry	1	"	"	"	"	
Toluene	<0.029	0.029	0.0028	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.088	0.088	0.014	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*93.1*			*80-150 %*		"	"	"	"	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (1102144-07) Methanol	**Sampled: 05/17/11 00:00**		**Received: 05/18/11 8:35**							
Benzene	<0.025	0.025	0.0038	mg/kg wet	1	B1E1801	05/18/11	05/18/11	WI(95) GRO	
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	*95.7*			*80-150 %*		*"*	*"*	*"*	*"*	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

PAH 8270C
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1102144-01) Soil Sampled: 05/17/11 13:40 Received: 05/18/11 8:35										
2-Chloronaphthalene	<0.45	0.45	0.046	mg/kg dry	1	B1E1910	05/19/11	05/20/11	EPA 8270C	
2-Methylnaphthalene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.45	0.45	0.051	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Anthracene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.45	0.45	0.057	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.45	0.45	0.065	mg/kg dry	1	"	"	"	"	
Chrysene	<0.45	0.45	0.059	mg/kg dry	1	"	"	"	"	
Dibenz[a,h]anthracene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.45	0.45	0.053	mg/kg dry	1	"	"	"	"	
Fluorene	<0.45	0.45	0.047	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.45	0.45	0.054	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.45	0.45	0.045	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Pyrene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	*65.4*			*46.3-96.2 %*		"	"	"	"	
Surrogate: Nitrobenzene-d5	*61.4*			*49.3-94 %*		"	"	"	"	
Surrogate: Terphenyl-d14	*69.9*			*51.5-94.6 %*		"	"	"	"	
Stockpile-2 (1102144-02) Soil Sampled: 05/17/11 13:45 Received: 05/18/11 8:35										
2-Chloronaphthalene	<0.45	0.45	0.047	mg/kg dry	1	B1E1910	05/19/11	05/20/11	EPA 8270C	
2-Methylnaphthalene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.45	0.45	0.052	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.45	0.45	0.056	mg/kg dry	1	"	"	"	"	
Anthracene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.45	0.45	0.056	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.45	0.45	0.059	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.45	0.45	0.059	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.45	0.45	0.066	mg/kg dry	1	"	"	"	"	
Chrysene	<0.45	0.45	0.060	mg/kg dry	1	"	"	"	"	
Dibenz[a,h]anthracene	<0.45	0.45	0.059	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.45	0.45	0.053	mg/kg dry	1	"	"	"	"	
Fluorene	<0.45	0.45	0.048	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.45	0.45	0.045	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	

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Barr Engineering Co.	Project: 49161092	
4700 W 77th St	Project Number: 49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 05/20/11

PAH 8270C
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-2 (1102144-02) Soil Sampled: 05/17/11 13:45 Received: 05/18/11 8:35										
Pyrene	<0.45	0.45	0.056	mg/kg dry	1	B1E1910	05/19/11	05/20/11	EPA 8270C	
Surrogate: 2-Fluorobiphenyl	*61.3*			*46.3-96.2 %*		"	"	"	"	
Surrogate: Nitrobenzene-d5	*58.3*			*49.3-94 %*		"	"	"	"	
Surrogate: Terphenyl-d14	*69.3*			*51.5-94.6 %*		"	"	"	"	
Stockpile-3 (1102144-03) Soil Sampled: 05/17/11 13:50 Received: 05/18/11 8:35										
2-Chloronaphthalene	<0.44	0.44	0.045	mg/kg dry	1	B1E1910	05/19/11	05/20/11	EPA 8270C	
2-Methylnaphthalene	<0.44	0.44	0.048	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.44	0.44	0.051	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.44	0.44	0.055	mg/kg dry	1	"	"	"	"	
Anthracene	<0.44	0.44	0.048	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.44	0.44	0.055	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.44	0.44	0.056	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.44	0.44	0.057	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.44	0.44	0.057	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.44	0.44	0.064	mg/kg dry	1	"	"	"	"	
Chrysene	<0.44	0.44	0.059	mg/kg dry	1	"	"	"	"	
Dibenz[a,h]anthracene	<0.44	0.44	0.057	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.44	0.44	0.052	mg/kg dry	1	"	"	"	"	
Fluorene	<0.44	0.44	0.047	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.44	0.44	0.053	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.44	0.44	0.044	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.44	0.44	0.048	mg/kg dry	1	"	"	"	"	
Pyrene	<0.44	0.44	0.055	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	*68.7*			*46.3-96.2 %*		"	"	"	"	
Surrogate: Nitrobenzene-d5	*64.4*			*49.3-94 %*		"	"	"	"	
Surrogate: Terphenyl-d14	*76.9*			*51.5-94.6 %*		"	"	"	"	
Stockpile-4 (1102144-04) Soil Sampled: 05/17/11 13:55 Received: 05/18/11 8:35										
2-Chloronaphthalene	<0.45	0.45	0.046	mg/kg dry	1	B1E1910	05/19/11	05/19/11	EPA 8270C	
2-Methylnaphthalene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.45	0.45	0.051	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Anthracene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.45	0.45	0.057	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.45	0.45	0.065	mg/kg dry	1	"	"	"	"	
Chrysene	<0.45	0.45	0.059	mg/kg dry	1	"	"	"	"	
Dibenz[a,h]anthracene	<0.45	0.45	0.058	mg/kg dry	1	"	"	"	"	

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Barr Engineering Co.	Project: 49161092	
4700 W 77th St	Project Number: 49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager: Ms. Andrea Nord	Date Reported: 05/20/11

PAH 8270C
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-4 (1102144-04) Soil Sampled: 05/17/11 13:55 Received: 05/18/11 8:35										
Fluoranthene	<0.45	0.45	0.053	mg/kg dry	1	B1E1910	05/19/11	05/19/11	EPA 8270C	
Fluorene	<0.45	0.45	0.047	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.45	0.45	0.054	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.45	0.45	0.045	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.45	0.45	0.049	mg/kg dry	1	"	"	"	"	
Pyrene	<0.45	0.45	0.055	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	*63.1*			*46.3-96.2 %*		"	"	"	"	
Surrogate: Nitrobenzene-d5	*62.4*			*49.3-94 %*		"	"	"	"	
Surrogate: Terphenyl-d14	*74.2*			*51.5-94.6 %*		"	"	"	"	
Stockpile-5 (1102144-05) Soil Sampled: 05/17/11 14:00 Received: 05/18/11 8:35										
2-Chloronaphthalene	<0.43	0.43	0.045	mg/kg dry	1	B1E1910	05/19/11	05/19/11	EPA 8270C	
2-Methylnaphthalene	<0.43	0.43	0.047	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.43	0.43	0.050	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.43	0.43	0.054	mg/kg dry	1	"	"	"	"	
Anthracene	<0.43	0.43	0.047	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.43	0.43	0.054	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.43	0.43	0.055	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.43	0.43	0.057	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.43	0.43	0.057	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.43	0.43	0.063	mg/kg dry	1	"	"	"	"	
Chrysene	<0.43	0.43	0.058	mg/kg dry	1	"	"	"	"	
Dibenz[a,h]anthracene	<0.43	0.43	0.057	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.43	0.43	0.051	mg/kg dry	1	"	"	"	"	
Fluorene	<0.43	0.43	0.046	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.43	0.43	0.053	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.43	0.43	0.043	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.43	0.43	0.047	mg/kg dry	1	"	"	"	"	
Pyrene	<0.43	0.43	0.054	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	*62.1*			*46.3-96.2 %*		"	"	"	"	
Surrogate: Nitrobenzene-d5	*61.2*			*49.3-94 %*		"	"	"	"	
Surrogate: Terphenyl-d14	*79.4*			*51.5-94.6 %*		"	"	"	"	
Stockpile-6 (1102144-06) Soil Sampled: 05/17/11 14:05 Received: 05/18/11 8:35										
2-Chloronaphthalene	<0.42	0.42	0.044	mg/kg dry	1	B1E1910	05/19/11	05/19/11	EPA 8270C	
2-Methylnaphthalene	<0.42	0.42	0.046	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.42	0.42	0.049	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.42	0.42	0.053	mg/kg dry	1	"	"	"	"	
Anthracene	<0.42	0.42	0.046	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.42	0.42	0.053	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.42	0.42	0.054	mg/kg dry	1	"	"	"	"	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

PAH 8270C
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-6 (1102144-06) Soil Sampled: 05/17/11 14:05 Received: 05/18/11 8:35										
Benzo(b)fluoranthene	<0.42	0.42	0.055	mg/kg dry	1	B1E1910	05/19/11	05/19/11	EPA 8270C	
Benzo(g,h,i)perylene	<0.42	0.42	0.055	mg/kg dry	1	"	"	"	"	
Benzo(k)fluoranthene	<0.42	0.42	0.062	mg/kg dry	1	"	"	"	"	
Chrysene	<0.42	0.42	0.056	mg/kg dry	1	"	"	"	"	
Dibenz[a,h]anthracene	<0.42	0.42	0.055	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.42	0.42	0.050	mg/kg dry	1	"	"	"	"	
Fluorene	<0.42	0.42	0.045	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.42	0.42	0.051	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.42	0.42	0.042	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.42	0.42	0.046	mg/kg dry	1	"	"	"	"	
Pyrene	<0.42	0.42	0.053	mg/kg dry	1	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	*69.9*			*46.3-96.2 %*		"	"	"	"	
Surrogate: Nitrobenzene-d5	*64.7*			*49.3-94 %*		"	"	"	"	
Surrogate: Terphenyl-d14	*82.4*			*51.5-94.6 %*		"	"	"	"	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile-1 (1102144-01) Soil	**Sampled: 05/17/11 13:40**		**Received: 05/18/11 8:35**							
% Solids	**74**			%	1	B1E1916	05/19/11	05/20/11	% calculation	
Stockpile-2 (1102144-02) Soil	**Sampled: 05/17/11 13:45**		**Received: 05/18/11 8:35**							
% Solids	**73**			%	1	B1E1916	05/19/11	05/20/11	% calculation	
Stockpile-3 (1102144-03) Soil	**Sampled: 05/17/11 13:50**		**Received: 05/18/11 8:35**							
% Solids	**75**			%	1	B1E1916	05/19/11	05/20/11	% calculation	
Stockpile-4 (1102144-04) Soil	**Sampled: 05/17/11 13:55**		**Received: 05/18/11 8:35**							
% Solids	**74**			%	1	B1E1916	05/19/11	05/20/11	% calculation	
Stockpile-5 (1102144-05) Soil	**Sampled: 05/17/11 14:00**		**Received: 05/18/11 8:35**							
% Solids	**76**			%	1	B1E1916	05/19/11	05/20/11	% calculation	
Stockpile-6 (1102144-06) Soil	**Sampled: 05/17/11 14:05**		**Received: 05/18/11 8:35**							
% Solids	**78**			%	1	B1E1916	05/19/11	05/20/11	% calculation	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

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

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1E1911 - Sonication (Wisc DRO)											
Blank (B1E1911-BLK1)					Prepared: 05/19/11 Analyzed: 05/20/11						
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: C-30	*13.5*			*mg/kg wet*	*16.0*		*84.4*	*70-130*			
LCS (B1E1911-BS1)					Prepared: 05/19/11 Analyzed: 05/20/11						
Diesel Range Organics	57.5	8.0	1.3	mg/kg wet	64.0		89.9	70-120			
Surrogate: C-30	*16.8*			*mg/kg wet*	*16.0*		*105*	*70-130*			
LCS Dup (B1E1911-BSD1)					Prepared: 05/19/11 Analyzed: 05/20/11						
Diesel Range Organics	53.1	8.0	1.3	mg/kg wet	64.0		82.9	70-120	8.07	20	
Surrogate: C-30	*15.9*			*mg/kg wet*	*16.0*		*99.4*	*70-130*			

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Fax: 651-642-1239

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

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

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1E1801 - EPA 5035 Soil (Purge and Trap)											
Blank (B1E1801-BLK1)					Prepared & Analyzed: 05/18/11						
Benzene	< 0.025	0.025	0.0038	mg/kg wet							
Ethylbenzene	< 0.025	0.025	0.0047	mg/kg wet							
Toluene	< 0.025	0.025	0.0024	mg/kg wet							
Xylenes (total)	< 0.075	0.075	0.012	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	*24.8*			*ug/L*	*25.0*		*99.3*	*80-150*			
LCS (B1E1801-BS1)					Prepared & Analyzed: 05/18/11						
Benzene	95.1			ug/L	100		95.1	80-120			
Ethylbenzene	104			ug/L	100		104	80-120			
Toluene	102			ug/L	100		102	80-120			
Xylenes (total)	310			ug/L	300		103	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.5*			*ug/L*	*25.0*		*102*	*80-150*			
LCS Dup (B1E1801-BSD1)					Prepared: 05/18/11 Analyzed: 05/19/11						
Benzene	95.0			ug/L	100		95.0	80-120	0.0893	20	
Ethylbenzene	101			ug/L	100		101	80-120	2.54	20	
Toluene	101			ug/L	100		101	80-120	1.10	20	
Xylenes (total)	302			ug/L	300		101	80-120	2.60	20	
Surrogate: 4-Fluorochlorobenzene	*25.2*			*ug/L*	*25.0*		*101*	*80-150*			
Matrix Spike (B1E1801-MS1)		**Source: 1102096-01**			Prepared & Analyzed: 05/18/11						
Benzene	94.2			ug/L	100	<	94.2	80-120			
Ethylbenzene	103			ug/L	100	0.313	102	80-120			
Toluene	101			ug/L	100	0.168	100	80-120			
Xylenes (total)	309			ug/L	300	0.150	103	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.6*			*ug/L*	*25.0*		*102*	*80-150*			

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

PAH 8270C - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1E1910 - EPA 3545 ASE Extraction											
Blank (B1E1910-BLK1)				Prepared & Analyzed: 05/19/11							
2-Chloronaphthalene	< 0.33	0.33	0.034	mg/kg wet							
2-Methylnaphthalene	< 0.33	0.33	0.036	mg/kg wet							
Acenaphthene	< 0.33	0.33	0.038	mg/kg wet							
Acenaphthylene	< 0.33	0.33	0.041	mg/kg wet							
Anthracene	< 0.33	0.33	0.036	mg/kg wet							
Benzo(a)anthracene	< 0.33	0.33	0.041	mg/kg wet							
Benzo(a)pyrene	< 0.33	0.33	0.042	mg/kg wet							
Benzo(b)fluoranthene	< 0.33	0.33	0.043	mg/kg wet							
Benzo(g,h,i)perylene	< 0.33	0.33	0.043	mg/kg wet							
Benzo(k)fluoranthene	< 0.33	0.33	0.048	mg/kg wet							
Chrysene	< 0.33	0.33	0.044	mg/kg wet							
Dibenz[a,h]anthracene	< 0.33	0.33	0.043	mg/kg wet							
Fluoranthene	< 0.33	0.33	0.039	mg/kg wet							
Fluorene	< 0.33	0.33	0.035	mg/kg wet							
Indeno (1,2,3-cd) pyrene	< 0.33	0.33	0.040	mg/kg wet							
Naphthalene	< 0.33	0.33	0.033	mg/kg wet							
Phenanthrene	< 0.33	0.33	0.036	mg/kg wet							
Pyrene	< 0.33	0.33	0.041	mg/kg wet							
Surrogate: 2-Fluorobiphenyl	*4.72*			*mg/kg wet*	*6.67*		*70.8*	*46.3-96.2*			
Surrogate: Nitrobenzene-d5	*4.58*			*mg/kg wet*	*6.67*		*68.8*	*49.3-94*			
Surrogate: Terphenyl-d14	*5.44*			*mg/kg wet*	*6.67*		*81.7*	*51.5-94.6*			
LCS (B1E1910-BS1)				Prepared & Analyzed: 05/19/11							
Acenaphthylene	5.46	0.33	0.041	mg/kg wet	6.67		81.9	65.9-87.2			
Anthracene	5.58	0.33	0.036	mg/kg wet	6.67		83.6	69.2-89			
Benzo(a)anthracene	5.55	0.33	0.041	mg/kg wet	6.67		83.3	64.7-93.3			
Benzo(a)pyrene	5.48	0.33	0.042	mg/kg wet	6.67		82.1	65.7-93.1			
Benzo(b)fluoranthene	5.30	0.33	0.043	mg/kg wet	6.67		79.4	63.7-96.3			
Benzo(g,h,i)perylene	5.32	0.33	0.043	mg/kg wet	6.67		79.7	61.2-98.3			
Benzo(k)fluoranthene	5.18	0.33	0.048	mg/kg wet	6.67		77.7	64.7-94.6			
Chrysene	5.53	0.33	0.044	mg/kg wet	6.67		82.9	62.7-92.8			
Dibenz[a,h]anthracene	5.25	0.33	0.043	mg/kg wet	6.67		78.8	62.2-95.7			
Fluoranthene	5.48	0.33	0.039	mg/kg wet	6.67		82.1	67.6-92.3			
Fluorene	5.31	0.33	0.035	mg/kg wet	6.67		79.6	65.9-86.4			
Indeno (1,2,3-cd) pyrene	5.43	0.33	0.040	mg/kg wet	6.67		81.5	63.5-100			
Naphthalene	4.90	0.33	0.033	mg/kg wet	6.67		73.6	61.9-84.6			
Phenanthrene	5.69	0.33	0.036	mg/kg wet	6.67		85.4	69-89.1			
Surrogate: 2-Fluorobiphenyl	*5.07*			*mg/kg wet*	*6.67*		*76.1*	*46.3-96.2*			
Surrogate: Nitrobenzene-d5	*4.91*			*mg/kg wet*	*6.67*		*73.7*	*49.3-94*			
Surrogate: Terphenyl-d14	*4.61*			*mg/kg wet*	*6.67*		*69.1*	*51.5-94.6*			

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

PAH 8270C - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1E1910 - EPA 3545 ASE Extraction											
Matrix Spike (B1E1910-MS1)		**Source: 1102115-05**			Prepared & Analyzed: 05/19/11						
Acenaphthylene	4.88	0.33	0.041	mg/kg wet	6.67	<0.33	73.2	50.6-95.9			
Anthracene	5.12	0.33	0.036	mg/kg wet	6.67	0.406	70.8	58.9-96.5			
Benzo(a)anthracene	5.49	0.33	0.041	mg/kg wet	6.67	1.19	64.5	53.5-98.7			
Benzo(a)pyrene	5.77	0.33	0.042	mg/kg wet	6.67	1.15	69.3	53.2-97.5			
Benzo(b)fluoranthene	5.49	0.33	0.043	mg/kg wet	6.67	1.26	63.4	50.3-98.2			
Benzo(g,h,i)perylene	5.90	0.33	0.043	mg/kg wet	6.67	0.792	76.6	44.6-103			
Benzo(k)fluoranthene	5.60	0.33	0.048	mg/kg wet	6.67	0.511	76.3	52.4-99.2			
Chrysene	5.58	0.33	0.044	mg/kg wet	6.67	1.23	65.4	51.9-98.6			
Dibenz[a,h]anthracene	6.03	0.33	0.043	mg/kg wet	6.67	<0.33	87.9	45.4-104			
Fluoranthene	5.19	0.33	0.039	mg/kg wet	6.67	2.27	43.8	54.3-97.7			M2
Fluorene	4.80	0.33	0.035	mg/kg wet	6.67	<0.33	70.9	54.4-93.2			
Indeno (1,2,3-cd) pyrene	5.94	0.33	0.040	mg/kg wet	6.67	0.754	77.8	45-106			
Naphthalene	4.10	0.33	0.033	mg/kg wet	6.67	<0.33	61.5	48.6-90.1			
Phenanthrene	5.28	0.33	0.036	mg/kg wet	6.67	1.62	54.9	58.8-93.7			M2
Surrogate: 2-Fluorobiphenyl	*4.27*			*mg/kg wet*	*6.67*		*64.0*	*46.3-96.2*			
Surrogate: Nitrobenzene-d5	*4.04*			*mg/kg wet*	*6.67*		*60.6*	*49.3-94*			
Surrogate: Terphenyl-d14	*4.81*			*mg/kg wet*	*6.67*		*72.1*	*51.5-94.6*			
Matrix Spike Dup (B1E1910-MSD1)		**Source: 1102115-05**			Prepared & Analyzed: 05/19/11						
Acenaphthylene	4.92	0.33	0.041	mg/kg wet	6.68	<0.33	73.7	50.6-95.9	0.911	16.5	
Anthracene	5.92	0.33	0.036	mg/kg wet	6.68	0.406	82.5	58.9-96.5	14.4	14	R5
Benzo(a)anthracene	6.91	0.33	0.041	mg/kg wet	6.68	1.19	85.6	53.5-98.7	22.9	15.6	R5
Benzo(a)pyrene	7.02	0.33	0.042	mg/kg wet	6.68	1.15	87.9	53.2-97.5	19.5	14.3	R5
Benzo(b)fluoranthene	6.57	0.33	0.043	mg/kg wet	6.68	1.26	79.6	50.3-98.2	18.0	17.5	R5
Benzo(g,h,i)perylene	7.08	0.33	0.043	mg/kg wet	6.68	0.792	94.2	44.6-103	18.2	15	R5
Benzo(k)fluoranthene	6.35	0.33	0.048	mg/kg wet	6.68	0.511	87.5	52.4-99.2	12.6	15.3	
Chrysene	7.16	0.33	0.044	mg/kg wet	6.68	1.23	88.9	51.9-98.6	24.7	14.8	R5
Dibenz[a,h]anthracene	6.96	0.33	0.043	mg/kg wet	6.68	<0.33	102	45.4-104	14.4	16.5	
Fluoranthene	6.91	0.33	0.039	mg/kg wet	6.68	2.27	69.5	54.3-97.7	28.4	19.1	R2
Fluorene	5.16	0.33	0.035	mg/kg wet	6.68	<0.33	76.2	54.4-93.2	7.20	18.5	
Indeno (1,2,3-cd) pyrene	7.31	0.33	0.040	mg/kg wet	6.68	0.754	98.2	45-106	20.7	17.7	R5
Naphthalene	3.95	0.33	0.033	mg/kg wet	6.68	<0.33	59.2	48.6-90.1	3.76	15.9	
Phenanthrene	6.75	0.33	0.036	mg/kg wet	6.68	1.62	76.8	58.8-93.7	24.4	25.3	
Surrogate: 2-Fluorobiphenyl	*4.26*			*mg/kg wet*	*6.68*		*63.8*	*46.3-96.2*			
Surrogate: Nitrobenzene-d5	*3.92*			*mg/kg wet*	*6.68*		*58.8*	*49.3-94*			
Surrogate: Terphenyl-d14	*5.47*			*mg/kg wet*	*6.68*		*81.9*	*51.5-94.6*			

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B1E1916 - General Preparation											
Duplicate (B1E1916-DUP1)		**Source: 1102144-06**			Prepared: 05/19/11	Analyzed: 05/20/11					
% Solids	76.0			%		78.0			2.60	20	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092	Work Order #: 1102144
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/20/11

Notes and Definitions

R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recoveries met acceptance critieria.
R2	RPD/RSD exceeded the laboratory acceptance limit. See case narrative.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
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)

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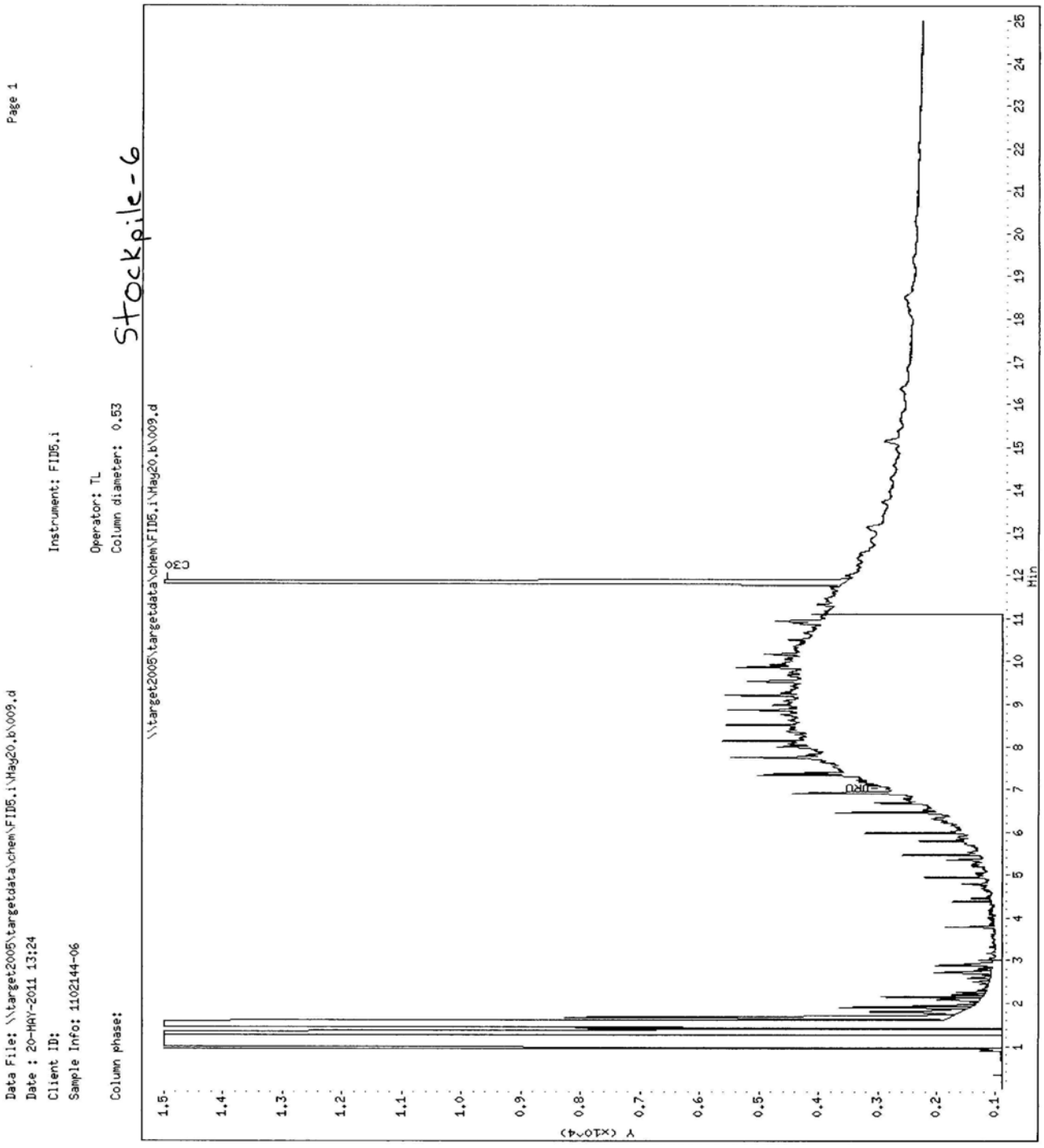

11-Oct-2012

Margaret Treanor
Barr Engineering Company
4700 West 77th Street
Minneapolis, MN 55435-4803

Re: **49161092.01 SOIL 001** Work Order: **1210334**

Dear Margaret,

ALS Environmental received 6 samples on 10-Oct-2012 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 40.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Alex Csaszar

Electronically approved by: Alex Csaszar

Alex Csaszar
Project Manager

Certificate No: MN331938

ALS Group USA, Corp

Date: 11-Oct-12

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Work Order: **1210334**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1210334-01	Terminal Stockpile - 1	Soil		10/9/2012 14:25	10/10/2012 10:00	☐
1210334-02	Terminal Stockpile - 2	Soil		10/9/2012 14:35	10/10/2012 10:00	☐
1210334-03	Terminal Stockpile - 3	Soil		10/9/2012 14:45	10/10/2012 10:00	☐
1210334-04	Terminal Stockpile - 4	Soil		10/9/2012 14:55	10/10/2012 10:00	☐
1210334-05	Terminal Stockpile - 5	Soil		10/9/2012 15:15	10/10/2012 10:00	☐
1210334-06	Trip Blank	Soil		10/9/2012	10/10/2012 10:00	☐

ALS Group USA, Corp

Date: 11-Oct-12

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
WorkOrder: **1210334**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
µg/Kg	Micrograms per Kilogram
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 1
Collection Date: 10/9/2012 02:25 PM

Work Order: 1210334
Lab ID: 1210334-01
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-141**			Prep: PUBL-SW-141 / 10/10/12		Analyst: **CW**
DRO (C10-C28)	U		0.79	2.6	mg/Kg-dry	1	10/10/2012 19:05
GASOLINE RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-140**					Analyst: **CW**
GRO (C6-C10)	U		730	2,400	µg/Kg-dry	50	10/11/2012 02:01
Surr: a,a,a-Trifluorotoluene	*107*			*80-120*	*%REC*	50	10/11/2012 02:01
MERCURY BY CVAA		Method: **SW7471**			Prep: SW7471 / 10/10/12		Analyst: **LR**
Mercury	**0.029**		**0.0011**	**0.0038**	**mg/Kg-dry**	1	10/10/2012 16:10
METALS BY ICP-MS		Method: **SW6020A**			Prep: SW3050B / 10/10/12		Analyst: **CES**
Arsenic	**3.2**		**0.11**	**0.36**	**mg/Kg-dry**	2	10/11/2012 12:21
Barium	**230**		**0.032**	**0.11**	**mg/Kg-dry**	2	10/11/2012 12:21
Cadmium	**0.14**		**0.011**	**0.036**	**mg/Kg-dry**	2	10/11/2012 12:21
Chromium	**50**		**0.025**	**0.083**	**mg/Kg-dry**	2	10/11/2012 12:21
Lead	**11**		**0.0036**	**0.012**	**mg/Kg-dry**	2	10/11/2012 12:21
Selenium	**1.7**		**0.065**	**0.22**	**mg/Kg-dry**	2	10/11/2012 12:21
Silver	**0.062**		**0.0036**	**0.012**	**mg/Kg-dry**	2	10/11/2012 12:21
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270**			Prep: SW3541 / 10/10/12		Analyst: **HL**
1-Methylnaphthalene	U		12	40	µg/Kg-dry	1	10/11/2012 12:03
2-Methylnaphthalene	U		13	44	µg/Kg-dry	1	10/11/2012 12:03
Acenaphthene	U		12	41	µg/Kg-dry	1	10/11/2012 12:03
Acenaphthylene	U		13	43	µg/Kg-dry	1	10/11/2012 12:03
Anthracene	U		14	46	µg/Kg-dry	1	10/11/2012 12:03
Benzo(a)anthracene	U		16	55	µg/Kg-dry	1	10/11/2012 12:03
Benzo(a)pyrene	U		21	69	µg/Kg-dry	1	10/11/2012 12:03
Benzo(b)fluoranthene	U		22	72	µg/Kg-dry	1	10/11/2012 12:03
Benzo(g,h,i)perylene	U		32	110	µg/Kg-dry	1	10/11/2012 12:03
Benzo(k)fluoranthene	U		18	61	µg/Kg-dry	1	10/11/2012 12:03
Chrysene	U		15	51	µg/Kg-dry	1	10/11/2012 12:03
Dibenzo(a,h)anthracene	U		23	77	µg/Kg-dry	1	10/11/2012 12:03
Fluoranthene	U		16	53	µg/Kg-dry	1	10/11/2012 12:03
Fluorene	U		12	39	µg/Kg-dry	1	10/11/2012 12:03
Indeno(1,2,3-cd)pyrene	U		26	85	µg/Kg-dry	1	10/11/2012 12:03
Naphthalene	U		12	38	µg/Kg-dry	1	10/11/2012 12:03
Phenanthrene	U		41	130	µg/Kg-dry	1	10/11/2012 12:03
Pyrene	U		17	56	µg/Kg-dry	1	10/11/2012 12:03
Surr: 2-Fluorobiphenyl	*69.7*			*12-100*	*%REC*	1	10/11/2012 12:03
Surr: 4-Terphenyl-d14	*101*			*25-137*	*%REC*	1	10/11/2012 12:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 1
Collection Date: 10/9/2012 02:25 PM

Work Order: 1210334
Lab ID: 1210334-01
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*75.3*			*37-107*	*%REC*	1	10/11/2012 12:03
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**			Prep: SW5035 / 10/10/12		Analyst: **AK**
1,1,1-Trichloroethane	U		16	52	µg/Kg-dry	1	10/10/2012 15:53
1,1,2,2-Tetrachloroethane	U		18	60	µg/Kg-dry	1	10/10/2012 15:53
1,1,2-Trichloroethane	U		14	48	µg/Kg-dry	1	10/10/2012 15:53
1,1,2-Trichlorotrifluoroethane	U		15	50	µg/Kg-dry	1	10/10/2012 15:53
1,1-Dichloroethane	U		15	50	µg/Kg-dry	1	10/10/2012 15:53
1,1-Dichloroethene	U		17	57	µg/Kg-dry	1	10/10/2012 15:53
1,2,4-Trichlorobenzene	U		21	70	µg/Kg-dry	1	10/10/2012 15:53
1,2-Dibromo-3-chloropropane	U		20	66	µg/Kg-dry	1	10/10/2012 15:53
1,2-Dibromoethane	U		16	53	µg/Kg-dry	1	10/10/2012 15:53
1,2-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 15:53
1,2-Dichloroethane	U		19	64	µg/Kg-dry	1	10/10/2012 15:53
1,2-Dichloropropane	U		13	45	µg/Kg-dry	1	10/10/2012 15:53
1,3-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 15:53
1,4-Dichlorobenzene	U		16	52	µg/Kg-dry	1	10/10/2012 15:53
2-Butanone	U		100	340	µg/Kg-dry	1	10/10/2012 15:53
2-Hexanone	U		10	33	µg/Kg-dry	1	10/10/2012 15:53
4-Methyl-2-pentanone	U		14	46	µg/Kg-dry	1	10/10/2012 15:53
Acetone	U		86	290	µg/Kg-dry	1	10/10/2012 15:53
Benzene	U		16	54	µg/Kg-dry	1	10/10/2012 15:53
Bromodichloromethane	U		9.1	30	µg/Kg-dry	1	10/10/2012 15:53
Bromoform	U		8.0	27	µg/Kg-dry	1	10/10/2012 15:53
Bromomethane	U		16	52	µg/Kg-dry	1	10/10/2012 15:53
Carbon disulfide	U		20	67	µg/Kg-dry	1	10/10/2012 15:53
Carbon tetrachloride	U		12	39	µg/Kg-dry	1	10/10/2012 15:53
Chlorobenzene	U		17	55	µg/Kg-dry	1	10/10/2012 15:53
Chloroethane	U		86	290	µg/Kg-dry	1	10/10/2012 15:53
Chloroform	U		17	56	µg/Kg-dry	1	10/10/2012 15:53
Chloromethane	U		23	76	µg/Kg-dry	1	10/10/2012 15:53
cis-1,2-Dichloroethene	U		17	55	µg/Kg-dry	1	10/10/2012 15:53
cis-1,3-Dichloropropene	U		14	46	µg/Kg-dry	1	10/10/2012 15:53
Cyclohexane	U		18	61	µg/Kg-dry	1	10/10/2012 15:53
Dibromochloromethane	U		7.5	25	µg/Kg-dry	1	10/10/2012 15:53
Dichlorodifluoromethane	U		18	61	µg/Kg-dry	1	10/10/2012 15:53
Ethylbenzene	U		15	50	µg/Kg-dry	1	10/10/2012 15:53
Isopropylbenzene	U		18	58	µg/Kg-dry	1	10/10/2012 15:53
Methyl acetate	U		55	180	µg/Kg-dry	1	10/10/2012 15:53
Methyl tert-butyl ether	U		17	57	µg/Kg-dry	1	10/10/2012 15:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 1
Collection Date: 10/9/2012 02:25 PM

Work Order: 1210334
Lab ID: 1210334-01
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		19	63	µg/Kg-dry	1	10/10/2012 15:53
Methylene chloride	U		16	53	µg/Kg-dry	1	10/10/2012 15:53
Styrene	U		15	51	µg/Kg-dry	1	10/10/2012 15:53
Tetrachloroethene	U		18	60	µg/Kg-dry	1	10/10/2012 15:53
Toluene	U		15	51	µg/Kg-dry	1	10/10/2012 15:53
trans-1,2-Dichloroethene	U		13	42	µg/Kg-dry	1	10/10/2012 15:53
trans-1,3-Dichloropropene	U		14	45	µg/Kg-dry	1	10/10/2012 15:53
Trichloroethene	U		19	63	µg/Kg-dry	1	10/10/2012 15:53
Trichlorofluoromethane	U		11	37	µg/Kg-dry	1	10/10/2012 15:53
Vinyl chloride	U		18	61	µg/Kg-dry	1	10/10/2012 15:53
Xylenes, Total	U		48	160	µg/Kg-dry	1	10/10/2012 15:53
Surr: 1,2-Dichloroethane-d4	*126*			*70-130*	*%REC*	1	10/10/2012 15:53
Surr: 4-Bromofluorobenzene	*122*			*70-130*	*%REC*	1	10/10/2012 15:53
Surr: Dibromofluoromethane	*122*			*70-130*	*%REC*	1	10/10/2012 15:53
Surr: Toluene-d8	*122*			*70-130*	*%REC*	1	10/10/2012 15:53
MOISTURE		Method: **A2540 G**					Analyst: **LR**
Moisture	**26**		**0.025**	**0.083**	**% of sample**	1	10/10/2012 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 2
Collection Date: 10/9/2012 02:35 PM

Work Order: 1210334
Lab ID: 1210334-02
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-141**			Prep: PUBL-SW-141 / 10/10/12		Analyst: **CW**
DRO (C10-C28)	U		0.86	2.8	mg/Kg-dry	1	10/10/2012 19:32
GASOLINE RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-140**					Analyst: **CW**
GRO (C6-C10)	U		720	2,400	µg/Kg-dry	50	10/11/2012 02:29
Surr: a,a,a-Trifluorotoluene	*108*			*80-120*	*%REC*	50	10/11/2012 02:29
MERCURY BY CVAA		Method: **SW7471**			Prep: SW7471 / 10/10/12		Analyst: **LR**
Mercury	**0.023**		**0.0010**	**0.0034**	**mg/Kg-dry**	1	10/10/2012 16:18
METALS BY ICP-MS		Method: **SW6020A**			Prep: SW3050B / 10/10/12		Analyst: **CES**
Arsenic	**2.9**		**0.11**	**0.37**	**mg/Kg-dry**	2	10/11/2012 12:27
Barium	**240**		**0.034**	**0.11**	**mg/Kg-dry**	2	10/11/2012 12:27
Cadmium	**0.18**		**0.011**	**0.037**	**mg/Kg-dry**	2	10/11/2012 12:27
Chromium	**44**		**0.026**	**0.086**	**mg/Kg-dry**	2	10/11/2012 12:27
Lead	**10**		**0.0037**	**0.012**	**mg/Kg-dry**	2	10/11/2012 12:27
Selenium	**1.4**		**0.067**	**0.22**	**mg/Kg-dry**	2	10/11/2012 12:27
Silver	**0.050**		**0.0037**	**0.012**	**mg/Kg-dry**	2	10/11/2012 12:27
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270**			Prep: SW3541 / 10/10/12		Analyst: **HL**
1-Methylnaphthalene	U		12	39	µg/Kg-dry	1	10/11/2012 12:31
2-Methylnaphthalene	U		13	43	µg/Kg-dry	1	10/11/2012 12:31
Acenaphthene	U		12	40	µg/Kg-dry	1	10/11/2012 12:31
Acenaphthylene	U		12	41	µg/Kg-dry	1	10/11/2012 12:31
Anthracene	U		13	44	µg/Kg-dry	1	10/11/2012 12:31
Benzo(a)anthracene	**30**	J	**16**	**53**	**µg/Kg-dry**	1	10/11/2012 12:31
Benzo(a)pyrene	**23**	J	**20**	**67**	**µg/Kg-dry**	1	10/11/2012 12:31
Benzo(b)fluoranthene	**31**	J	**21**	**70**	**µg/Kg-dry**	1	10/11/2012 12:31
Benzo(g,h,i)perylene	U		31	100	µg/Kg-dry	1	10/11/2012 12:31
Benzo(k)fluoranthene	**24**	J	**18**	**59**	**µg/Kg-dry**	1	10/11/2012 12:31
Chrysene	**40**	J	**15**	**49**	**µg/Kg-dry**	1	10/11/2012 12:31
Dibenzo(a,h)anthracene	U		22	74	µg/Kg-dry	1	10/11/2012 12:31
Fluoranthene	**110**		**16**	**52**	**µg/Kg-dry**	1	10/11/2012 12:31
Fluorene	U		11	38	µg/Kg-dry	1	10/11/2012 12:31
Indeno(1,2,3-cd)pyrene	U		25	82	µg/Kg-dry	1	10/11/2012 12:31
Naphthalene	U		11	37	µg/Kg-dry	1	10/11/2012 12:31
Phenanthrene	**83**	J	**39**	**130**	**µg/Kg-dry**	1	10/11/2012 12:31
Pyrene	**77**		**16**	**54**	**µg/Kg-dry**	1	10/11/2012 12:31
Surr: 2-Fluorobiphenyl	*67.2*			*12-100*	*%REC*	1	10/11/2012 12:31
Surr: 4-Terphenyl-d14	*98.8*			*25-137*	*%REC*	1	10/11/2012 12:31

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 2
Collection Date: 10/9/2012 02:35 PM

Work Order: 1210334
Lab ID: 1210334-02
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*73.8*			*37-107*	*%REC*	1	10/11/2012 12:31
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**			Prep: SW5035 / 10/10/12		Analyst: **AK**
1,1,1-Trichloroethane	U		15	51	µg/Kg-dry	1	10/10/2012 16:17
1,1,2,2-Tetrachloroethane	U		18	59	µg/Kg-dry	1	10/10/2012 16:17
1,1,2-Trichloroethane	U		14	47	µg/Kg-dry	1	10/10/2012 16:17
1,1,2-Trichlorotrifluoroethane	U		15	50	µg/Kg-dry	1	10/10/2012 16:17
1,1-Dichloroethane	U		15	49	µg/Kg-dry	1	10/10/2012 16:17
1,1-Dichloroethene	U		17	56	µg/Kg-dry	1	10/10/2012 16:17
1,2,4-Trichlorobenzene	U		21	69	µg/Kg-dry	1	10/10/2012 16:17
1,2-Dibromo-3-chloropropane	U		20	65	µg/Kg-dry	1	10/10/2012 16:17
1,2-Dibromoethane	U		16	53	µg/Kg-dry	1	10/10/2012 16:17
1,2-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 16:17
1,2-Dichloroethane	U		19	64	µg/Kg-dry	1	10/10/2012 16:17
1,2-Dichloropropane	U		13	44	µg/Kg-dry	1	10/10/2012 16:17
1,3-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 16:17
1,4-Dichlorobenzene	U		15	51	µg/Kg-dry	1	10/10/2012 16:17
2-Butanone	U		100	330	µg/Kg-dry	1	10/10/2012 16:17
2-Hexanone	U		9.9	33	µg/Kg-dry	1	10/10/2012 16:17
4-Methyl-2-pentanone	U		14	45	µg/Kg-dry	1	10/10/2012 16:17
Acetone	U		85	280	µg/Kg-dry	1	10/10/2012 16:17
Benzene	U		16	54	µg/Kg-dry	1	10/10/2012 16:17
Bromodichloromethane	U		9.0	30	µg/Kg-dry	1	10/10/2012 16:17
Bromoform	U		7.9	26	µg/Kg-dry	1	10/10/2012 16:17
Bromomethane	U		15	51	µg/Kg-dry	1	10/10/2012 16:17
Carbon disulfide	U		20	66	µg/Kg-dry	1	10/10/2012 16:17
Carbon tetrachloride	U		11	38	µg/Kg-dry	1	10/10/2012 16:17
Chlorobenzene	U		16	55	µg/Kg-dry	1	10/10/2012 16:17
Chloroethane	U		86	280	µg/Kg-dry	1	10/10/2012 16:17
Chloroform	U		17	55	µg/Kg-dry	1	10/10/2012 16:17
Chloromethane	U		22	75	µg/Kg-dry	1	10/10/2012 16:17
cis-1,2-Dichloroethene	U		16	54	µg/Kg-dry	1	10/10/2012 16:17
cis-1,3-Dichloropropene	U		14	46	µg/Kg-dry	1	10/10/2012 16:17
Cyclohexane	U		18	60	µg/Kg-dry	1	10/10/2012 16:17
Dibromochloromethane	U		7.5	25	µg/Kg-dry	1	10/10/2012 16:17
Dichlorodifluoromethane	U		18	61	µg/Kg-dry	1	10/10/2012 16:17
Ethylbenzene	U		15	50	µg/Kg-dry	1	10/10/2012 16:17
Isopropylbenzene	U		17	58	µg/Kg-dry	1	10/10/2012 16:17
Methyl acetate	U		54	180	µg/Kg-dry	1	10/10/2012 16:17
Methyl tert-butyl ether	U		17	57	µg/Kg-dry	1	10/10/2012 16:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 2
Collection Date: 10/9/2012 02:35 PM

Work Order: 1210334
Lab ID: 1210334-02
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		19	62	µg/Kg-dry	1	10/10/2012 16:17
Methylene chloride	U		16	53	µg/Kg-dry	1	10/10/2012 16:17
Styrene	U		15	50	µg/Kg-dry	1	10/10/2012 16:17
Tetrachloroethene	U		18	60	µg/Kg-dry	1	10/10/2012 16:17
Toluene	U		15	50	µg/Kg-dry	1	10/10/2012 16:17
trans-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	10/10/2012 16:17
trans-1,3-Dichloropropene	U		13	45	µg/Kg-dry	1	10/10/2012 16:17
Trichloroethene	U		19	63	µg/Kg-dry	1	10/10/2012 16:17
Trichlorofluoromethane	U		11	37	µg/Kg-dry	1	10/10/2012 16:17
Vinyl chloride	U		18	61	µg/Kg-dry	1	10/10/2012 16:17
Xylenes, Total	U		48	160	µg/Kg-dry	1	10/10/2012 16:17
Surr: 1,2-Dichloroethane-d4	*97.6*			*70-130*	*%REC*	1	10/10/2012 16:17
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	1	10/10/2012 16:17
Surr: Dibromofluoromethane	*99.0*			*70-130*	*%REC*	1	10/10/2012 16:17
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	10/10/2012 16:17
MOISTURE		Method: **A2540 G**					Analyst: **LR**
Moisture	**26**		**0.025**	**0.083**	**% of sample**	1	10/10/2012 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 3
Collection Date: 10/9/2012 02:45 PM

Work Order: 1210334
Lab ID: 1210334-03
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-141**			Prep: PUBL-SW-141 / 10/10/12		Analyst: **CW**
DRO (C10-C28)	U		0.79	2.6	mg/Kg-dry	1	10/10/2012 19:59
GASOLINE RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-140**					Analyst: **CW**
GRO (C6-C10)	U		720	2,400	µg/Kg-dry	50	10/11/2012 02:58
Surr: a,a,a-Trifluorotoluene	*106*			*80-120*	*%REC*	50	10/11/2012 02:58
MERCURY BY CVAA		Method: **SW7471**			Prep: SW7471 / 10/10/12		Analyst: **LR**
Mercury	**0.020**		**0.0011**	**0.0037**	**mg/Kg-dry**	1	10/10/2012 16:20
METALS BY ICP-MS		Method: **SW6020A**			Prep: SW3050B / 10/10/12		Analyst: **CES**
Arsenic	**2.6**		**0.10**	**0.34**	**mg/Kg-dry**	2	10/11/2012 12:32
Barium	**220**		**0.031**	**0.10**	**mg/Kg-dry**	2	10/11/2012 12:32
Cadmium	**0.18**		**0.010**	**0.035**	**mg/Kg-dry**	2	10/11/2012 12:32
Chromium	**43**		**0.024**	**0.080**	**mg/Kg-dry**	2	10/11/2012 12:32
Lead	**10**		**0.0035**	**0.011**	**mg/Kg-dry**	2	10/11/2012 12:32
Selenium	**1.4**		**0.063**	**0.21**	**mg/Kg-dry**	2	10/11/2012 12:32
Silver	**0.050**		**0.0035**	**0.011**	**mg/Kg-dry**	2	10/11/2012 12:32
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270**			Prep: SW3541 / 10/10/12		Analyst: **HL**
1-Methylnaphthalene	U		12	38	µg/Kg-dry	1	10/11/2012 12:59
2-Methylnaphthalene	U		13	42	µg/Kg-dry	1	10/11/2012 12:59
Acenaphthene	U		12	39	µg/Kg-dry	1	10/11/2012 12:59
Acenaphthylene	U		12	41	µg/Kg-dry	1	10/11/2012 12:59
Anthracene	U		13	44	µg/Kg-dry	1	10/11/2012 12:59
Benzo(a)anthracene	U		16	53	µg/Kg-dry	1	10/11/2012 12:59
Benzo(a)pyrene	U		20	67	µg/Kg-dry	1	10/11/2012 12:59
Benzo(b)fluoranthene	U		21	70	µg/Kg-dry	1	10/11/2012 12:59
Benzo(g,h,i)perylene	U		31	100	µg/Kg-dry	1	10/11/2012 12:59
Benzo(k)fluoranthene	U		18	59	µg/Kg-dry	1	10/11/2012 12:59
Chrysene	U		15	49	µg/Kg-dry	1	10/11/2012 12:59
Dibenzo(a,h)anthracene	U		22	74	µg/Kg-dry	1	10/11/2012 12:59
Fluoranthene	U		15	51	µg/Kg-dry	1	10/11/2012 12:59
Fluorene	U		11	38	µg/Kg-dry	1	10/11/2012 12:59
Indeno(1,2,3-cd)pyrene	U		25	82	µg/Kg-dry	1	10/11/2012 12:59
Naphthalene	U		11	37	µg/Kg-dry	1	10/11/2012 12:59
Phenanthrene	U		39	130	µg/Kg-dry	1	10/11/2012 12:59
Pyrene	U		16	54	µg/Kg-dry	1	10/11/2012 12:59
Surr: 2-Fluorobiphenyl	*70.0*			*12-100*	*%REC*	1	10/11/2012 12:59
Surr: 4-Terphenyl-d14	*103*			*25-137*	*%REC*	1	10/11/2012 12:59

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 3
Collection Date: 10/9/2012 02:45 PM

Work Order: 1210334
Lab ID: 1210334-03
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*75.1*			*37-107*	*%REC*	1	10/11/2012 12:59
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**			Prep: SW5035 / 10/10/12		Analyst: **AK**
1,1,1-Trichloroethane	U		15	51	µg/Kg-dry	1	10/10/2012 16:41
1,1,2,2-Tetrachloroethane	U		18	59	µg/Kg-dry	1	10/10/2012 16:41
1,1,2-Trichloroethane	U		14	47	µg/Kg-dry	1	10/10/2012 16:41
1,1,2-Trichlorotrifluoroethane	U		15	49	µg/Kg-dry	1	10/10/2012 16:41
1,1-Dichloroethane	U		15	49	µg/Kg-dry	1	10/10/2012 16:41
1,1-Dichloroethene	U		17	56	µg/Kg-dry	1	10/10/2012 16:41
1,2,4-Trichlorobenzene	U		21	69	µg/Kg-dry	1	10/10/2012 16:41
1,2-Dibromo-3-chloropropane	U		19	65	µg/Kg-dry	1	10/10/2012 16:41
1,2-Dibromoethane	U		16	53	µg/Kg-dry	1	10/10/2012 16:41
1,2-Dichlorobenzene	U		16	53	µg/Kg-dry	1	10/10/2012 16:41
1,2-Dichloroethane	U		19	63	µg/Kg-dry	1	10/10/2012 16:41
1,2-Dichloropropane	U		13	44	µg/Kg-dry	1	10/10/2012 16:41
1,3-Dichlorobenzene	U		16	53	µg/Kg-dry	1	10/10/2012 16:41
1,4-Dichlorobenzene	U		15	51	µg/Kg-dry	1	10/10/2012 16:41
2-Butanone	U		99	330	µg/Kg-dry	1	10/10/2012 16:41
2-Hexanone	U		9.8	33	µg/Kg-dry	1	10/10/2012 16:41
4-Methyl-2-pentanone	U		14	45	µg/Kg-dry	1	10/10/2012 16:41
Acetone	U		85	280	µg/Kg-dry	1	10/10/2012 16:41
Benzene	U		16	53	µg/Kg-dry	1	10/10/2012 16:41
Bromodichloromethane	U		9.0	30	µg/Kg-dry	1	10/10/2012 16:41
Bromoform	U		7.9	26	µg/Kg-dry	1	10/10/2012 16:41
Bromomethane	U		15	51	µg/Kg-dry	1	10/10/2012 16:41
Carbon disulfide	U		20	66	µg/Kg-dry	1	10/10/2012 16:41
Carbon tetrachloride	U		11	38	µg/Kg-dry	1	10/10/2012 16:41
Chlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 16:41
Chloroethane	U		85	280	µg/Kg-dry	1	10/10/2012 16:41
Chloroform	U		16	55	µg/Kg-dry	1	10/10/2012 16:41
Chloromethane	U		22	74	µg/Kg-dry	1	10/10/2012 16:41
cis-1,2-Dichloroethene	U		16	54	µg/Kg-dry	1	10/10/2012 16:41
cis-1,3-Dichloropropene	U		14	46	µg/Kg-dry	1	10/10/2012 16:41
Cyclohexane	U		18	60	µg/Kg-dry	1	10/10/2012 16:41
Dibromochloromethane	U		7.4	25	µg/Kg-dry	1	10/10/2012 16:41
Dichlorodifluoromethane	U		18	60	µg/Kg-dry	1	10/10/2012 16:41
Ethylbenzene	U		15	49	µg/Kg-dry	1	10/10/2012 16:41
Isopropylbenzene	U		17	57	µg/Kg-dry	1	10/10/2012 16:41
Methyl acetate	U		54	180	µg/Kg-dry	1	10/10/2012 16:41
Methyl tert-butyl ether	U		17	56	µg/Kg-dry	1	10/10/2012 16:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 3
Collection Date: 10/9/2012 02:45 PM

Work Order: 1210334
Lab ID: 1210334-03
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		19	62	µg/Kg-dry	1	10/10/2012 16:41
Methylene chloride	U		16	52	µg/Kg-dry	1	10/10/2012 16:41
Styrene	U		15	50	µg/Kg-dry	1	10/10/2012 16:41
Tetrachloroethene	U		18	59	µg/Kg-dry	1	10/10/2012 16:41
Toluene	U		15	50	µg/Kg-dry	1	10/10/2012 16:41
trans-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	10/10/2012 16:41
trans-1,3-Dichloropropene	U		13	45	µg/Kg-dry	1	10/10/2012 16:41
Trichloroethene	U		19	62	µg/Kg-dry	1	10/10/2012 16:41
Trichlorofluoromethane	U		11	37	µg/Kg-dry	1	10/10/2012 16:41
Vinyl chloride	U		18	60	µg/Kg-dry	1	10/10/2012 16:41
Xylenes, Total	U		47	160	µg/Kg-dry	1	10/10/2012 16:41
Surr: 1,2-Dichloroethane-d4	*103*			*70-130*	*%REC*	1	10/10/2012 16:41
Surr: 4-Bromofluorobenzene	*97.6*			*70-130*	*%REC*	1	10/10/2012 16:41
Surr: Dibromofluoromethane	*104*			*70-130*	*%REC*	1	10/10/2012 16:41
Surr: Toluene-d8	*99.2*			*70-130*	*%REC*	1	10/10/2012 16:41
MOISTURE		Method: **A2540 G**					Analyst: **LR**
Moisture	**25**		**0.025**	**0.083**	**% of sample**	1	10/10/2012 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 4
Collection Date: 10/9/2012 02:55 PM

Work Order: 1210334
Lab ID: 1210334-04
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-141**			Prep: PUBL-SW-141 / 10/10/12		Analyst: **CW**
DRO (C10-C28)	U		0.80	2.6	mg/Kg-dry	1	10/10/2012 20:25
GASOLINE RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-140**					Analyst: **CW**
GRO (C6-C10)	U		720	2,400	µg/Kg-dry	50	10/11/2012 03:27
Surr: a,a,a-Trifluorotoluene	*104*			*80-120*	*%REC*	50	10/11/2012 03:27
MERCURY BY CVAA		Method: **SW7471**			Prep: SW7471 / 10/10/12		Analyst: **LR**
Mercury	**0.019**		**0.0012**	**0.0041**	**mg/Kg-dry**	1	10/10/2012 16:22
METALS BY ICP-MS		Method: **SW6020A**			Prep: SW3050B / 10/10/12		Analyst: **CES**
Arsenic	**2.7**		**0.11**	**0.37**	**mg/Kg-dry**	2	10/11/2012 12:38
Barium	**190**		**0.033**	**0.11**	**mg/Kg-dry**	2	10/11/2012 12:38
Cadmium	**0.16**		**0.011**	**0.037**	**mg/Kg-dry**	2	10/11/2012 12:38
Chromium	**42**		**0.026**	**0.086**	**mg/Kg-dry**	2	10/11/2012 12:38
Lead	**9.9**		**0.0037**	**0.012**	**mg/Kg-dry**	2	10/11/2012 12:38
Selenium	**1.2**		**0.067**	**0.22**	**mg/Kg-dry**	2	10/11/2012 12:38
Silver	**0.042**		**0.0037**	**0.012**	**mg/Kg-dry**	2	10/11/2012 12:38
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270**			Prep: SW3541 / 10/10/12		Analyst: **HL**
1-Methylnaphthalene	U		12	39	µg/Kg-dry	1	10/11/2012 13:27
2-Methylnaphthalene	U		13	43	µg/Kg-dry	1	10/11/2012 13:27
Acenaphthene	U		12	40	µg/Kg-dry	1	10/11/2012 13:27
Acenaphthylene	U		13	42	µg/Kg-dry	1	10/11/2012 13:27
Anthracene	U		13	45	µg/Kg-dry	1	10/11/2012 13:27
Benzo(a)anthracene	U		16	54	µg/Kg-dry	1	10/11/2012 13:27
Benzo(a)pyrene	U		20	68	µg/Kg-dry	1	10/11/2012 13:27
Benzo(b)fluoranthene	U		21	71	µg/Kg-dry	1	10/11/2012 13:27
Benzo(g,h,i)perylene	U		31	100	µg/Kg-dry	1	10/11/2012 13:27
Benzo(k)fluoranthene	U		18	60	µg/Kg-dry	1	10/11/2012 13:27
Chrysene	U		15	50	µg/Kg-dry	1	10/11/2012 13:27
Dibenzo(a,h)anthracene	U		23	75	µg/Kg-dry	1	10/11/2012 13:27
Fluoranthene	U		16	52	µg/Kg-dry	1	10/11/2012 13:27
Fluorene	U		12	38	µg/Kg-dry	1	10/11/2012 13:27
Indeno(1,2,3-cd)pyrene	U		25	83	µg/Kg-dry	1	10/11/2012 13:27
Naphthalene	U		11	38	µg/Kg-dry	1	10/11/2012 13:27
Phenanthrene	U		40	130	µg/Kg-dry	1	10/11/2012 13:27
Pyrene	U		16	55	µg/Kg-dry	1	10/11/2012 13:27
Surr: 2-Fluorobiphenyl	*68.7*			*12-100*	*%REC*	1	10/11/2012 13:27
Surr: 4-Terphenyl-d14	*99.1*			*25-137*	*%REC*	1	10/11/2012 13:27

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 4
Collection Date: 10/9/2012 02:55 PM

Work Order: 1210334
Lab ID: 1210334-04
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*77.4*			*37-107*	*%REC*	1	10/11/2012 13:27
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**			Prep: SW5035 / 10/10/12		Analyst: **AK**
1,1,1-Trichloroethane	U		15	51	µg/Kg-dry	1	10/10/2012 17:05
1,1,2,2-Tetrachloroethane	U		18	59	µg/Kg-dry	1	10/10/2012 17:05
1,1,2-Trichloroethane	U		14	47	µg/Kg-dry	1	10/10/2012 17:05
1,1,2-Trichlorotrifluoroethane	U		15	50	µg/Kg-dry	1	10/10/2012 17:05
1,1-Dichloroethane	U		15	49	µg/Kg-dry	1	10/10/2012 17:05
1,1-Dichloroethene	U		17	56	µg/Kg-dry	1	10/10/2012 17:05
1,2,4-Trichlorobenzene	U		21	69	µg/Kg-dry	1	10/10/2012 17:05
1,2-Dibromo-3-chloropropane	U		20	65	µg/Kg-dry	1	10/10/2012 17:05
1,2-Dibromoethane	U		16	53	µg/Kg-dry	1	10/10/2012 17:05
1,2-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 17:05
1,2-Dichloroethane	U		19	64	µg/Kg-dry	1	10/10/2012 17:05
1,2-Dichloropropane	U		13	44	µg/Kg-dry	1	10/10/2012 17:05
1,3-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 17:05
1,4-Dichlorobenzene	U		15	51	µg/Kg-dry	1	10/10/2012 17:05
2-Butanone	U		100	330	µg/Kg-dry	1	10/10/2012 17:05
2-Hexanone	U		9.9	33	µg/Kg-dry	1	10/10/2012 17:05
4-Methyl-2-pentanone	U		14	45	µg/Kg-dry	1	10/10/2012 17:05
Acetone	U		85	280	µg/Kg-dry	1	10/10/2012 17:05
Benzene	U		16	54	µg/Kg-dry	1	10/10/2012 17:05
Bromodichloromethane	U		9.0	30	µg/Kg-dry	1	10/10/2012 17:05
Bromoform	U		7.9	26	µg/Kg-dry	1	10/10/2012 17:05
Bromomethane	U		15	51	µg/Kg-dry	1	10/10/2012 17:05
Carbon disulfide	U		20	66	µg/Kg-dry	1	10/10/2012 17:05
Carbon tetrachloride	U		11	38	µg/Kg-dry	1	10/10/2012 17:05
Chlorobenzene	U		16	55	µg/Kg-dry	1	10/10/2012 17:05
Chloroethane	U		86	280	µg/Kg-dry	1	10/10/2012 17:05
Chloroform	U		17	55	µg/Kg-dry	1	10/10/2012 17:05
Chloromethane	U		22	75	µg/Kg-dry	1	10/10/2012 17:05
cis-1,2-Dichloroethene	U		16	54	µg/Kg-dry	1	10/10/2012 17:05
cis-1,3-Dichloropropene	U		14	46	µg/Kg-dry	1	10/10/2012 17:05
Cyclohexane	U		18	60	µg/Kg-dry	1	10/10/2012 17:05
Dibromochloromethane	U		7.5	25	µg/Kg-dry	1	10/10/2012 17:05
Dichlorodifluoromethane	U		18	61	µg/Kg-dry	1	10/10/2012 17:05
Ethylbenzene	U		15	50	µg/Kg-dry	1	10/10/2012 17:05
Isopropylbenzene	U		17	58	µg/Kg-dry	1	10/10/2012 17:05
Methyl acetate	U		54	180	µg/Kg-dry	1	10/10/2012 17:05
Methyl tert-butyl ether	U		17	57	µg/Kg-dry	1	10/10/2012 17:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 4
Collection Date: 10/9/2012 02:55 PM

Work Order: 1210334
Lab ID: 1210334-04
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		19	62	µg/Kg-dry	1	10/10/2012 17:05
Methylene chloride	U		16	53	µg/Kg-dry	1	10/10/2012 17:05
Styrene	U		15	50	µg/Kg-dry	1	10/10/2012 17:05
Tetrachloroethene	U		18	60	µg/Kg-dry	1	10/10/2012 17:05
Toluene	U		15	50	µg/Kg-dry	1	10/10/2012 17:05
trans-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	10/10/2012 17:05
trans-1,3-Dichloropropene	U		13	45	µg/Kg-dry	1	10/10/2012 17:05
Trichloroethene	U		19	63	µg/Kg-dry	1	10/10/2012 17:05
Trichlorofluoromethane	U		11	37	µg/Kg-dry	1	10/10/2012 17:05
Vinyl chloride	U		18	61	µg/Kg-dry	1	10/10/2012 17:05
Xylenes, Total	U		48	160	µg/Kg-dry	1	10/10/2012 17:05
Surr: 1,2-Dichloroethane-d4	*100*			*70-130*	*%REC*	1	10/10/2012 17:05
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	1	10/10/2012 17:05
Surr: Dibromofluoromethane	*100*			*70-130*	*%REC*	1	10/10/2012 17:05
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	10/10/2012 17:05
MOISTURE		Method: **A2540 G**					Analyst: **LR**
Moisture	**26**		**0.025**	**0.083**	**% of sample**	1	10/10/2012 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 5
Collection Date: 10/9/2012 03:15 PM

Work Order: 1210334
Lab ID: 1210334-05
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-141**			Prep: PUBL-SW-141 / 10/10/12		Analyst: **CW**
DRO (C10-C28)	U		0.81	2.7	mg/Kg-dry	1	10/10/2012 20:52
GASOLINE RANGE ORGANICS BY GC-FID		Method: **PUBL-SW-140**					Analyst: **CW**
GRO (C6-C10)	U		770	2,600	µg/Kg-dry	50	10/11/2012 03:55
Surr: a,a,a-Trifluorotoluene	*111*			*80-120*	*%REC*	50	10/11/2012 03:55
MERCURY BY CVAA		Method: **SW7471**			Prep: SW7471 / 10/10/12		Analyst: **LR**
Mercury	**0.021**		**0.0013**	**0.0042**	**mg/Kg-dry**	1	10/10/2012 16:24
METALS BY ICP-MS		Method: **SW6020A**			Prep: SW3050B / 10/10/12		Analyst: **CES**
Arsenic	**2.6**		**0.13**	**0.42**	**mg/Kg-dry**	2	10/11/2012 12:43
Barium	**230**		**0.039**	**0.13**	**mg/Kg-dry**	2	10/11/2012 12:43
Cadmium	**0.18**		**0.013**	**0.043**	**mg/Kg-dry**	2	10/11/2012 12:43
Chromium	**45**		**0.030**	**0.099**	**mg/Kg-dry**	2	10/11/2012 12:43
Lead	**10**		**0.0043**	**0.014**	**mg/Kg-dry**	2	10/11/2012 12:43
Selenium	**1.4**		**0.077**	**0.26**	**mg/Kg-dry**	2	10/11/2012 12:43
Silver	**0.050**		**0.0043**	**0.014**	**mg/Kg-dry**	2	10/11/2012 12:43
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW8270**			Prep: SW3541 / 10/10/12		Analyst: **HL**
1-Methylnaphthalene	U		13	42	µg/Kg-dry	1	10/11/2012 13:55
2-Methylnaphthalene	U		14	46	µg/Kg-dry	1	10/11/2012 13:55
Acenaphthene	U		13	43	µg/Kg-dry	1	10/11/2012 13:55
Acenaphthylene	U		13	45	µg/Kg-dry	1	10/11/2012 13:55
Anthracene	U		14	48	µg/Kg-dry	1	10/11/2012 13:55
Benzo(a)anthracene	U		17	57	µg/Kg-dry	1	10/11/2012 13:55
Benzo(a)pyrene	U		22	73	µg/Kg-dry	1	10/11/2012 13:55
Benzo(b)fluoranthene	U		23	76	µg/Kg-dry	1	10/11/2012 13:55
Benzo(g,h,i)perylene	U		33	110	µg/Kg-dry	1	10/11/2012 13:55
Benzo(k)fluoranthene	U		19	64	µg/Kg-dry	1	10/11/2012 13:55
Chrysene	U		16	53	µg/Kg-dry	1	10/11/2012 13:55
Dibenzo(a,h)anthracene	U		24	80	µg/Kg-dry	1	10/11/2012 13:55
Fluoranthene	U		17	56	µg/Kg-dry	1	10/11/2012 13:55
Fluorene	U		12	41	µg/Kg-dry	1	10/11/2012 13:55
Indeno(1,2,3-cd)pyrene	U		27	89	µg/Kg-dry	1	10/11/2012 13:55
Naphthalene	U		12	40	µg/Kg-dry	1	10/11/2012 13:55
Phenanthrene	U		42	140	µg/Kg-dry	1	10/11/2012 13:55
Pyrene	U		18	59	µg/Kg-dry	1	10/11/2012 13:55
Surr: 2-Fluorobiphenyl	*65.5*			*12-100*	*%REC*	1	10/11/2012 13:55
Surr: 4-Terphenyl-d14	*94.6*			*25-137*	*%REC*	1	10/11/2012 13:55

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 5
Collection Date: 10/9/2012 03:15 PM

Work Order: 1210334
Lab ID: 1210334-05
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*70.0*			*37-107*	*%REC*	1	10/11/2012 13:55
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**			Prep: SW5035 / 10/10/12		Analyst: **AK**
1,1,1-Trichloroethane	U		16	54	µg/Kg-dry	1	10/10/2012 17:29
1,1,2,2-Tetrachloroethane	U		19	63	µg/Kg-dry	1	10/10/2012 17:29
1,1,2-Trichloroethane	U		15	50	µg/Kg-dry	1	10/10/2012 17:29
1,1,2-Trichlorotrifluoroethane	U		16	53	µg/Kg-dry	1	10/10/2012 17:29
1,1-Dichloroethane	U		16	52	µg/Kg-dry	1	10/10/2012 17:29
1,1-Dichloroethene	U		18	60	µg/Kg-dry	1	10/10/2012 17:29
1,2,4-Trichlorobenzene	U		22	74	µg/Kg-dry	1	10/10/2012 17:29
1,2-Dibromo-3-chloropropane	U		21	69	µg/Kg-dry	1	10/10/2012 17:29
1,2-Dibromoethane	U		17	56	µg/Kg-dry	1	10/10/2012 17:29
1,2-Dichlorobenzene	U		17	57	µg/Kg-dry	1	10/10/2012 17:29
1,2-Dichloroethane	U		20	67	µg/Kg-dry	1	10/10/2012 17:29
1,2-Dichloropropane	U		14	47	µg/Kg-dry	1	10/10/2012 17:29
1,3-Dichlorobenzene	U		17	57	µg/Kg-dry	1	10/10/2012 17:29
1,4-Dichlorobenzene	U		16	54	µg/Kg-dry	1	10/10/2012 17:29
2-Butanone	U		110	350	µg/Kg-dry	1	10/10/2012 17:29
2-Hexanone	U		10	35	µg/Kg-dry	1	10/10/2012 17:29
4-Methyl-2-pentanone	U		14	48	µg/Kg-dry	1	10/10/2012 17:29
Acetone	U		90	300	µg/Kg-dry	1	10/10/2012 17:29
Benzene	U		17	57	µg/Kg-dry	1	10/10/2012 17:29
Bromodichloromethane	U		9.6	32	µg/Kg-dry	1	10/10/2012 17:29
Bromoform	U		8.4	28	µg/Kg-dry	1	10/10/2012 17:29
Bromomethane	U		16	54	µg/Kg-dry	1	10/10/2012 17:29
Carbon disulfide	U		21	70	µg/Kg-dry	1	10/10/2012 17:29
Carbon tetrachloride	U		12	40	µg/Kg-dry	1	10/10/2012 17:29
Chlorobenzene	U		17	58	µg/Kg-dry	1	10/10/2012 17:29
Chloroethane	U		91	300	µg/Kg-dry	1	10/10/2012 17:29
Chloroform	U		18	59	µg/Kg-dry	1	10/10/2012 17:29
Chloromethane	U		24	79	µg/Kg-dry	1	10/10/2012 17:29
cis-1,2-Dichloroethene	U		17	58	µg/Kg-dry	1	10/10/2012 17:29
cis-1,3-Dichloropropene	U		15	49	µg/Kg-dry	1	10/10/2012 17:29
Cyclohexane	U		19	64	µg/Kg-dry	1	10/10/2012 17:29
Dibromochloromethane	U		7.9	26	µg/Kg-dry	1	10/10/2012 17:29
Dichlorodifluoromethane	U		19	64	µg/Kg-dry	1	10/10/2012 17:29
Ethylbenzene	U		16	53	µg/Kg-dry	1	10/10/2012 17:29
Isopropylbenzene	U		18	61	µg/Kg-dry	1	10/10/2012 17:29
Methyl acetate	U		57	190	µg/Kg-dry	1	10/10/2012 17:29
Methyl tert-butyl ether	U		18	60	µg/Kg-dry	1	10/10/2012 17:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Terminal Stockpile - 5
Collection Date: 10/9/2012 03:15 PM

Work Order: 1210334
Lab ID: 1210334-05
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		20	66	µg/Kg-dry	1	10/10/2012 17:29
Methylene chloride	U		17	56	µg/Kg-dry	1	10/10/2012 17:29
Styrene	U		16	53	µg/Kg-dry	1	10/10/2012 17:29
Tetrachloroethene	U		19	63	µg/Kg-dry	1	10/10/2012 17:29
Toluene	U		16	53	µg/Kg-dry	1	10/10/2012 17:29
trans-1,2-Dichloroethene	U		13	44	µg/Kg-dry	1	10/10/2012 17:29
trans-1,3-Dichloropropene	U		14	48	µg/Kg-dry	1	10/10/2012 17:29
Trichloroethene	U		20	66	µg/Kg-dry	1	10/10/2012 17:29
Trichlorofluoromethane	U		12	39	µg/Kg-dry	1	10/10/2012 17:29
Vinyl chloride	U		19	64	µg/Kg-dry	1	10/10/2012 17:29
Xylenes, Total	U		50	170	µg/Kg-dry	1	10/10/2012 17:29
Surr: 1,2-Dichloroethane-d4	*97.0*			*70-130*	*%REC*	1	10/10/2012 17:29
Surr: 4-Bromofluorobenzene	*96.2*			*70-130*	*%REC*	1	10/10/2012 17:29
Surr: Dibromofluoromethane	*98.8*			*70-130*	*%REC*	1	10/10/2012 17:29
Surr: Toluene-d8	*98.6*			*70-130*	*%REC*	1	10/10/2012 17:29
MOISTURE		Method: **A2540 G**					Analyst: **LR**
Moisture	**30**		**0.025**	**0.083**	**% of sample**	1	10/10/2012 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Trip Blank
Collection Date: 10/9/2012

Work Order: 1210334
Lab ID: 1210334-06
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**			Prep: SW5035 / 10/10/12		Analyst: **AK**
1,1,1-Trichloroethane	U		11	38	µg/Kg	1	10/10/2012 15:29
1,1,2,2-Tetrachloroethane	U		13	44	µg/Kg	1	10/10/2012 15:29
1,1,2-Trichloroethane	U		11	35	µg/Kg	1	10/10/2012 15:29
1,1,2-Trichlorotrifluoroethane	U		11	37	µg/Kg	1	10/10/2012 15:29
1,1-Dichloroethane	U		11	37	µg/Kg	1	10/10/2012 15:29
1,1-Dichloroethene	U		13	42	µg/Kg	1	10/10/2012 15:29
1,2,4-Trichlorobenzene	U		16	52	µg/Kg	1	10/10/2012 15:29
1,2-Dibromo-3-chloropropane	U		15	49	µg/Kg	1	10/10/2012 15:29
1,2-Dibromoethane	U		12	39	µg/Kg	1	10/10/2012 15:29
1,2-Dichlorobenzene	U		12	40	µg/Kg	1	10/10/2012 15:29
1,2-Dichloroethane	U		14	47	µg/Kg	1	10/10/2012 15:29
1,2-Dichloropropane	U		9.9	33	µg/Kg	1	10/10/2012 15:29
1,3-Dichlorobenzene	U		12	40	µg/Kg	1	10/10/2012 15:29
1,4-Dichlorobenzene	U		11	38	µg/Kg	1	10/10/2012 15:29
2-Butanone	U		74	250	µg/Kg	1	10/10/2012 15:29
2-Hexanone	U		7.4	25	µg/Kg	1	10/10/2012 15:29
4-Methyl-2-pentanone	U		10	34	µg/Kg	1	10/10/2012 15:29
Acetone	U		64	210	µg/Kg	1	10/10/2012 15:29
Benzene	U		12	40	µg/Kg	1	10/10/2012 15:29
Bromodichloromethane	U		6.7	22	µg/Kg	1	10/10/2012 15:29
Bromoform	U		5.9	20	µg/Kg	1	10/10/2012 15:29
Bromomethane	U		11	38	µg/Kg	1	10/10/2012 15:29
Carbon disulfide	U		15	49	µg/Kg	1	10/10/2012 15:29
Carbon tetrachloride	U		8.5	28	µg/Kg	1	10/10/2012 15:29
Chlorobenzene	U		12	41	µg/Kg	1	10/10/2012 15:29
Chloroethane	U		64	210	µg/Kg	1	10/10/2012 15:29
Chloroform	U		12	41	µg/Kg	1	10/10/2012 15:29
Chloromethane	U		17	56	µg/Kg	1	10/10/2012 15:29
cis-1,2-Dichloroethene	U		12	41	µg/Kg	1	10/10/2012 15:29
cis-1,3-Dichloropropene	U		10	34	µg/Kg	1	10/10/2012 15:29
Cyclohexane	U		13	45	µg/Kg	1	10/10/2012 15:29
Dibromochloromethane	U		5.6	18	µg/Kg	1	10/10/2012 15:29
Dichlorodifluoromethane	U		14	45	µg/Kg	1	10/10/2012 15:29
Ethylbenzene	U		11	37	µg/Kg	1	10/10/2012 15:29
Isopropylbenzene	U		13	43	µg/Kg	1	10/10/2012 15:29
Methyl acetate	U		40	130	µg/Kg	1	10/10/2012 15:29
Methyl tert-butyl ether	U		13	42	µg/Kg	1	10/10/2012 15:29
Methylcyclohexane	U		14	46	µg/Kg	1	10/10/2012 15:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-Oct-12*

Client: Barr Engineering Company
Project: 49161092.01 SOIL 001
Sample ID: Trip Blank
Collection Date: 10/9/2012

Work Order: 1210334
Lab ID: 1210334-06
Matrix: SOIL

Analyses	Result	Qual	LOD	LOQ	Units	Dilution Factor	Date Analyzed
Methylene chloride	U		12	39	µg/Kg	1	10/10/2012 15:29
Styrene	U		11	37	µg/Kg	1	10/10/2012 15:29
Tetrachloroethene	U		13	44	µg/Kg	1	10/10/2012 15:29
Toluene	U		11	38	µg/Kg	1	10/10/2012 15:29
trans-1,2-Dichloroethene	U		9.2	31	µg/Kg	1	10/10/2012 15:29
trans-1,3-Dichloropropene	U		10	33	µg/Kg	1	10/10/2012 15:29
Trichloroethene	U		14	47	µg/Kg	1	10/10/2012 15:29
Trichlorofluoromethane	U		8.3	28	µg/Kg	1	10/10/2012 15:29
Vinyl chloride	U		14	45	µg/Kg	1	10/10/2012 15:29
Xylenes, Total	U		35	120	µg/Kg	1	10/10/2012 15:29
Surr: 1,2-Dichloroethane-d4	*96.8*			*70-130*	*%REC*	1	10/10/2012 15:29
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	10/10/2012 15:29
Surr: Dibromofluoromethane	*98.0*			*70-130*	*%REC*	1	10/10/2012 15:29
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	10/10/2012 15:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

QC BATCH REPORT

Batch ID: **44060** Instrument ID **GC8** Method: **PUBL-SW-141**

MBLK	Sample ID: **DBLKS1-44060-44060**				Units: **mg/Kg**			Analysis Date: **10/10/2012 06:12 PM**			
Client ID:		Run ID: **GC8_121010A**			SeqNo: **2109225**			Prep Date: **10/10/2012**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	U	5.0									

LCS	Sample ID: **DLCSS1-44060-44060**				Units: **mg/Kg**			Analysis Date: **10/10/2012 06:39 PM**			
Client ID:		Run ID: **GC8_121010A**			SeqNo: **2109226**			Prep Date: **10/10/2012**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	145.8	5.0	160	0	91.1	70-120	0				

LCSD	Sample ID: **DLCSDS1-44060-44060**				Units: **mg/Kg**			Analysis Date: **10/10/2012 09:18 PM**			
Client ID:		Run ID: **GC8_121010A**			SeqNo: **2109232**			Prep Date: **10/10/2012**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	141.4	5.0	160	0	88.4	70-120	145.8	3.04	20		

The following samples were analyzed in this batch:

1210334-01B	1210334-02B	1210334-03B
1210334-04B	1210334-05B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **R111039** Instrument ID **GC9** Method: **PUBL-SW-140**

MBLK Sample ID: **WBLK1-121010-R111039** Units: **µg/Kg** Analysis Date: **10/11/2012 01:32 A**
Client ID: Run ID: **GC9_121010A** SeqNo: **2109346** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	50								
Surr: a,a,a-Trifluorotoluene	*20.14*	0	*20*	0	*101*	*80-120*	0			

LCS Sample ID: **WLCS1-121010-R111039** Units: **µg/Kg** Analysis Date: **10/11/2012 01:03 A**
Client ID: Run ID: **GC9_121010A** SeqNo: **2109345** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	533.8	50	500	0	107	80-120	0			
Surr: a,a,a-Trifluorotoluene	*20.75*	0	*20*	0	*104*	*80-120*	0			

LCSD Sample ID: **WLCSD1-121010-R111039** Units: **µg/Kg** Analysis Date: **10/11/2012 04:24 A**
Client ID: Run ID: **GC9_121010A** SeqNo: **2109352** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	556.9	50	500	0	111	80-120	533.8	4.23	20	
Surr: a,a,a-Trifluorotoluene	*21.53*	0	*20*	0	*108*	*80-120*	20.75	*3.69*		

The following samples were analyzed in this batch:

1210334-01A	1210334-02A	1210334-03A
1210334-04A	1210334-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44059** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-44059-44059** Units: **mg/Kg** Analysis Date: **10/10/2012 03:27 PM**
Client ID: Run ID: **HG1_121010A** SeqNo: **2108569** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001333	0.020								J

LCS Sample ID: **LCS-44059-44059** Units: **mg/Kg** Analysis Date: **10/10/2012 03:29 PM**
Client ID: Run ID: **HG1_121010A** SeqNo: **2108571** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1604	0.020	0.1665	0	96.3	80-120	0			

MS Sample ID: **1210250-14CMS** Units: **mg/Kg** Analysis Date: **10/10/2012 03:57 PM**
Client ID: Run ID: **HG1_121010A** SeqNo: **2108595** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1825	0.019	0.1561	0.03476	94.6	75-125	0			

MSD Sample ID: **1210250-14CMSD** Units: **mg/Kg** Analysis Date: **10/10/2012 03:59 PM**
Client ID: Run ID: **HG1_121010A** SeqNo: **2108596** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1731	0.017	0.1442	0.03476	96	75-125	0.1825	5.29	35	

The following samples were analyzed in this batch:

1210334-01C	1210334-02C	1210334-03C
1210334-04C	1210334-05C	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44063** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-44063-44063** Units: **mg/Kg** Analysis Date: **10/11/2012 12:10 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109463** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.25								
Barium	U	0.25								
Cadmium	0.005815	0.10								J
Chromium	U	0.25								
Lead	U	0.25								
Selenium	U	0.25								
Silver	U	0.25								

LCS Sample ID: **LCS-44063-44063** Units: **mg/Kg** Analysis Date: **10/10/2012 06:07 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109048** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.188	0.25	5	0	83.8	80-120	0			
Barium	4.88	0.25	5	0	97.6	80-120	0			
Cadmium	4.796	0.10	5	0	95.9	80-120	0			
Chromium	4.717	0.25	5	0	94.3	80-120	0			
Lead	5.075	0.25	5	0	102	80-120	0			
Silver	4.996	0.25	5	0	99.9	80-120	0			

LCS Sample ID: **LCS-44063-44063** Units: **mg/Kg** Analysis Date: **10/11/2012 12:16 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109466** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	4.39	0.25	5	0	87.8	80-120	0			

MS Sample ID: **1210247-05AMS** Units: **mg/Kg** Analysis Date: **10/10/2012 07:14 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109070** Prep Date: **10/10/2012** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.756	0.71	7.133	2.38	75.4	75-125	0			
Cadmium	6.934	0.29	7.133	0.3109	92.9	75-125	0			
Chromium	40.68	0.71	7.133	33.59	99.5	75-125	0			O
Lead	24.96	0.71	7.133	17.07	111	75-125	0			
Silver	6.227	0.71	7.133	0.05814	86.5	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44063** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1210247-05AMS** Units: **mg/Kg** Analysis Date: **10/11/2012 12:54 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109475** Prep Date: **10/10/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	285	3.6	7.133	308.2	-327	75-125	0			SO
Selenium	7.996	3.6	7.133	1.656	88.9	75-125	0			

MSD Sample ID: **1210247-05AMSD** Units: **mg/Kg** Analysis Date: **10/10/2012 07:19 PM**
Client ID: Run ID: **ICPMS1_121010A** SeqNo: **2109071** Prep Date: **10/10/2012** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.5	0.68	6.812	2.38	75.2	75-125	7.756	3.36	25	
Cadmium	6.729	0.27	6.812	0.3109	94.2	75-125	6.934	3.01	25	
Chromium	40.41	0.68	6.812	33.59	100	75-125	40.68	0.681	25	O
Lead	24.6	0.68	6.812	17.07	111	75-125	24.96	1.45	25	
Silver	5.828	0.68	6.812	0.05814	84.7	75-125	6.227	6.61	25	

MSD Sample ID: **1210247-05AMSD** Units: **mg/Kg** Analysis Date: **10/11/2012 01:00 PM**
Client ID: Run ID: **ICPMS1_121011A** SeqNo: **2109476** Prep Date: **10/10/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	307.5	3.4	6.812	308.2	-11	75-125	285	7.61	25	SO
Selenium	7.405	3.4	6.812	1.656	84.4	75-125	7.996	7.68	25	

The following samples were analyzed in this batch:

1210334-01C	1210334-02C	1210334-03C
1210334-04C	1210334-05C	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44064** Instrument ID **SVMS7** Method: **SW8270**

MBLK Sample ID: **SBLKS1-44064-44064** Units: **µg/Kg** Analysis Date: **10/11/2012 08:41 A**
Client ID: Run ID: **SVMS7_121011A** SeqNo: **2109638** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1-Methylnaphthalene	U	160								
2-Methylnaphthalene	U	80								
Acenaphthene	U	30								
Acenaphthylene	U	30								
Anthracene	U	30								
Benzo(a)anthracene	U	30								
Benzo(a)pyrene	U	30								
Benzo(b)fluoranthene	U	30								
Benzo(g,h,i)perylene	U	30								
Benzo(k)fluoranthene	U	30								
Chrysene	U	30								
Dibenzo(a,h)anthracene	U	30								
Fluoranthene	U	30								
Fluorene	U	30								
Indeno(1,2,3-cd)pyrene	U	30								
Naphthalene	U	30								
Phenanthrene	U	30								
Pyrene	U	30								
Surr: 2-Fluorobiphenyl	*1157*	0	*1667*	0	*69.4*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1702*	0	*1667*	0	*102*	*25-137*	0			
Surr: Nitrobenzene-d5	*1303*	0	*1667*	0	*78.2*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44064** Instrument ID **SVMS7** Method: **SW8270**

LCS Sample ID: **SLCSS1-44064-44064** Units: **µg/Kg** Analysis Date: **10/11/2012 07:19 A**
Client ID: Run ID: **SVMS7_121011A** SeqNo: **2109637** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	568.3	80	666.7	0	85.2	45-105	0			
Acenaphthene	576	30	666.7	0	86.4	45-110	0			
Acenaphthylene	604	30	666.7	0	90.6	45-105	0			
Anthracene	624	30	666.7	0	93.6	55-105	0			
Benzo(a)anthracene	635.3	30	666.7	0	95.3	50-110	0			
Benzo(a)pyrene	665.3	30	666.7	0	99.8	50-110	0			
Benzo(b)fluoranthene	685	30	666.7	0	103	45-115	0			
Benzo(g,h,i)perylene	730.7	30	666.7	0	110	40-125	0			
Benzo(k)fluoranthene	588	30	666.7	0	88.2	45-115	0			
Chrysene	633	30	666.7	0	94.9	55-110	0			
Dibenzo(a,h)anthracene	734.7	30	666.7	0	110	40-125	0			
Fluoranthene	685.3	30	666.7	0	103	55-115	0			
Fluorene	590.7	30	666.7	0	88.6	50-110	0			
Indeno(1,2,3-cd)pyrene	720.3	30	666.7	0	108	40-120	0			
Naphthalene	549.7	30	666.7	0	82.4	40-105	0			
Phenanthrene	600.3	30	666.7	0	90	50-110	0			
Pyrene	683.3	30	666.7	0	102	45-125	0			
Surr: 2-Fluorobiphenyl	*1166*	0	*1667*	0	*70*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1765*	0	*1667*	0	*106*	*25-137*	0			
Surr: Nitrobenzene-d5	*1322*	0	*1667*	0	*79.3*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44064** Instrument ID **SVMS7** Method: **SW8270**

MS Sample ID: **1210272-04A MS** Units: **µg/Kg** Analysis Date: **10/11/2012 11:07 A**

Client ID: Run ID: **SVMS7_121011A** SeqNo: **2109652** Prep Date: **10/10/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	1325	1,600	1325	285.4	78.5	45-105	0			J
Acenaphthene	1418	600	1325	0	107	45-110	0			
Acenaphthylene	1332	600	1325	0	100	45-105	0			
Anthracene	1849	600	1325	302	117	55-105	0			S
Benzo(a)anthracene	2571	600	1325	1145	108	50-110	0			
Benzo(a)pyrene	3081	600	1325	1500	119	50-110	0			S
Benzo(b)fluoranthene	4002	600	1325	2436	118	45-115	0			S
Benzo(g,h,i)perylene	3127	600	1325	1507	122	40-125	0			
Benzo(k)fluoranthene	2299	600	1325	793.1	114	45-115	0			
Chrysene	3578	600	1325	1812	133	55-110	0			S
Dibenzo(a,h)anthracene	1789	600	1325	361.7	108	40-125	0			
Fluoranthene	5102	600	1325	3000	159	55-115	0			S
Fluorene	1358	600	1325	0	102	50-110	0			
Indeno(1,2,3-cd)pyrene	2776	600	1325	1254	115	40-120	0			
Naphthalene	1093	600	1325	169.2	69.7	40-105	0			
Phenanthrene	3531	600	1325	1656	142	50-110	0			S
Pyrene	4512	600	1325	2615	143	45-125	0			S
Surr: 2-Fluorobiphenyl	*2697*	0	*3313*	0	*81.4*	*12-100*	0			
Surr: 4-Terphenyl-d14	*4035*	0	*3313*	0	*122*	*25-137*	0			
Surr: Nitrobenzene-d5	*2339*	0	*3313*	0	*70.6*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44064** Instrument ID **SVMS7** Method: **SW8270**

MSD Sample ID: **1210272-04A MSD** Units: **µg/Kg** Analysis Date: **10/11/2012 11:35 A**

Client ID: Run ID: **SVMS7_121011A** SeqNo: **2109653** Prep Date: **10/10/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	1287	1,500	1262	285.4	79.4	45-105	1325	0	30	J
Acenaphthene	1249	570	1262	0	99	45-110	1418	12.6	30	
Acenaphthylene	1268	570	1262	0	100	45-105	1332	4.89	30	
Anthracene	1527	570	1262	302	97.1	55-105	1849	19.1	30	
Benzo(a)anthracene	2189	570	1262	1145	82.8	50-110	2571	16	30	
Benzo(a)pyrene	2858	570	1262	1500	108	50-110	3081	7.5	30	
Benzo(b)fluoranthene	3811	570	1262	2436	109	45-115	4002	4.89	30	
Benzo(g,h,i)perylene	3003	570	1262	1507	119	40-125	3127	4.04	30	
Benzo(k)fluoranthene	2164	570	1262	793.1	109	45-115	2299	6.05	30	
Chrysene	3167	570	1262	1812	107	55-110	3578	12.2	30	
Dibenzo(a,h)anthracene	1672	570	1262	361.7	104	40-125	1789	6.75	30	
Fluoranthene	4089	570	1262	3000	86.3	55-115	5102	22	30	
Fluorene	1205	570	1262	0	95.5	50-110	1358	11.9	30	
Indeno(1,2,3-cd)pyrene	2682	570	1262	1254	113	40-120	2776	3.47	30	
Naphthalene	1066	570	1262	169.2	71.1	40-105	1093	2.49	30	
Phenanthrene	2461	570	1262	1656	63.8	50-110	3531	35.7	30	R
Pyrene	3710	570	1262	2615	86.8	45-125	4512	19.5	30	
Surr: 2-Fluorobiphenyl	*2593*	0	*3155*	0	*82.2*	*12-100*	2697	*3.91*	*40*	
Surr: 4-Terphenyl-d14	*3805*	0	*3155*	0	*121*	*25-137*	4035	*5.88*	*40*	
Surr: Nitrobenzene-d5	*2347*	0	*3155*	0	*74.4*	*37-107*	2339	*0.355*	*40*	

The following samples were analyzed in this batch: 1210334-01D 1210334-02D 1210334-03D 1210334-04D 1210334-05D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

MBLK Sample ID: **MBLK-44067-44067** Units: **µg/Kg** Analysis Date: **10/10/2012 03:05 PM**
Client ID: Run ID: **VMS5_121010A** SeqNo: **2108806** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	589	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

trans-1,2-Dichloroethene	U	30					
trans-1,3-Dichloropropene	U	30					
Trichloroethene	U	30					
Trichlorofluoromethane	U	30					
Vinyl chloride	U	30					
Xylenes, Total	U	90					
Surr: 1,2-Dichloroethane-d4	*1060*	0	*1000*	0	*106*	*70-130*	0
Surr: 4-Bromofluorobenzene	*1014*	0	*1000*	0	*101*	*70-130*	0
Surr: Dibromofluoromethane	*1026*	0	*1000*	0	*103*	*70-130*	0
Surr: Toluene-d8	*994.5*	0	*1000*	0	*99.4*	*70-130*	0

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

LCS	Sample ID: **LCS-44067-44067**				Units: **µg/Kg**			Analysis Date: **10/10/2012 01:53 PM**		
Client ID:		Run ID: **VMS5_121010A**			SeqNo: **2108805**		Prep Date: **10/10/2012**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	981.5	30	1000	0	98.2	70-135	0			
1,1,2,2-Tetrachloroethane	795	30	1000	0	79.5	55-130	0			
1,1,2-Trichloroethane	951.5	30	1000	0	95.2	60-125	0			
1,1-Dichloroethane	1004	30	1000	0	100	75-125	0			
1,1-Dichloroethene	1019	30	1000	0	102	65-135	0			
1,2,4-Trichlorobenzene	943	30	1000	0	94.3	65-130	0			
1,2-Dibromo-3-chloropropane	879	30	1000	0	87.9	40-135	0			
1,2-Dibromoethane	926	30	1000	0	92.6	70-125	0			
1,2-Dichlorobenzene	960	30	1000	0	96	75-120	0			
1,2-Dichloroethane	962	30	1000	0	96.2	70-135	0			
1,2-Dichloropropane	1042	30	1000	0	104	70-120	0			
1,3-Dichlorobenzene	971.5	30	1000	0	97.2	70-125	0			
1,4-Dichlorobenzene	960.5	30	1000	0	96	70-125	0			
2-Butanone	793	200	1000	0	79.3	30-160	0			
2-Hexanone	698.5	30	1000	0	69.8	45-145	0			
4-Methyl-2-pentanone	832.5	30	1000	0	83.2	45-145	0			
Acetone	764.5	100	1000	0	76.4	20-160	0			
Benzene	952	30	1000	0	95.2	75-125	0			
Bromodichloromethane	994	30	1000	0	99.4	70-130	0			
Bromoform	946	30	1000	0	94.6	55-135	0			
Bromomethane	1448	75	1000	0	145	30-160	0			
Carbon disulfide	1048	30	1000	0	105	45-160	0			
Carbon tetrachloride	994	30	1000	0	99.4	65-135	0			
Chlorobenzene	963	30	1000	0	96.3	75-125	0			
Chloroethane	1108	100	1000	0	111	40-155	0			
Chloroform	1024	30	1000	0	102	70-125	0			
Chloromethane	922	100	1000	0	92.2	50-130	0			
cis-1,2-Dichloroethene	1060	30	1000	0	106	65-125	0			
cis-1,3-Dichloropropene	1016	30	1000	0	102	70-125	0			
Dibromochloromethane	1031	30	1000	0	103	65-135	0			
Dichlorodifluoromethane	939.5	30	1000	0	94	35-135	0			
Ethylbenzene	931	30	1000	0	93.1	75-125	0			
Isopropylbenzene	952.5	30	1000	0	95.2	75-130	0			
Methyl tert-butyl ether	1018	30	1000	0	102	75-125	0			
Methylene chloride	1092	30	1000	0	109	55-145	0			
Styrene	944	30	1000	0	94.4	75-125	0			
Tetrachloroethene	912.5	30	1000	0	91.2	64-140	0			
Toluene	936	30	1000	0	93.6	70-125	0			
trans-1,2-Dichloroethene	1072	30	1000	0	107	65-135	0			
trans-1,3-Dichloropropene	964	30	1000	0	96.4	65-125	0			
Trichloroethene	868.5	30	1000	0	86.8	75-125	0			
Trichlorofluoromethane	1132	30	1000	0	113	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44067**	Instrument ID **VMS5**		Method: **SW8260**				
Vinyl chloride	930.5	30	1000	0	93	60-125	0
Xylenes, Total	2832	90	3000	0	94.4	75-125	0
Surr: 1,2-Dichloroethane-d4	*966.5*	0	*1000*	0	*96.6*	*70-130*	0
Surr: 4-Bromofluorobenzene	*991*	0	*1000*	0	*99.1*	*70-130*	0
Surr: Dibromofluoromethane	*1023*	0	*1000*	0	*102*	*70-130*	0
Surr: Toluene-d8	*1002*	0	*1000*	0	*100*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: **1210334-01A MS** Units: **µg/Kg** Analysis Date: **10/10/2012 10:33 PM**
Client ID: **Terminal Stockpile - 1** Run ID: **VMS5_121010A** SeqNo: **2108815** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	936	30	1000	0	93.6	70-135	0			
1,1,2,2-Tetrachloroethane	900	30	1000	0	90	55-130	0			
1,1,2-Trichloroethane	1020	30	1000	0	102	60-125	0			
1,1-Dichloroethane	948	30	1000	0	94.8	75-125	0			
1,1-Dichloroethene	935	30	1000	0	93.5	65-135	0			
1,2,4-Trichlorobenzene	983.5	30	1000	0	98.4	65-130	0			
1,2-Dibromo-3-chloropropane	986.5	30	1000	0	98.6	40-135	0			
1,2-Dibromoethane	1023	30	1000	0	102	70-125	0			
1,2-Dichlorobenzene	1003	30	1000	0	100	75-120	0			
1,2-Dichloroethane	1032	30	1000	0	103	70-135	0			
1,2-Dichloropropane	1022	30	1000	0	102	70-120	0			
1,3-Dichlorobenzene	971	30	1000	0	97.1	70-125	0			
1,4-Dichlorobenzene	1002	30	1000	0	100	70-125	0			
2-Butanone	909.5	200	1000	0	91	30-160	0			
2-Hexanone	858	30	1000	0	85.8	45-145	0			
4-Methyl-2-pentanone	970	30	1000	0	97	45-145	0			
Acetone	808.5	100	1000	0	80.8	20-160	0			
Benzene	957.5	30	1000	0	95.8	75-125	0			
Bromodichloromethane	1028	30	1000	0	103	70-130	0			
Bromoform	1032	30	1000	0	103	55-135	0			
Bromomethane	1129	75	1000	0	113	30-160	0			
Carbon disulfide	974	30	1000	0	97.4	45-160	0			
Carbon tetrachloride	958	30	1000	0	95.8	65-135	0			
Chlorobenzene	963.5	30	1000	0	96.4	75-125	0			
Chloroethane	1051	100	1000	0	105	40-155	0			
Chloroform	983.5	30	1000	0	98.4	70-125	0			
Chloromethane	895	100	1000	0	89.5	50-130	0			
cis-1,2-Dichloroethene	1035	30	1000	0	104	65-125	0			
cis-1,3-Dichloropropene	1036	30	1000	0	104	70-125	0			
Dibromochloromethane	1052	30	1000	0	105	65-135	0			
Dichlorodifluoromethane	787.5	30	1000	0	78.8	35-135	0			
Ethylbenzene	939	30	1000	0	93.9	75-125	0			
Isopropylbenzene	959.5	30	1000	0	96	75-130	0			
Methyl tert-butyl ether	1112	30	1000	0	111	75-125	0			
Methylene chloride	1026	30	1000	0	103	55-145	0			
Styrene	968	30	1000	0	96.8	75-125	0			
Tetrachloroethene	929.5	30	1000	0	93	64-140	0			
Toluene	930.5	30	1000	0	93	70-125	0			
trans-1,2-Dichloroethene	1042	30	1000	0	104	65-135	0			
trans-1,3-Dichloropropene	976.5	30	1000	0	97.6	65-125	0			
Trichloroethene	891.5	30	1000	0	89.2	75-125	0			
Trichlorofluoromethane	1013	30	1000	0	101	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

Vinyl chloride	900.5	30	1000	0	90	60-125	0
Xylenes, Total	2864	90	3000	0	95.5	75-125	0
Surr: 1,2-Dichloroethane-d4	*989.5*	0	*1000*	0	*99*	*70-130*	0
Surr: 4-Bromofluorobenzene	*990*	0	*1000*	0	*99*	*70-130*	0
Surr: Dibromofluoromethane	*995.5*	0	*1000*	0	*99.6*	*70-130*	0
Surr: Toluene-d8	*978.5*	0	*1000*	0	*97.8*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: **1210334-01A MSD** Units: **µg/Kg** Analysis Date: **10/10/2012 10:57 PM**
Client ID: **Terminal Stockpile - 1** Run ID: **VMS5_121010A** SeqNo: **2108816** Prep Date: **10/10/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	888	30	1000	0	88.8	70-135	936	5.26	30	
1,1,2,2-Tetrachloroethane	902.5	30	1000	0	90.2	55-130	900	0.277	30	
1,1,2-Trichloroethane	990	30	1000	0	99	60-125	1020	3.03	30	
1,1-Dichloroethane	959	30	1000	0	95.9	75-125	948	1.15	30	
1,1-Dichloroethene	910	30	1000	0	91	65-135	935	2.71	30	
1,2,4-Trichlorobenzene	952	30	1000	0	95.2	65-130	983.5	3.25	30	
1,2-Dibromo-3-chloropropane	910.5	30	1000	0	91	40-135	986.5	8.01	30	
1,2-Dibromoethane	990.5	30	1000	0	99	70-125	1023	3.23	30	
1,2-Dichlorobenzene	992.5	30	1000	0	99.2	75-120	1003	1.05	30	
1,2-Dichloroethane	948.5	30	1000	0	94.8	70-135	1032	8.48	30	
1,2-Dichloropropane	977.5	30	1000	0	97.8	70-120	1022	4.4	30	
1,3-Dichlorobenzene	944	30	1000	0	94.4	70-125	971	2.82	30	
1,4-Dichlorobenzene	945.5	30	1000	0	94.6	70-125	1002	5.75	30	
2-Butanone	879.5	200	1000	0	88	30-160	909.5	3.35	30	
2-Hexanone	868	30	1000	0	86.8	45-145	858	1.16	30	
4-Methyl-2-pentanone	942	30	1000	0	94.2	45-145	970	2.93	30	
Acetone	793.5	100	1000	0	79.4	20-160	808.5	1.87	30	
Benzene	898	30	1000	0	89.8	75-125	957.5	6.41	30	
Bromodichloromethane	948	30	1000	0	94.8	70-130	1028	8.1	30	
Bromoform	1028	30	1000	0	103	55-135	1032	0.291	30	
Bromomethane	1059	75	1000	0	106	30-160	1129	6.4	30	
Carbon disulfide	900.5	30	1000	0	90	45-160	974	7.84	30	
Carbon tetrachloride	865.5	30	1000	0	86.6	65-135	958	10.1	30	
Chlorobenzene	953	30	1000	0	95.3	75-125	963.5	1.1	30	
Chloroethane	1018	100	1000	0	102	40-155	1051	3.19	30	
Chloroform	945.5	30	1000	0	94.6	70-125	983.5	3.94	30	
Chloromethane	896	100	1000	0	89.6	50-130	895	0.112	30	
cis-1,2-Dichloroethene	967.5	30	1000	0	96.8	65-125	1035	6.74	30	
cis-1,3-Dichloropropene	987.5	30	1000	0	98.8	70-125	1036	4.79	30	
Dibromochloromethane	1067	30	1000	0	107	65-135	1052	1.37	30	
Dichlorodifluoromethane	787.5	30	1000	0	78.8	35-135	787.5	0	30	
Ethylbenzene	922	30	1000	0	92.2	75-125	939	1.83	30	
Isopropylbenzene	958	30	1000	0	95.8	75-130	959.5	0.156	30	
Methyl tert-butyl ether	1112	30	1000	0	111	75-125	1112	0	30	
Methylene chloride	1002	30	1000	0	100	55-145	1026	2.42	30	
Styrene	951	30	1000	0	95.1	75-125	968	1.77	30	
Tetrachloroethene	900.5	30	1000	0	90	64-140	929.5	3.17	30	
Toluene	913.5	30	1000	0	91.4	70-125	930.5	1.84	30	
trans-1,2-Dichloroethene	970.5	30	1000	0	97	65-135	1042	7.11	30	
trans-1,3-Dichloropropene	960.5	30	1000	0	96	65-125	976.5	1.65	30	
Trichloroethene	809.5	30	1000	0	81	75-125	891.5	9.64	30	
Trichlorofluoromethane	951	30	1000	0	95.1	25-185	1013	6.31	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **44067** Instrument ID **VMS5** Method: **SW8260**

Vinyl chloride	854.5	30	1000	0	85.4	60-125	900.5	5.24	30
Xylenes, Total	2786	90	3000	0	92.9	75-125	2864	2.76	30
Surr: 1,2-Dichloroethane-d4	*985.5*	0	*1000*	0	*98.6*	*70-130*	989.5	*0.405*	*30*
Surr: 4-Bromofluorobenzene	*1016*	0	*1000*	0	*102*	*70-130*	990	*2.59*	*30*
Surr: Dibromofluoromethane	*961*	0	*1000*	0	*96.1*	*70-130*	995.5	*3.53*	*30*
Surr: Toluene-d8	*990.5*	0	*1000*	0	*99*	*70-130*	978.5	*1.22*	*30*

The following samples were analyzed in this batch: 1210334-01A 1210334-02A 1210334-03A 1210334-04A 1210334-05A 1210334-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Barr Engineering Company
Work Order: 1210334
Project: 49161092.01 SOIL 001

QC BATCH REPORT

Batch ID: **R111028** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: **WBLKS1-R111028**				Units: **% of sample**			Analysis Date: **10/10/2012 12:15 PM**		
Client ID:		Run ID: **MOIST_121010B**			SeqNo: **2108951**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.050								

LCS	Sample ID: **LCS-R111028**				Units: **% of sample**			Analysis Date: **10/10/2012 12:15 PM**		
Client ID:		Run ID: **MOIST_121010B**			SeqNo: **2108945**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	99.99	0.050	100	0	100	99.5-100.5	0			

DUP	Sample ID: **1210334-05E DUP**				Units: **% of sample**			Analysis Date: **10/10/2012 12:15 PM**		
Client ID: **Terminal Stockpile - 5**		Run ID: **MOIST_121010B**			SeqNo: **2108927**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	29.25	0.050	0	0	0	-0 0	29.79	1.83	20	

DUP	Sample ID: **1210335-07B DUP**				Units: **% of sample**			Analysis Date: **10/10/2012 12:15 PM**		
Client ID:		Run ID: **MOIST_121010B**			SeqNo: **2108935**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	7.65	0.050	0	0	0	-0 0	7.79	1.81	20	

The following samples were analyzed in this batch:

1210334-01E	1210334-02E	1210334-03E
1210334-04E	1210334-05E	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

1210 334

Chain of Custody

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

COC 1 of 1

Project Number: 49161092

Project Name: Enbridge Terminal Stockpile 2012

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

COC Number: № 35334

Project Manager: REE

Project QC Contact: TAO

Sampled by: REE

Laboratory: ALS

Location	Start Depth	Stop Depth	Depth Unit (m./ft. or in.)	Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix: Water	Matrix: Soil	Type: Grab	Type: Comp.	Type: QC	Number of Containers/Preservative: Water: VOCs (HCl) #1	Water: SVOCs (unpreserved) #2	Water: Dissolved Metals (HNO_3)	Water: Total Metals (HNO_3)	Water: General (unpreserved) #3	Water: Diesel Range Organics (HCl)	Water: Nutrients (H_2SO_4) #4	Soil: VOCs (tared MeOH) #1	Soil: GRO, BTEX (tared MeOH) #1	Soil: DRO (tared unpreserved)	Soil: Metals (unpreserved)	Soil: SVOCs (unpreserved) #2	Soil: % Solids (plastic vial, unpres.)	Soil: PAHs	Total Number Of Containers	
1. Terminal Stockpile-1				10/9/12	1425		X	X										2	2	1	1		1	1	6	DRO, GRO, VOC's, RCRA metals, PAH's
2. Terminal Stockpile-2					1435																				
3. Terminal Stockpile-3					1445																				
4. Terminal Stockpile-4					1455																				
5. Terminal Stockpile-5					1515																				
6. TRIP BLANK				10/9/12	—													X							
7.																									ASAP TAT
8.																									
9.																									
10.																									

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:	On Ice?	Date	Time	Received by:	Date	Time
[signature]	Y N	10/9/12	1700	FEDEX		
Relinquished By: FEDEX	On Ice? Y N	Date 10/10/12	Time 1000	Received by: [signature]	Date	Time

Samples Shipped VIA: ☐ Air Freight ☒ Federal Express ☐ Sampler ☐ Other: _____

Air Bill Number:

4.2°C MC

Distribution: White-Original Accompanies Shipment to Lab; Yellow - Field Copy; Pink - Lab Coordinator

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ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **BARRENG- MN** Date/Time Received: **10-Oct-12 10:00**

Work Order: **1210334** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 10-Oct-12 (Date) Reviewed by: Alex Csaszar (eSignature) 11-Oct-12 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.2 C		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	10/10/2012 10:55:08 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Hydraulic Conductivity Test Data

Project: Enbridge Soil Stockpile Date: 11/6/2012

Reported To: Barr Engineering Company Job No.: 8718

Boring No.:							
Sample No.:	2	5					
Depth (ft):	1-2	1-2					
Location:	Terminal Stockpile	Terminal Stockpile					
Sample Type:	Bulk	Bulk					
Soil Type:	Fat Clay with sand and a little gravel (CH)	Clayey Sand with a little gravel (SC)					
Atterberg Limits							
LL	69.5	47.0					
PL	20.3	16.4					
PI	49.2	30.6					
Permeability Test							
Before Test Conditions: Saturation %:							
Porosity:							
Ht. (in):	3.00	3.00					
Dia. (in):	2.85	2.85					
Dry Density (pcf):	96.1	110.2					
Water Content:	24.8%	16.4%					
Test Type:	Falling	Falling					
Max Head (ft):	5.0	5.0					
Confining press. (Effective-psi):	2.0	2.0					
Trial No.:							
Water Temp °C:	22.0	22.0					
% Compaction	94.8%	95.1%					
% Saturation (After Test)	95.0%	95.8%					
Coefficient of Permeability							
K @ 20 °C (cm/sec)	**4.7×10^{-9}**	**4.8×10^{-9}**					
K @ 20 °C (ft/min)	**9.2×10^{-9}**	**9.5×10^{-9}**					
Notes:							

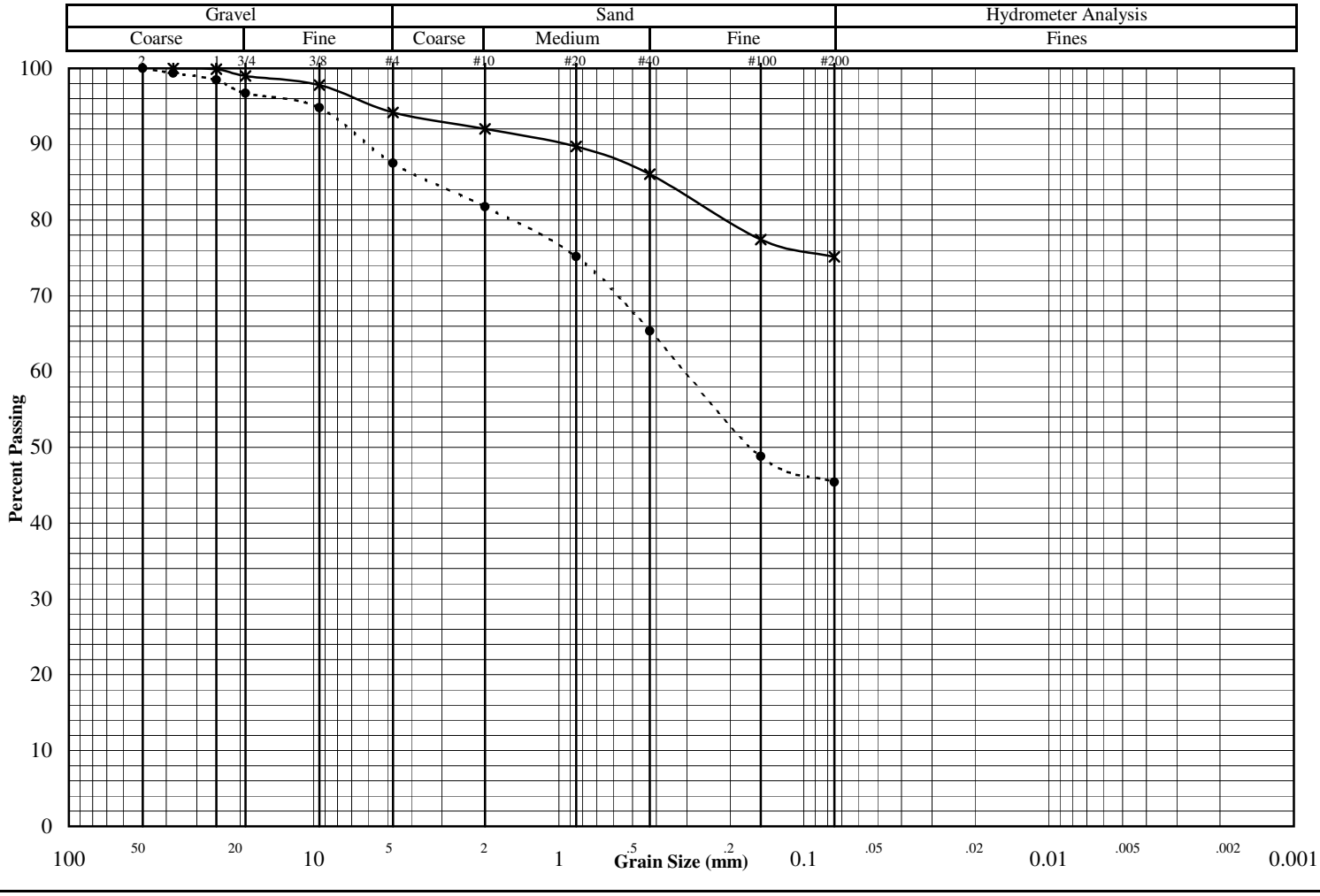
2401 W 66th Street
SOIL ENGINEERING TESTING, INC.
Richfield, Minnesota 55423-2031

Grain Size Distribution ASTM D422

Job No. : **8718**

Project:	Enbridge Soil Stockpile	Test Date:	10/16/12
Reported To:	Barr Engineering Company	Report Date:	10/19/12

	Location / Boring No.	Sample No.	Depth (ft)	Sample Type	Soil Classification
*	Terminal Stockpile	2	1-2	Bulk	Fat Clay w/sand and a little gravel (CH)
●	Terminal Stockpile	5	1-2	Bulk	Clayey Sand w/a little gravel (SC)
◇					



Other Tests	*	●	◇
Liquid Limit	69.5	47.0	
Plastic Limit	20.3	16.4	
Plasticity Index	49.2	30.6	
Water Content	31.3	23.6	
Dry Density (pcf)			
Specific Gravity			
Porosity			
Organic Content			
pH			
Shrinkage Limit			
Penetrometer			
Qu (psf)			

(* = assumed)

Percent Passing	*	●	◇
Mass (g)	24637.0	28844.0	
2"		100.0	
1.5"	100.0	99.4	
1"	99.9	98.5	
3/4"	99.0	96.7	
3/8"	97.8	94.8	
#4	94.2	87.5	
#10	92.0	81.7	
#20	89.7	75.2	
#40	86.0	65.4	
#100	77.4	48.8	
#200	75.1	45.4	

	*	●	◇
D_{60}			
D_{30}			
D_{10}			
C_U			
C_C			

Remarks:

2401 W 66th Street

SOIL ENGINEERING TESTING, INC.

Richfield, Minnesota 55423-2031

Moisture Density Curve ASTM: D698, Method B

Project: **Enbridge Soil Stockpile** Date: **10/23/12**

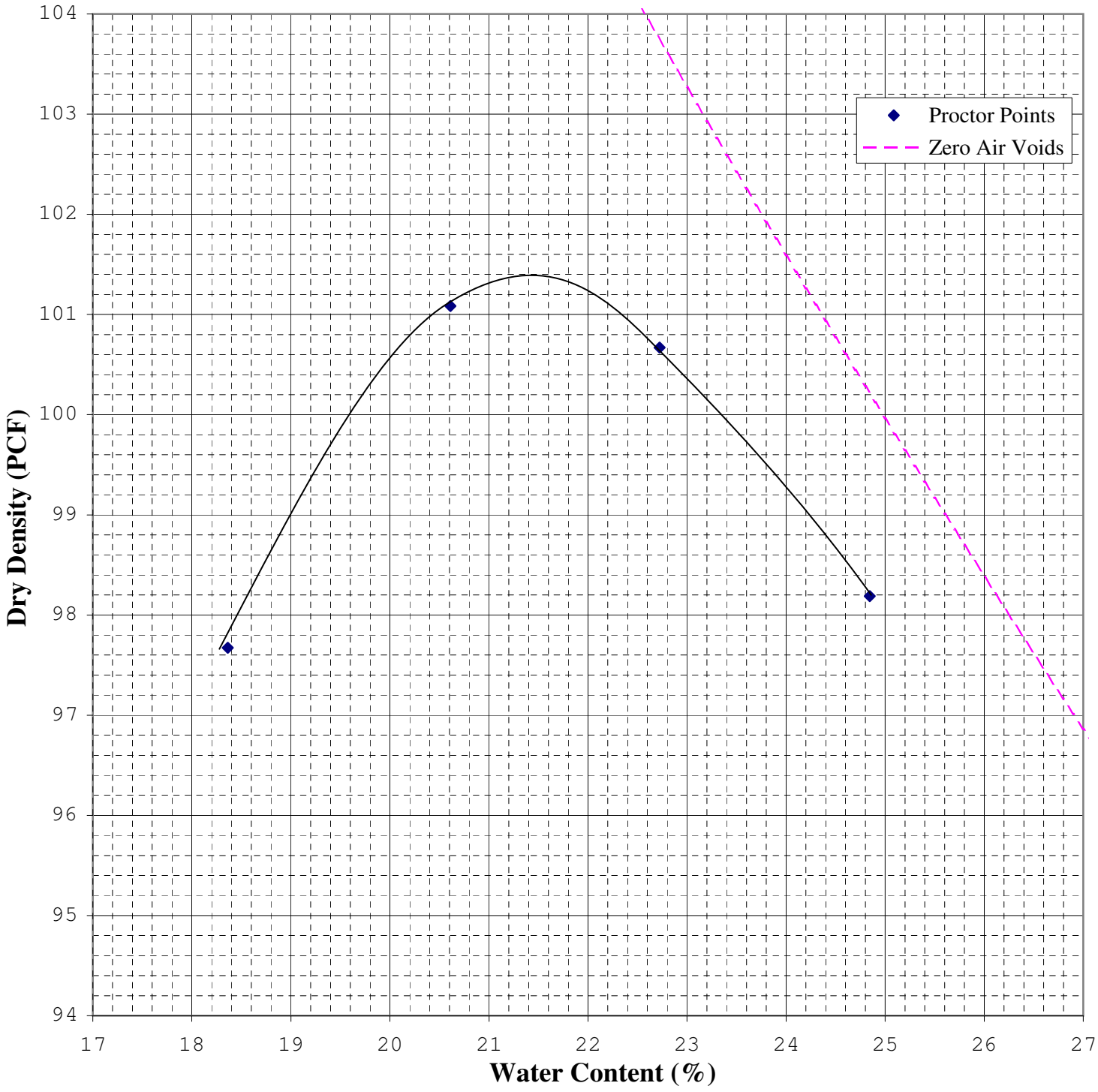
Client: **Barr Engineering Company** Job No. **8718**

Boring No. Sample: Depth(ft): **1-2** Location: **Terminal Stockpile 2**

Soil Type: **Fat Clay with sand and a little gravel (CH)**

As Received W.C. (%): **31.3** LL: **69.5** PL: **20.3** PI: **49.2** Specific Gravity: **2.67** *Assumed

Maximum Dry Density (pcf): **101.4** Opt. Water Content (%): **21.5**



2401 W 66th Street

SOIL ENGINEERING TESTING, INC.

Richfield, Minnesota 55423-2031

SET-R18a

Moisture Density Curve ASTM: D698, Method B

Project: **Enbridge Soil Stockpile** Date: **10/23/12**

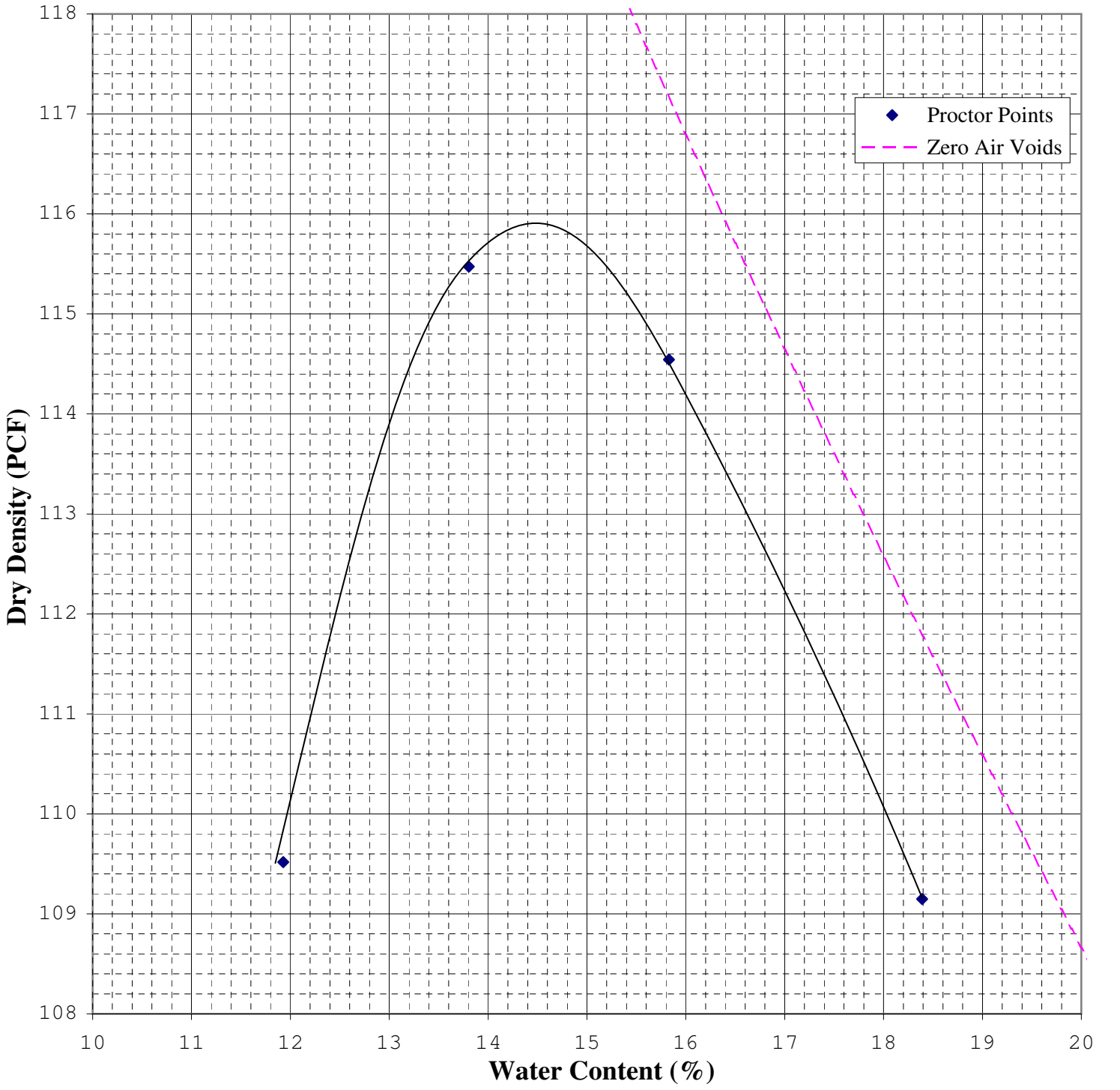
Client: **Barr Engineering Company** Job No. **8718**

Boring No. Sample: Depth(ft): **1-2** Location: **Terminal Stockpile #5**

Soil Type: **Clayey Sand with a little gravel (SC)**

As Received W.C. (%): **23.6** LL: **47.0** PL: **16.4** PI: **30.6** Specific Gravity: **2.67** *Assumed

Maximum Dry Density (pcf): **115.9** Opt. Water Content (%): **14.5**



2401 W 66th Street

SOIL ENGINEERING TESTING, INC.

Richfield, Minnesota 55423-2031

Chain of Custody

BARR

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

Project Number: 49/61092 SOIL 001

Project Name: Enbridge Terminal Stockpile

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

COC Number: NE 35410

COC 1 of 1

Project Manager: Ryan Erickson rerickson@barr.com 6124180166

Project QC Contact: Ryan Erickson

Sampled by: CJG Z

Laboratory: SET

Location	Start Depth	Stop Depth	Depth Unit (m./ft. or in.)	Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix: Water	Matrix: Soil	Matrix:	Type: Grab	Type: Comp.	Type: QC	Number of Containers/Preservative — Water: VOCs (HCl) #1	SVOCs (unpreserved) #2	Dissolved Metals (HNO_3)	Total Metals (HNO_3)	General (unpreserved) #3	Diesel Range Organics (HCl)	Nutrients (H_2SO_4) #4	Soil: VOCs (tared MeOH) #1	GRO, BTEX (tared MeOH) #1	DRO (tared unpreserved)	Metals (unpreserved)	SVOCs (unpreserved) #2	% Solids (plastic vial, unpres.)	Total Number Of Containers	
1. Terminal Stockpile-2	1	2	ft	10/10/12	225		X		X																2	As discussed w/ Bart +SKB
2. Terminal Stockpile-3	1	2		↓	230		X		X																2	↓
3.																										
4.																										
5.																										
6.																										
7.																										
8.																										
9.																										
10.																										

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:	On Ice? Y N	Date	Time	Received by:	Date	Time
	Y (N)	10/10/12	1500			
Relinquished By:	On Ice? Y N	Date	Time	Received by:	Date	Time
	Y N					

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other: _____ Air Bill Number:

Distribution: White-Original Accompanies Shipment to Lab; Yellow - Field Copy; Pink - Lab Coordinator

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Attachment D

Four Star Soil Trucking Ledgers

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-19-13 Page: 1 of 3

Site Name:
Project Name: Soil handling
Contractor Name: Four STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (CLAY)	8:00 Am	U-34	UDEEN	15 yds	105 yds	Solid - Udeen pit, Pattison Park
2		9:16 Am			15yds		
3		10:36 Am			15yds		
4		11:46 Am			15yds		
5		12:44 pm			15yds		
6		1:40 pm			15yds		
7		2:40 pm			15yds		
8							
9	Clean Soil (CLAY)	7:40 Am	B-22	Udeen	15yds	90 yds	Solid - Udeen pit, Pattison Park
10		9:00 Am			15yds		
11		10:30 Am			15yds		
12		11:55 Am			15yds		
13		12:59 pm			15yds		
14		1:57 pm			15yds		
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-19-13 Page: 2 of 3

Site Name:
Project Name: Soil Handling
Contractor Name: Four Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (CLAY)	7:50 Am	U-32	Udeen	15 yds	105 yds	Solid - Udeen PIT, Pattison PARK
2		9:10 Am			15 yds		
3		10:30 Am			15 yds		
4		11:30 Am			15 yds		
5		12:30 Pm			15 yds		
6		1:30 Pm			15 yds		
7		2:30 Pm			15 yds		
8							
9							
10							
11	Clean Soil (CLAY)	9:10 Am	U-22	Udeen	15 yds	75 yds	Solid - Udeen PIT, Pattison PARK
12		10:25 Am			15 yds		
13		11:55 Am			15 yds		
14		12:50 Pm			15 yds		
15		1:50 Pm			15 yds		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-19-13 Page: 3 of 3

Site Name:
Project Name: Soil Handling
Contractor Name: Four STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	8:00 Am	U-30	Udeen	15yds	75yds	Solid - Udeen Pit, Pattison PARK
2		9:15 Am			15 yds		
3		10:35 Am			15 yds		
4		11:43 Am			15 yds		
5		12:35 Pm			15 yds		
6							
7	Clean Soil (clay)	8:00Am	V-28	Udeen	15yds	75 yds	Solid - Udeen Pit, Pattison PARK
8		9:45Am			15yds		
9		11:00 Am			15yds		
10		12:05 Pm			15 yds		
11		1:10 pm			15yds		
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-20-13 Page: 1 of 4

Site Name:
Project Name: Soil Handling
Contractor Name: Four STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (CLAY)	8:15	U-22	Udeen	15 yds	105 yds	Solid - udeen pit, Pattison PARK
2		9:15			15 yds		
3		10:15			15 yds		
4		11:15			15 yds		
5		12:05			15 yds		
6		1:00			15 yds		
7		1:50			15 yds		
8							
9	Clean Soil (CLAY)	7:50	U-28	Udeen	15 yds	105 yds	Solid - udeen pit, PATTISON PARK
10		9:05			15 yds		
11		10:10			15 yds		
12		11:05			15 yds		
13		12:10			15 yds		
14		1:05			15 yds		
15		2:05			15 yds		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-20-13 Page: 2 of 4

Site Name:
Project Name: Soil Handling
Contractor Name: Four Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (CLAY)	7:30	U32	Udeen	15yds	120 yds	Solid - Udeen Pit, Pattison Park
2		8:35			15yds		
3		9:35			15yds		
4		10:35			15yds		
5		11:35			15yds		
6		12:45			15yds		
7		1:40			15 yds		
8		2:35			15yds		
9	Clean Soil (CLAY)	7:35	U30	Udeen	15yds	105yds	Solid - Udeen Pit, Pattison Park
10		8:41			15yds		
11		9:40			15yds		
12		10:40			15yds		
13		12:10			15yds		
14		1:10			15yds		
15		2:10			15yds		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-20-13 Page: 3 of 4

Site Name:
Project Name: Soil Handling
Contractor Name: Four STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (CLAY)	7:30	G-22	udeen	15 yds	120 yds	Solid - udeen PH, Pathson Pack
2		8:28			15 yds		
3		9:22			15 yds		
4		10:30			15 yds		
5		11:30			15 yds		
6		12:30			15 yds		
7		1:30			15 yds		
8		2:30			15 yds		
9	Clean Soil (CLAY)	7:00	U-34	udeen	15 yds	120 yds	Solid - udeen PIT, Pathson Pack
10		8:50			15 yds		
11		9:50			15 yds		
12		10:49			15 yds		
13		11:42			15 yds		
14		12:38			15 yds		
15		1:32			15 yds		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: _____

Site Name: _____
Project Name: _____
Contractor Name: _____

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil clean (clay)	2:33	U-34	udeen	15 yds		
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Date: 2-21-13 Page: 1 of 3

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name:
Project Name: Soil Handling
Contractor Name: Four STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:00	G-22	Udeen	15yds	105yds	Solid, Udeen Pit, Pattison park
2		8:30			"		
3		9:30			"		
4		10:34			"		
5		11:55			"		
6		1:15			"		
7		2:30			"		
8	Clean Soil (clay)	8:15	U-22	Udeen	15yds	75yds	Solid, Udeen Pit, Pattison Park
9		9:15			"		
10		10:15			"		
11		11:35			"		
12		12:45			"		
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-21-13 Page: 2 of 3

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	clean soil clay	7:26	430	Udeen	15 yds	105	Soilid - Udeen pit Pattison Park
2	"	8:30					
3	"	9:30					
4	"	10:25					
5	"	11:46					
6	"	1:00					
7	"	2:15					
8	clean soil clay	7:32	428	Udeen	15	105	Solid - Udeen pit Pattison Park
9	"	8:54					
10	"	9:51					
11	"	10:48					
12	"	12:09					
13	"	1:19					
14		2:34					
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-21-13 Page: 3 of 3

Site Name: Sup. Term
Project Name: Soil Handling
Contractor Name: Four Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:20	U-32	Udeen	15 yds	105 yds	Solid, Udeen Pit, Pattison Park
2		8:25			11		
3		9:20			11		
4		10:20			11		
5		11:40			11		
6		12:55			11		
7		2:15			11		
8	Clean Soil (clay)	7:00	U-34	Udeen	15yds	105 yds	Solid, Udeen Pit, Pattison Park
9		8:40			11		
10		9:45			11		
11		10:43			11		
12		12:18			11		
13		1:28			11		
14		2:45			11		
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

Date: 2-25-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: Enbridge Terminal
Project Name: Soil Handling
Contractor Name: 4 Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*		*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:00	434	Kaeen	15	15	
2		8:45				30	
3		9:43				45	
4		10:42				60	
5		11:39				75	
6		12:46				90	
7		1:40				105	
8		2:40				120	
9	Soil Handling	7:15	622		15	15	
10		8:30				30	
11		9:27				45	
12		10:26				60	
13		11:20				75	
14		12:20				90	
15		1:23				105	

COMMENTS *(soil destination*, stockpile condition, weather...)*:
2:25
120

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-25-13 Page: 1 of

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: Enbridge Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Soil Handling	clean clay 8:15	4-22	udeen	15	15	Solid clean clay - pattison Park Pit
2		9:30				30	
3		10:20				45	
4		11:20				60	
5		12:20				75	
6		1:30				90	
7	Soil Handling	clean clay 7:55 [illegible]	28	udeen	15	15	
8		8:58 [illegible]				30	
9		9:59 [illegible]				45	
10		11:05 [illegible]				60	
11		12:15				75	
12		1:25				90	
13		2:35				105	
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 3-25-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: ~~Soil~~
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:50 Am	U-30	Udeen	15 yds	120 yds	Solid - Udeen pit - Pattison PARK
2		8:50 Am			15 yds		
3		9:50 Am			15 yds		
4		10:52 Am			15 yds		
5		11:53 Am			15 yds		
6		12:50 pm			15 yds		
7		1:48 pm			15 yds		
8		2:41 pm			15 yds		
9	Clean Soil (clay)	7:35 Am	U-32	Udeen	15 yds	105 yds	Solid - Udeen pit - Pattison PARK
10		8:40 Am			15 yds		
11		9:40 Am			15 yds		
12		10:35 Am			15 yds		
13		11:35 Am			15 yds		
14		1:15 pm			15 yds		
15		2:15 pm			15 yds		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-26-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2803 East 21st Street
Superior, WI 54880

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:45	U-28	Udeen	15	15	clean solid clay - Pattison Park Pit
2		9:15				30	
3		10:33				45	
4		12:58				60	
5		2:00				75	
6	Soil Handling	7:50	U-30	Udeen	15	15	clean solid clay - Pattison Park P
7		9:18				30	
8		10:40				45	
9		11:32				60	
10		12:50				75	
11		1:58				90	
12		2:47				105	
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-26-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:35	U-32	Udeen	15	15	Clean Solid Clay - Pattison Park Pit
2		9:05				30	
3		1:15				45	
4		2:15				60	
5	Soil Handling	7:00	G-22	Udeen	15	15	Clean Solid Clay - Pattison Park Pit
6		9:10				30	
7		10:30				45	
8		12:00				60	
9		12:49				75	
10		1:49				90	
11		2:40				105	
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-26-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name:
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Clean Soil (Clay)	9:00	U-22	Udeen	15yds	75yds	Solid, Udeen Pit, Pattison Park
2		10:20			15yds		
3		11:45			15yds		
4		1:10			15yds		
5		2:05			15yds		
6	Clean Soil (Clay)	7:00	U-34	Udeen	15yds	90 yds	Solid, Udeen Pit, Pattison Park
7		9:23			15yds		
8		10:45			15yds		
9		11:42			15yds		
10		1:12			15yds		
11		2:09			15yds		
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-27-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:00	622	Udeen	15	15	
2		8:15				30	
3		9:15				45	
4		10:20				60	
5		11:26				75	
6		12:30				90	
7		1:30				105	
8		2:32				120	
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Baaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-27-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	730	432	Ideen	15	15	clean solid clay - Pattison P
2		9:30				30	
3		9:25				45	
4		10:30				60	
5		11:40				75	
6		12:45				90	
7		1:45				105	
8		2:45				120	
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landf*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 2-27-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:40	4-22	Udeen	15	15	solid clean clay - Pattison Park
2		7:55				30	
3		10:05				45	
4		11:13				60	
5		12:33				75	
6		1:35				90	
7		2:27				105	
8	Soil Handling	7:45	4-28	Udeen	15	15	Solid clean clay - Pattison Park
9		8:40				30	
10		9:37				45	
11		10:46				60	
12		11:46				75	
13		12:51				90	
14		1:50				105	
15		2:40				120	

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify land*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-27-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (Clay)	8:15	U-22	Udeen	15yds	90 yds	Solid, Udeen Pit, Pattison Park
2		9:15			15yds		
3		10:15			15yds		
4		11:20			15yds		
5		12:25			15yds		
6		1:25			15yds		
7	Clean Soil (Clay)	7:00	U-34	Udeen	15yds	120 yds	Solid, Udeen Pit, Pattison Park
8		8:34			15yds		
9		9:34			15yds		
10		10:44			15yds		
11		11:35			15yds		
12		12:40			15yds		
13		1:40			15yds		
14		2:40			15yds		
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify land*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-28-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2300 East 21st Street
Superior, WI 54880

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Soil Handling	7:00	G-22	Udeen	15	15	Solid clean clay - Pattison Park PIT
2		8:35				30	
3		9:35				45	
4		10:35				60	
5		11:35				75	
6		12:32				90	
7		1:29				105	
8		2:30				120	
9	Soil Handling	8:15	4-27	Udeen	15	15	Solid clean clay - Pattison Park P
10		9:20				30	
11		10:20				45	
12		11:20				60	
13		12:05				75	
14		1:30				90	
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-28-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: _____
Project Name: Soil Handing
Contractor Name: 4-STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ASC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Clean Soil (clay)	7:00	U-34	Udeen	15yds	105 yds	Solid, Udeen Pit, Pattison Park
2		8:50			"		
3		9:50			"		
4		10:45			"		
5		12:08			"		
6		1:18			"		
7		2:17			"		
8	Clean Soil (clay)	7:32			15yds	120 yds	Solid, Udeen Pit, Pattison Park
9		8:34			"		
10		9:29			"		
11		10:28			"		
12		11:42			"		
13		12:38			"		
14		1:37			"		
15		2:37			"		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beasley (715) 718-1040; Paul Turner (218) 269-0560.

Date: 2-28-13 Page: _____ of _____

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Clean Soil (clay)	7:42	u-30	udeen	15 yds	105 yds	Solid, udeen Pit, Pattison Park
2		8:45			"		
3		9:53			"		
4		10:50			"		
5		12:10			"		
6		1:10			"		
7		2:10			"		
8	Clean Soil (clay)	7:35	u-32	udeen	15 yds	120 yds	Solid, udeen Pit, Pattison Park
9		8:40			"		
10		9:35			"		
11		10:30			"		
12		11:45			"		
13		12:45			"		
14		1:40			"		
15		2:45			"		

COMMENTS *(soil destination*, stockpile condition, weather...)*:

* *(Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfil*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-5-13 Page: _____ of _____

Site Name: Sup Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1							
2	No outgoing material today - Snow storm						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-6-13 Page: _____ of _____

Site Name: Soil Handling
Project Name: _____
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	8:15	U-22	Udeen	15yds	15	
2		9:30				30	
3		10:30				45	
4		11:30				60	
5		12:30				75	
6		1:40				90yds	Solid, Udeen Pit, Pattison Park
7	Clean Soil (clay)	7:38	Ticket # 22311	Udeen	15yds	15	
8		8:49				30	
9		9:50				45	
10		10:52				60	
11		11:55				75	
12		12:55				90	
13		2:10				105yds	Solid, Udeen Pit, Pattison Park
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-6-13 Page: _____ of _____

Site Name: Soil Handling
Project Name: _____
Contractor Name: 4-Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	8:50	U-32	Udeen	15 yds	15	
2		9:54				30	
3		10:56				45	
4		12:00				60	
5		1:02				75	
6		2:15				90 yds	Solid, Udeen Pit, Pattison Park
7	Clean Soil (clay)	7:08	G-22	Udeen	15yds	15	
8		8:24				30	
9		1:22				45	
10		2:30				60 yds	Solid, Udeen Pit, Pattison Park
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-6-13 Page: _____ of _____

Site Name: Soil Handling
Project Name: _____
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:30	MC-21	Udeen	15yds	15	
2		8:30				30	
3		9:35				45	
4		10:25				60	
5		12:05				75	
6		1:09				90	
7		2:20				105yds	Solid, Udeen Pit, Pattison Park
8	Clean Soil (Clay)	7:00	U-34	Udeen	15yds	15	
9		8:43				30	
10		9:44				45	
11		11:13				60	
12		12:14				75	
13		1:14				90	
14		2:30				105yds	Solid, Udeen Pit, Pattison Park
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-7-13 Page: _____ of _____

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:33	28	vdeen	15 yds	15	
2		9:08				30	
3		10:25				45	
4		11:35				60	
5		12:39				75	
6		1:50				90	
7		2:55				105yds	Solid, vdeen pit, Pattison Park
8	Clean Soil (clay)	9:00	30	vdeen	15yds	15	
9		10:21				30	
10		11:30				45	
11		12:35				60	
12		1:43				75	
13		2:50				90 yds	Solid, vdeen pit, Pattison Park
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-7-13 Page: _____ of _____

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:00	G-22	udeen	15yds	15	
2		8:53				30	
3		10:12				45	
4		11:22				60	
5		12:30				75	
6		2:35				90 yds	Solid, udeen Pit, Pattison Park
7	Clean Soil (clay)	8:39	32	udeen	15yds	15	
8		9:50				30	
9		12:15				45	
10		1:30				60 yds	Soil, udeen Pit, Pattison Park
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-7-13 Page: _____ of _____

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments (Solid or Slurry Soil and Soil Destination*)
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil (clay)	7:00	34	Udeen	15yds	15	
2		9:14				30	
3		10:32				45	
4		11:57				60	
5		1:19				95	
6		2:16				90 yds	Solid, Udeen Pit, Pattison PARK
7	Clean Soil (clay)	7:20	MC-21	Udeen	15yds	15	
8		8:35				30	
9		10:05				45	
10		11:20				60	
11		12:25				75	
12		1:30				90	
13		2:40				105 yds	Solid, Udeen Pit, Pattison PARK
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-14-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:00	G-22	Ideen	15	15	Solid clean clay - Pattison Park pit
2		8:39				30	
3		10:14				45	
4		11:16				60	
5		12:18				75	
6		1:23				90	
7		2:30				105	
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-14-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:00	434	Udeen	15	15	solid clean clay - Pattison Park Pit
2		745				30	
3	Soil Handling	925	428	Udeen	15	45	solid clean clay - Pat. Park Pit
4		1021				30	
5		1121				45	
6		1223				60	
7		127				75	
8		233				90	
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-14-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	8:15	4-22	Udeen	15	15	Solid clean clay - Pattison Park Pit
2		9:15				30	
3		10:15				45	
4		11:30				60	
5		12:35				75	
6		1:40				90	
7	Soil Handling	7:00	MC 21	Udeen	15	15	Solid Clean clay P.P.P
8		8:30				30	
9		9:35				45	
10		10:35				60	
11		11:40				75	
12		12:50				90	
13		2:05				105	
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-14-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:45	432	Udeen	15	15	Solid Clean Clay - Pattison Park Pit
2		8:45				30	
3		9:45				45	
4		10:45				60	
5		11:50				75	
6		1:00				90	
7	Soil Handling	2:15				105	
8	" "	7:54	430	Udeen		15	Solid clean Clay Pat. Park Pit
9		8:51				30	
10		9:53				45	
11		10:53				60	
12		11:58				75	
13		1:06				90	
14		2:30				105	
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-15-13 Page: _____ of _____

Site Name: Sup. Term.
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:00	M21	Ydeen	15	30	Solid clean clay Pattison Park Pit
2		8:30				30	
3		9:40				45	
4		10:45				60	
5		11:50				75	
6		1:00				90	
7		2:05				105	
8	Soil Handling	8:15	U22	Ydeen	15	15	
9		9:20				30	
10		10:30				45	
11		11:35				60	
12		12:45				75	
13		1:45				90	
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (715) 398-8323.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-15-13 Page: _____ of _____

Site Name: Sup. Term.
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	745	430	udeen	15	15	solid clean day Pattison Park
2		858				30	
3		1004				45	
4		1121				60	
5		1223				75	
6		127				90	
7		230				105	
8	Soil Handling	744	K12	udeen	15	15	" " " " "
9		905				30	
10		1008				45	
11		1115				60	
12		1221				75	
13		120				90	
14		223				105	
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (715) 398-8323.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-15-13 Page: _____ of _____

Site Name: Sup. Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	700	434	Kdeen	15	15	Solid clear clay Pattison Park Pit
2		901				30	
3		1005				45	
4		1114				60	
5		200				75	
6	Soil Handling	732	428	Kdeen	15	15	" " " " " "
7		841				30	
8		~~841~~ 947				45	
9		~~947~~ 1055				60	
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-15-13 Page: _____ of _____

Site Name: Sup Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:40	U32	Udeen	15	15	solid clean Clay - Pattison Park Pit
2		8:45				30	
3		9:50				45	
4		11:00				60	
5		12:00				75	
6		1 05				90	
7		2 15				105	
8	Soil Handling	7:00	622	udeen	15	15	solid clean Clay - Pat Park pit
9		8 30				30	
10		9 43				45	
11		10 49				60	
12		11 53				75	
13		1 03				90	
14		2 12				105	
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-25-13 Page: _____ of _____

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil	10:10	U-30	udeen	15yds	15	Solid, udeen Pit, Pattison Park
2		11:17				30	
3		12:24				45	
4		1:32				60	
5		2:45				75	
6	Clean Soil	7:35	MC-21	udeen	15yds	15	Solid, udeen Pit, Pattison Park
7		9:00				30	
8		10:05				45	
9		11:15				60	
10		12:25				75	
11		1:30				90	
12		2:45				105 yds	
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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TRUCKING LEDGER and **LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.**

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-25-13 Page: _____ of _____

Site Name: _____
Project Name: Soil Handling
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	**Profile #** *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil	7:55	K-12	Udeen	15yds	15	Solid, Udeen pit, Pattison Park
2		9:05				30	
3		10:15				45	
4		11:30				60	
5		12:35				75	
6		1:50				90	
7		2:55				105yds	
8	Clean Soil	8:00	G-22	Udeen	15yds	15	Solid, Udeen Pit, Pattison Park
9		9:00				30	
10		10:15				45	
11		11:22				60	
12		12:32				75	
13		1:44				90	
14		2:55				105yds	
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-26-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	11:30	432	Ideen	15	15	solid clean clay to partisan Park Pit
2		12:30				30	
3		1:30				45	
4		2:30				60	
5	Soil Handling	7 45	K-12	Ideen	15	15	" " " " " " "
6		9 04				30	
7		10 15				45	
8		11 02				60	
9		12 03				75	
10		1 00				90	
11		2 05				105	
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-26-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	9:57	U-30	Ndeen	15 yrds	15	Solid clean clay to Pattison Park Pit
2		10:50				30	
3		11:44				45	
4		12:39				60	
5		1:36				75	
6		2:30				90	
7	Soil Handling	7:15	U-22	Ndeen	15yrds	15	" " " " " " " "
8		9:00				30	
9		10:00				45	
10	Soil Handling	11:00	U34	Ndeen	15yrds	15	" " " " " " " "
11		12:15				30	
12		1:16				45	
13		2:15				60	
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-26-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	745	MC21	udeen	15	15	solid clean clay to Patison Park Pit
2		850				30	
3		950				45	
4		1055				60	
5		1155				75	
6		1255				90	
7		200				105	
8	Soil Handling	740	G-22	udeen	15	15	" " " " " " "
9		900				30	
10		1001				45	
11		1100				60	
12		1200				75	
13		1259				90	
14		202				105	
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-28-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4 star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	700	622	Udeen			Solid clean clay to Pattison Park Pit
2		830					
3		945					
4		1642					
5		1144					
6		107					
7		217					
8	Soil Handling	816	U30				Solid clean clay to Pattison Park Pit
9		1056					
10		1200					
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (715) 398-8323.
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TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-28-13 Page: _____ of _____

Site Name: Superior Terminal
Project Name: Soil Handling
Contractor Name: 4Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Soil Handling	7:40	K-12	Udeen	15yrd	15	Solid clean clay to pattison Park Pit
2		8:43				30	
3		9:45				45	
4		10:45				60	
5		11:50				75	
6		1:15				90	
7		2:30				105	
8	Soil Handling	10:10	U-32	Udeen	15yrd	15	Solid clean clay to pattison Park Pit
9		11:20				30	
10		12:40				45	
11		1:45				60	
12	Soil Handling	10:00	U-34	Udeen	15yrd	15	Solid clean clay to pattison Park Pit
13		11:29				30	
14		12:50				45	
15		2:15				60	

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 3-28-13 Page: _____ of _____

Site Name: Superior
Project Name: _____
Contractor Name: _____

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil	7:25	mc 21	udeen	15yds	15	Solid, udeen Pit, Pattison Park
2		8:35				30	
3		9:35				45	
4		10:40				60	
5		11:40				75	
6		1:00				90	
7		2:15				105 yds	
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-3-13 Page: 1 of 1

Site Name: CLEAN SOIL HANDLING
Project Name:
Contractor Name: FOUR STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
7:30 7:40 1	CLEAN SOIL HANDLING	N/A	U20	UDEEN	15	15	SUP. TERM. TO UDEENS PIT
10:00 10:10 2	" "	" "	"	"	15	30	" " "
11:30 11:40 3	" "	" "	"	"	15	45	" " "
11:00 11:10 4	" "	" "	"	"	15	60	" " "
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-3-13 Page: 1 of 1

Site Name: SUP. TERM
Project Name: CLEAN SOIL HANDLING
Contractor Name: FOUR STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	CLEAN SOIL HANDLING	N/A	U32	UNITED	15	15	SUP. TERM TO UNITED PIT
2	" "	" "	"	"	15	30	" " "
3	" "	" "	"	"	15	45	" " "
4	" "	" "	"	"	15	60	" " "
5	" "	" "	"	"	15	75	" " "
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

8:30
8:40
10:00
10:10
11:46
12:00
1:55
2:40
2:30
2:40

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-3-13 Page: 1 of 1

Site Name: SUP. TERM.
Project Name: CLEAN SOIL HANDLING
Contractor Name: FOUR STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1 (8:40 / 8:50)	CLEAN SOIL HANDLING	N/A	U28	UBEEN	15	15	SUP. TERM. TO UBEEN PIT
2 (10:35 / 11:40)	" "	" "	"	"	15	30	" " "
3 (12:15 / 12:20)	" "	" "	"	"	15	45	" " "
4 (2:00 / 2:10)	" "	" "	"	"	15	60	" " "
5 (3:05 / 3:10)	" "	" "	"	"	15	75	" " "
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-3-13 Page: 1 of 1

Site Name: SUP. TERM.
Project Name: CLEAN SOIL HANDLING
Contractor Name: FOUR STAR

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
7:30 7:35 1	CLEAN SOIL HANDLING	N/A	G22	VALLEY	15	15	SUP TERM TO VALLEY PIT
9:06 9:10 2	" "	" "	"	"	15	30	" " "
11:20 11:25 3	" "	" "	"	"	15	45	" " "
1:00 1:10 4	" "	" "	"	"	15	60	" " "
2:30 2:35 5	" "	" "	"	"	15	75	" " "
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-9-13 Page: _____ of _____

Site Name: Soil Handling
Project Name: Clean Soil
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil	10:30	G-22	udeen	15yds	15	
2		12:10				30	
3		2:00				45yds	clean solid, udeen pit, School Forest
4	Clean Soil	12:00	28	udeen	15yds	15	
5		1:40				30	
6		2:20				45	
7		3:25				60	
8		4:35				75 yds	clean solid, udeen pit, School Forest
9							
10	cleansoil	10:30				90	
11		12:30				105	
12		2:10				120yds	clean solid, udeen pit, School Forest;
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
3800 East 21st Street
Superior, WI 54880

Date: 5-14-13 Page: 1 of 1

Site Name: CLEAN SOIL
Project Name:
Contractor Name: 4-star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offisite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Clean Soil	12:45	G22	UDEEN	15	15 yds	
2		2:30				30	
3		4:00				45 yds	clean soil, udeen pit, School Forest
4	Clean Soil	4:00	MC21	udeen	15	60 yds	clean soil, udeen pit, school Forest
5	Clean Soil	3:00	U-34	udeen	15	75	
6						90 yds	clean soil, udeen Pit, School Forest
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-14-15 Page: 1 of 1

Site Name: Clean Soil
Project Name: "
Contractor Name: 4-Star

Load #	Waste Stream: Name	Waste Stream: Profile # (for Offsite disposal)	Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments: Solid or Slurry Soil and Soil Destination*
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil	8:00	U32	udeen	15	15 Yds	
2		9:30				30	
3		11:00				45	
4		12:30				60	
5		2:00				75	
6		3:30				90yds	clean soil, udeen Pit, School Forrest
7	clean Soil	8:00	U30	udeen	15	105	
8		9:30				120	
9		11:00				135	
10		12:30				150	
11		2:00				165	
12		4:00				180yds	clean soil, udeen Pit, School Forrest
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: ***Terminal*** - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-16-13 Page: _____ of _____

Site Name: Soil Handling
Project Name: Clean Soil
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean soil	8:00	34	udeen	15yds	15	
2		9:30				30	
3		2:50				45 yds	Solid clean, udeen pit, School Forrest
4	Clean Soil	8:00	28	udeen	15yds	15	
5		9:40				30	
6		11:15				45	
7		3:35	28	udeen	15yds	~~45~~ 60	Solid clean, udeen Pit, School Forrest
8	Clean Soil	8:00	30	udeen	15yds	~~30~~ 15	
9		9:45				30	
10		3:00				45yds	Solid clean, udeen Pit, School Forrest
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

TRUCKING LEDGER and LANDFILL SHIPPING MANIFESTS must be submitted to Enbridge daily.

ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-17-13 Page: 1 of 1

Site Name: Clean Soil
Project Name:
Contractor Name: 4-Star

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Soil	7:50	28	udeen	15yds	15	
2		9:25				30	
3		11:00				45	
4		12:35				60	
5		2:10				75yds	Soild, udeen PIT, School Forrest
6	Clean Soil	8:00	30	udeen	15yds	15	
7		9:30				30	
8		11:15				45	
9		1:00				60	
10		2:30				75yds	Soild, udeen PIT, School Forrest
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-22-13 Page: 1 of 1

Site Name: Soil Handling
Project Name: Clean Soil
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offisite disposal)*					
Ex. Onsite	*Tank 99*	*-*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Clay	11:15	36	Udeen	15yd	15	Solid, udeen pit, Pattison Park
2		12:30				30yds	
3	clean clay	11:45	32	udeen	15yd	15	
4		1:30				30yds	solid, udeen Pit, Pattison Park
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-23-13 Page: 1 of 2

Site Name: Soil Handling
Project Name: Clean Soil
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Clay	8:00	34	Udeen	15yds	15	Solid, Udeen Pit, School Forrest
2		10:00				30	
3		11:45				45	
4		3:00				60	
5		4:30				75 yds	
6	Clean Clay	7:25	28	Udeen	15yds	15	Solid, Udeen Pit, School Forrest
7		8:40				30	
8		9:50				45	
9		11:20				60	
10		12:35				75	
11		2:00				90	
12		3:30				105 yds	
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-23-13 Page: 2 of 2

Site Name: Soil Handling
Project Name: Clean Soil
Contractor Name: 4-STAR

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments Solid or Slurry Soil and Soil Destination*
	Name	Profile # (for Offisite disposal)					
Ex. Onsite	Tank 99	-	12	DEF	10	10	Solid contaminated soil North Cell, covered and labeled.
Ex. Offsite	Tank 99	ABC-123	12	DEF	10	10	Solid contaminated soil from North Cell to SKB Landfill.
1	Clean Clay	8:00	22	udeen	15yds	15	Solid, udeen Pit, School Forrest
2		10:00				30	
3		12:00				45	
4		1:15				60	
5		3:00				75	
6		4:40				90 yds	
7	Clean Clay	12:00	30	udeen	15	15yds	Solid, udeen Pit, School/Forrest
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

ENBRIDGE CONTACTS: *Terminal* - Tom Peterson (715) 718-1572; Dennis Wedan (218) 428-1002.
Environment - Karl Beaster (715) 718-1040; Paul Turner (218) 269-0560.

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ENBRIDGE

Superior Terminal - Soil Trucking Ledger
2800 East 21st Street
Superior, WI 54880

Date: 5-24-13 Page: 1 of 1

Site Name: Soil Handling
Project Name: Clean Soil
Contractor Name: 4-STAR S

Load #	Waste Stream		Truck #	Trucking Co.	Load Volume (Cubic Yards)	Running Total (Cubic Yards)	Comments *Solid or Slurry Soil and Soil Destination**
	Name	Profile # *(for Offsite disposal)*					
Ex. Onsite	*Tank 99*	-	*12*	*DEF*	*10*	*10*	*Solid contaminated soil North Cell, covered and labeled.*
Ex. Offsite	*Tank 99*	*ABC-123*	*12*	*DEF*	*10*	*10*	*Solid contaminated soil from North Cell to SKB Landfill.*
1	Clean Clay	10:00	G22	udeen	15yds	15	Solid, udeen pit, school forest
2		11:45				30yds	
3	Clean Clay	9:00	34	udeen	15yds	15	Solid, udeen pit, school forest
4		10:50				30	
5		12:40				45yds	
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

COMMENTS *(soil destination*, stockpile condition, weather...)*:

** (Soil Destination: ONSITE refer to Figure 1 (i.e., North Cell, West Quad, East Container); OFFSITE identify landfill)*

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Attachment E

Shamrock Landfill Waste Disposal Documentation

Shamrock Landfill

Waste Profile Sheet

Shamrock Landfill

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 -	County: Douglas	Generator Contact: Paul Turner	
		Phone: 715-398-4752	Fax: 832-325-5467
Generator Mailing Address (if different: 1320 Grand Ave, Superior, WI 54880		Generator Email Address: paul.turner@enbridge.com	
Bill To Name & Address: Enbridge Energy, 1100 Louisiana Ave, STE. 3300, Houston, TX 77002	Bill To #:	Billing Contact: Paul Turner	
		Phone: 715-398-4752	Fax: 832-325-5467
Invoice Contact:		Billing Email Address: paul.turner@enbridge.com	

II. Waste Generation Information

Waste Name: Crude contaminated soil - Soil Management Area Road Excavation	Estimated rate of waste generation: 15 ☐ Lbs. ☐ tons ☒ cy ☐ drums	☒ one time ☐ yearly
Generator Facility Operations and/or Site History: Enbridge Pipeline Terminal		
Describe the generating process or source of contaminated soil/debris and/or waste: Pipeline Terminal Activities		

III. Waste Composition and Constituents (list all known)

	Actual Range %	ppm
Crude contaminated soil	100	

IV. Waste Properties

Physical state:	Free Liquids:	pH Range:	Flash point:	Color:	Odor (describe):
☒ Solid ☐ Liquid ☐ Sludge ☐ Gas	☐ Yes ☒ No Content _____%	☐ <2 ☐ 2-4 ☐ 5-8 ☐ 8-12.4 ☐ >12.5	☐ ≤ 140ºF ☐ > 140ºF to < 200ºF ☐ > 200ºF	Brown	petroleum odor

V. Waste Classification

Waste stream properties (answer ALL questions)			Does this waste contain absorbents?	☐ Yes	☒ 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?	☐ Yes	☒ No	Is this waste lethal (by Minn. Rules 7045.0131 Subp. 6)?	☐ Yes	☒ No
Does this waste stream contain PCB material	☐ Yes	☒ No	Is this waste recyclable?	☐ Yes	☒ No
If yes, concentration: _____ppm			Is this waste explosive?	☐ Yes	☒ No
Does this waste stream contain fuming acids?	☐ Yes	☒ No	Is this waste infectious?	☐ Yes	☒ No
Does this waste contain asbestos?	☐ Yes	☒ No	Is this putrescible waste?	☐ Yes	☒ No
Does this waste contain oxidizers?	☐ Yes	☒ No	Is this waste demolition debris?	☐ Yes	☒ No
Does this waste contain radioactive material?	☐ Yes	☒ No	Is this waste sewer sludge?	☐ Yes	☒ 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: ☐ drums (size _____) ☒ Bulk Solids ☐ boxes (size _____)		Method of shipment ☐ Roll-off ☒ End dump ☐ Rail ☐ 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.

ere are any changes in the process generating the waste or there have been changes in the composition ste stream changes or potentially changes, I or someone representing the generator, will immediately tor, hereby agree to fully indemnify SKB Environmental for any damages and/or costs incurred as a result

Paul Turner	Environmental	1/15/2013
Printed Name	Title	Date

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

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

January 14, 2013

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

Work Order Number: 1300133
RE: 49161092

Enclosed are the results of analyses for samples received by the laboratory on 01/10/13. If you have any questions concerning this report, please feel free to contact me.

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

WI Certification #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC

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

Tyler Jones
Chemist I
tjones@legend-group.com

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SMARoad-Stockpile-1	1300133-01	Soil	01/09/13 12:00	01/10/13 09:55

Shipping Container Information

Default Cooler Temperature (°C): 1.0

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:

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

DRO/8015B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SMARoad-Stockpile-1 (1300133-01) Soil	**Sampled: 01/09/13 12:00**			**Received: 01/10/13 9:55**						
Diesel Range Organics	**170**	12	1.9	mg/kg dry	1	B3A1107	01/11/13	01/14/13	WI(95) DRO	
Surrogate: Triacontane (C-30)	*86.4*			*70-130 %*		"	"	"	"	

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St Paul, MN 55103
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Fax: 651-642-1239

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SMARoad-Stockpile-1 (1300133-01) Soil	**Sampled: 01/09/13 12:00**			**Received: 01/10/13 9:55**						
Benzene	<0.032	0.032	0.0049	mg/kg dry	1	B3A1009	01/10/13	01/10/13	WI(95) GRO	
Ethylbenzene	<0.032	0.032	0.0060	mg/kg dry	1	"	"	"	"	
Toluene	<0.032	0.032	0.0031	mg/kg dry	1	"	"	"	"	
Xylenes (total)	<0.096	0.096	0.015	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*105*			*80-150 %*		*"*	*"*	*"*	*"*	

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SMARoad-Stockpile-1 (1300133-01) Soil	**Sampled: 01/09/13 12:00**			**Received: 01/10/13 9:55**						
% Solids	**78**			%	1	B3A1406	01/14/13	01/14/13	% calculation	

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

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 B3A1107 - Sonication (Wisc DRO)											
Blank (B3A1107-BLK1)					Prepared: 01/11/13 Analyzed: 01/14/13						
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: Triacontane (C-30)	*13.2*			*mg/kg wet*	*16.0*		*82.8*	*70-130*			
LCS (B3A1107-BS1)					Prepared: 01/11/13 Analyzed: 01/14/13						
Diesel Range Organics	62.0	8.0	1.3	mg/kg wet	64.0		96.9	70-120			
Surrogate: Triacontane (C-30)	*14.5*			*mg/kg wet*	*16.0*		*90.6*	*70-130*			
LCS Dup (B3A1107-BSD1)					Prepared: 01/11/13 Analyzed: 01/14/13						
Diesel Range Organics	59.4	8.0	1.3	mg/kg wet	64.0		92.8	70-120	4.32	20	
Surrogate: Triacontane (C-30)	*14.5*			*mg/kg wet*	*16.0*		*90.4*	*70-130*			

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

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

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B3A1009 - EPA 5035 Soil (Purge and Trap)											
Blank (B3A1009-BLK1)					Prepared & Analyzed: 01/10/13						
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	*25.0*			*ug/L*	*25.0*		*100*	*80-150*			
LCS (B3A1009-BS1)					Prepared & Analyzed: 01/10/13						
Benzene	110			ug/L	100		110	80-120			
Ethylbenzene	118			ug/L	100		118	80-120			
Toluene	110			ug/L	100		110	80-120			
Xylenes (total)	342			ug/L	300		114	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.3*			*ug/L*	*25.0*		*101*	*80-150*			
LCS Dup (B3A1009-BSD1)					Prepared & Analyzed: 01/10/13						
Benzene	108			ug/L	100		108	80-120	1.87	20	
Ethylbenzene	115			ug/L	100		115	80-120	2.48	20	
Toluene	108			ug/L	100		108	80-120	2.07	20	
Xylenes (total)	334			ug/L	300		111	80-120	2.52	20	
Surrogate: 4-Fluorochlorobenzene	*24.4*			*ug/L*	*25.0*		*97.7*	*80-150*			
Matrix Spike (B3A1009-MS1)		**Source: 1300133-01**			Prepared & Analyzed: 01/10/13						
Benzene	110			ug/L	100	<	110	80-120			
Ethylbenzene	117			ug/L	100	0.238	117	80-120			
Toluene	109			ug/L	100	<	109	80-120			
Xylenes (total)	337			ug/L	300	0.116	112	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.0*			*ug/L*	*25.0*		*100*	*80-150*			

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

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 B3A1406 - General Preparation											
Duplicate (B3A1406-DUP1)		**Source: 1300195-07**			Prepared & Analyzed: 01/14/13						
% Solids	83.0			%		82.0			1.21	20	

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4700 W 77th St	Project Number:	49161092.01 RESP 022	Work Order #: 1300133
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 01/14/13

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)

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Chain of Custody

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

1300133

Project Number: 49161093.01 RESP 022

Project Name: Enbridge Superior Terminal Stockpile Area Excavation

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

COC Number: № 40044

COC 1 of 1

Project Manager: REE

Project QC Contact: AAN

Sampled by: CIF

Laboratory: Legend

Location	Start Depth	Stop Depth	Depth Unit (m./ft. or in.)	Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix: Water	Matrix: Soil	Type: Grab	Type: Comp.	Type: QC	Number of Containers/Preservative: Water: VOCs (HCl) #1	SVOCs (unpreserved) #2	Dissolved Metals (HNO_3)	Total Metals (HNO_3)	General (unpreserved) #3	Diesel Range Organics (HCl)	Nutrients (H_2SO_4) #4	Soil: VOCs (tared MeOH) #1	GRO (BTEX) (tared MeOH) #1	DRO (tared unpreserved)	Metals (unpreserved)	SVOCs (unpreserved) #2	% Solids (plastic vial, unpres.)	Extra Containers - HOLD	Total Number Of Containers	
1. SmARoad-Stockpile-1	—	—		01/09/2013	12:00		X	X											X	X			X	2	5	BTEX, DRO, and Moisture } MAP VAT 2 extra jars } HOLD
2.																										
3.																										
4.																										
5.																										
6.																										
7.																										
8.																										
9.																										
10.																										

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

1.0°C

	On Ice?	Date	Time		Date	Time
Relinquished By:	(Y) N	1/9/13	1400	Received by:		
Relinquished By:	(Y) N			Received by: Kelley Fox Ben	1/10/13	9:55

Samples Shipped VIA: ☐ Air Freight ☑ Federal Express ☐ Sampler ☐ Other:

Air Bill Number:

Distribution: White-Original Accompanies Shipment to Lab; Yellow - Field Copy; Pink - Lab Coordinator

H:\RLG\ESTDF\0804\Schain Of Custody Form 2009 RLG Rev 09\01\09

Shamrock Landfill

January 16, 2013

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

RE: CL13-0002 Crude Contaminated Soil - Soil Mgmt Area Road Exc.

Dear Ms. O'Brien,

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 A [illegible] (name, position) Paul Turner, Environmental Analyst

DATE: 1/17/2013

WASTE APPROVAL Period: 1/16/2013 to 1/9/2015

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

Shamrock Landfill

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 - Soil Mgmt Area Road Exc.

Estimated Volume: 15 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 - Soil Mgmt Area

Shamrock Landfill

Notification of Waste Acceptance

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,
Accounts Payable

1100 Louisiana Ave, Ste 3300
Houston, TX 77002
Contact: Julie O'Brien
Phone: (715) 398-4752

Profile Sheet #:
Waste Stream #: CL13-0002
Waste Name: Crude Contaminated Soil - Soil Mgmt Area Road

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 15 YARDS / ONE TIME ONLY

This waste is acceptable for delivery beginning on 1/16/2013 thru 1/9/2015 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.

Shamrock Landfill

WASTE STREAM ANALYSIS INFORMATION

Waste Name:	Crude Contaminated Soil - Soil Mgmt Area Road Ex
Physical State:	Solid
Process 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 Shamrock Landfill employees for the purpose of determining waste acceptability. No other claims are made or implied.

COMMENTS

AUTHORIZATION

Approval: _____ Date: 1/16/13

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

SKB ECOLOQUET

REPORT NAME: **Tons Each Load By WSID**
DESCRIPTION: **Tonnage for EACH LOAD, grouped by customer**
DATE RANGE: **01/01/2013 to 01/16/2014**
PRINTED ON (DATE): **Thursday, January 16, 2014**

ENBS1
Enbridge Pipelines Limited Partnership,
2800 East 21st St
Superior WI 54880

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT	LIFT	TONS
8164 (A)	4659	3/1/2013	CL13-0002	Crude Contaminated Soil - Soil Mgm	2A	Z46	1160	14.02

Total # of Loads: 1 **Total Tons: 14.02**

Grand Total (Tons): 14.02
Grand Total (Loads): 1

Shamrock Landfill

Waste Profile Sheet

Shamrock Landfill

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 - Contaminated SMA Deconstruction	County: Douglas	Generator Contact: Karl Beaster	
		Phone: 715-398-4754	Fax:
Generator Mailing Address (if different: 1320 Grand Ave, Superior, WI 54880		Generator Email Address: Karl.Beaster@enbridge.com	
Bill To Name & Address: Enbridge Energy, 1100 Louisiana Ave, STE. 3300, Houston, TX 77002	Bill To #:	Billing Contact: Karl Beaster	
		Phone: 715-398-4754 Fax:	
Invoice Contact:		Billing Email Address: Karl.Beaster@enbridge.com	

II. Waste Generation Information

Waste Name: Crude contaminated soil - Contaminated SMA Deconstruction	Estimated rate of waste generation: 350 ☐ Lbs. ☐ tons ☒ cy ☐ drums	☒ one time ☐ yearly
Generator Facility Operations and/or Site History: Enbridge Pipeline Terminal		
Describe the generating process or source of contaminated soil/debris and/or waste: Pipeline Terminal Activities		

III. Waste Composition and Constituents (list all known)

	Actual Range %	ppm
Crude contaminated soil	100	

IV. Waste Properties

Physical state:	Free Liquids:	pH Range:	Flash point:	Color:	Odor (describe):
☒ Solid ☐ Liquid ☐ Sludge ☐ Gas	☐ Yes ☒ No Content _____%	☐ <2 ☐ 2-4 ☐ 5-8 ☐ 8-12.4 ☐ >12.5	☐ ≤ 140°F ☐ > 140°F to < 200°F ☐ > 200°F	Brown	petroleum odor

V. Waste Classification

Waste stream properties (answer ALL questions)		Does this waste contain absorbents?	☐ Yes ☒ 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?	☐ Yes ☒ No	Is this waste lethal (by Minn. Rules 7045.0131 Subp. 6)?	☐ Yes ☒ No
Does this waste stream contain PCB material	☐ Yes ☒ No	Is this waste recyclable?	☐ Yes ☒ No
If yes, concentration: _____ppm		Is this waste explosive?	☐ Yes ☒ No
Does this waste stream contain fuming acids?	☐ Yes ☒ No	Is this waste infectious?	☐ Yes ☒ No
Does this waste contain asbestos?	☐ Yes ☒ No	Is this putrescible waste?	☐ Yes ☒ No
Does this waste contain oxidizers?	☐ Yes ☒ No	Is this waste demolition debris?	☐ Yes ☒ No
Does this waste contain radioactive material?	☐ Yes ☒ No	Is this waste sewer sludge?	☐ Yes ☒ 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: ☐ drums (size _____) ☒ Bulk Solids ☐ boxes (size _____)		Method of shipment ☐ Roll-off ☒ End dump ☐ Rail ☐ 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.

Alex Smith

Karl Beaster — Environmental Analyst II — 8/28/13

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

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

August 27, 2013

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

Work Order Number: 1304174
RE: 49161092

Enclosed are the results of analyses for samples received by the laboratory on 08/23/13. 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

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

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

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

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Fax: 651-642-1239

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SMA Stockpile-1	1304174-01	Soil	08/22/13 12:45	08/23/13 09:20
SMA Stockpile-2	1304174-02	Soil	08/22/13 16:00	08/23/13 09:20

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:

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

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

The DRO chromatograms are attached for both samples.

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4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SMA Stockpile-1 (1304174-01) Soil	**Sampled: 08/22/13 12:45**			**Received: 08/23/13 9:20**						
Diesel Range Organics	**180**	79	9.2	mg/kg dry	8	B3H2313	08/23/13	08/26/13	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	*76.9*			*70-130 %*		"	"	"	"	
SMA Stockpile-2 (1304174-02) Soil	**Sampled: 08/22/13 16:00**			**Received: 08/23/13 9:20**						
Diesel Range Organics	**330**	83	9.7	mg/kg dry	8	B3H2313	08/23/13	08/26/13	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	*85.7*			*70-130 %*		"	"	"	"	

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4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SMA Stockpile-1 (1304174-01) Soil	**Sampled: 08/22/13 12:45**			**Received: 08/23/13 9:20**						
Benzene	<0.0038	0.031	0.0038	mg/kg dry	1	B3H2303	08/23/13	08/23/13	WI(95) GRO	
Ethylbenzene	**0.022**	0.031	0.0027	mg/kg dry	1	"	"	"	"	B-01, J
Toluene	**0.039**	0.031	0.0033	mg/kg dry	1	"	"	"	"	
Xylenes (total)	**0.011**	0.093	0.0099	mg/kg dry	1	"	"	"	"	J
Surrogate: 4-Fluorochlorobenzene	*91.2*			*80-150 %*		"	"	"	"	
SMA Stockpile-2 (1304174-02) Soil	**Sampled: 08/22/13 16:00**			**Received: 08/23/13 9:20**						
Benzene	<0.0040	0.032	0.0040	mg/kg dry	1	B3H2303	08/23/13	08/23/13	WI(95) GRO	
Ethylbenzene	**0.011**	0.032	0.0028	mg/kg dry	1	"	"	"	"	B-01, J
Toluene	**0.024**	0.032	0.0035	mg/kg dry	1	"	"	"	"	J
Xylenes (total)	**0.016**	0.097	0.010	mg/kg dry	1	"	"	"	"	J
Surrogate: 4-Fluorochlorobenzene	*89.9*			*80-150 %*		"	"	"	"	

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4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SMA Stockpile-1 (1304174-01) Soil	**Sampled: 08/22/13 12:45**			**Received: 08/23/13 9:20**						
% Solids	**81**			%	1	B3H2616	08/26/13	08/26/13	% calculation	
SMA Stockpile-2 (1304174-02) Soil	**Sampled: 08/22/13 16:00**			**Received: 08/23/13 9:20**						
% Solids	**77**			%	1	B3H2616	08/26/13	08/26/13	% calculation	

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4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

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 B3H2313 - Sonication (Wisc DRO)											
Blank (B3H2313-BLK1)					Prepared: 08/23/13 Analyzed: 08/26/13						
Diesel Range Organics	< 0.93	8.0	0.93	mg/kg wet							
Surrogate: Triacontane (C-30)	*13.8*			*mg/kg wet*	*16.0*		*86.4*	*70-130*			
LCS (B3H2313-BS1)					Prepared: 08/23/13 Analyzed: 08/26/13						
Diesel Range Organics	50.0	8.0	0.93	mg/kg wet	64.0		78.1	70-120			
Surrogate: Triacontane (C-30)	*13.7*			*mg/kg wet*	*16.0*		*85.7*	*70-130*			
LCS Dup (B3H2313-BSD1)					Prepared: 08/23/13 Analyzed: 08/27/13						
Diesel Range Organics	53.8	8.0	0.93	mg/kg wet	64.0		84.1	70-120	7.35	20	
Surrogate: Triacontane (C-30)	*14.5*			*mg/kg wet*	*16.0*		*90.4*	*70-130*			

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

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

Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

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 B3H2303 - EPA 5035 Soil (Purge and Trap)											
Blank (B3H2303-BLK1)					Prepared & Analyzed: 08/23/13						
Benzene	< 0.0031	0.025	0.0031	mg/kg wet							
Ethylbenzene	0.00623	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	*23.5*			*ug/L*	*25.0*		*93.9*	*80-150*			
LCS (B3H2303-BS1)					Prepared & Analyzed: 08/23/13						
Benzene	101			ug/L	100		101	80-120			
Ethylbenzene	104			ug/L	100		104	80-120			
Toluene	102			ug/L	100		102	80-120			
Xylenes (total)	310			ug/L	300		103	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.0*			*ug/L*	*25.0*		*100*	*80-150*			
LCS Dup (B3H2303-BSD1)					Prepared & Analyzed: 08/23/13						
Benzene	98.9			ug/L	100		98.9	80-120	1.82	20	
Ethylbenzene	101			ug/L	100		101	80-120	2.25	20	
Toluene	100			ug/L	100		100	80-120	1.90	20	
Xylenes (total)	304			ug/L	300		101	80-120	2.02	20	
Surrogate: 4-Fluorochlorobenzene	*24.4*			*ug/L*	*25.0*		*97.6*	*80-150*			
Matrix Spike (B3H2303-MS1)	**Source: 1304147-01**				Prepared & Analyzed: 08/23/13						
Benzene	100			ug/L	100	<	100	80-120			
Ethylbenzene	103			ug/L	100	0.263	102	80-120			
Toluene	102			ug/L	100	0.215	102	80-120			
Xylenes (total)	310			ug/L	300	<	103	80-120			
Surrogate: 4-Fluorochlorobenzene	*24.6*			*ug/L*	*25.0*		*98.6*	*80-150*			

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

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 B3H2616 - General Preparation											
Duplicate (B3H2616-DUP1)		**Source: 1304074-05**			Prepared & Analyzed: 08/26/13						
% Solids	95.0			%		96.0			1.05	20	
Duplicate (B3H2616-DUP2)		**Source: 1304193-01**			Prepared & Analyzed: 08/26/13						
% Solids	84.0			%		85.0			1.18	20	

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Barr Engineering Co.	Project:	49161092	
4700 W 77th St	Project Number:	49161092.02 003 020	Work Order #: 1304174
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 08/27/13

Notes and Definitions

L1	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
J	Parameter was present between the MDL and RL and should be considered an estimated value
B-02	Target analyte was present in the method blank between the MDL and RL.
B-01	Analyte was present in the method blank. Sample result is less than or equal to 10 times the blank concentration.
<	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)

L E G E N D
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Fax: 651-642-1239

Chain of Custody

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

1304174

Project Number: 49161092.02 003 020

Project Name: Contaminated SMA Reconstruction

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

COC Number: № 42450

Number of Containers/Preservative

COC 1 of 1

Location	Start Depth	Stop Depth	Depth Unit (m./ft. or in.)	Collection Date (mm/dd/yyyy)	Collection Time (hh:mm)	Matrix: Water	Matrix: Soil	Type: Grab	Type: Comp	Type: QC	Water: VOCs (HCl) #1	Water: SVOC (unpreserved) #2	Water: Dissolved Metals (HNO3)	Water: Total Metals (HNO3)	Water: General (unpreserved) #3	Water: Diesel Range Organics (HCl)	Water: Nutrients (H2SO4) #4	Soil: VOCs, Jared MeOH #1	Soil: GRO/BTEX, Jared MeOH #1	Soil: DRO (Jared unpreserved)	Soil: Metals (unpreserved)	Soil: SVOC (unpreserved) #2	Soil: Organic stuff (unpreserved)	Total Number Of Containers	Project Manager: REE/LEN Project QC Contact: AAN Sampled by: LEN Laboratory: Legend
1. SMA Stockpile - 1				08/22/2013	12:45		X	X											1	1		1	3	01 A-C
2. SMA Stockpile - 2					16:00		X	X											1	1		1	3	02 A-C
3. SMA Stockpile - Hold - 1					12:35		X	X															1	Hold 03 A
4. SMA Stockpile - Hold - 2					12:38		X	X															1	Hold 04
5. SMA Stockpile - Hold - 3					15:55		X	X															1	Hold 05
6.																								
7.																								ASAP TAT
8.																								
9.																								
10.																								

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, IS, Sulfate
#4 - Nutrients = COD, TOC, Phenols, Ammonia Nitrogen, TKN

Relinquished By	On Ice?	Date	Time	Received by	Date	Time
Laura Nothi	(Y) N	8/22/13	17:20			
Relinquished By	On Ice?	Date	Time	Received by	Date	Time
	Y (N)				8/23/13	9:20
Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other				Air Bill Number: NO #'s		

Distribution: White-Original Accompanies Shipment to Lab; Yellow - Field Copy; Pink - Lab Coordinator

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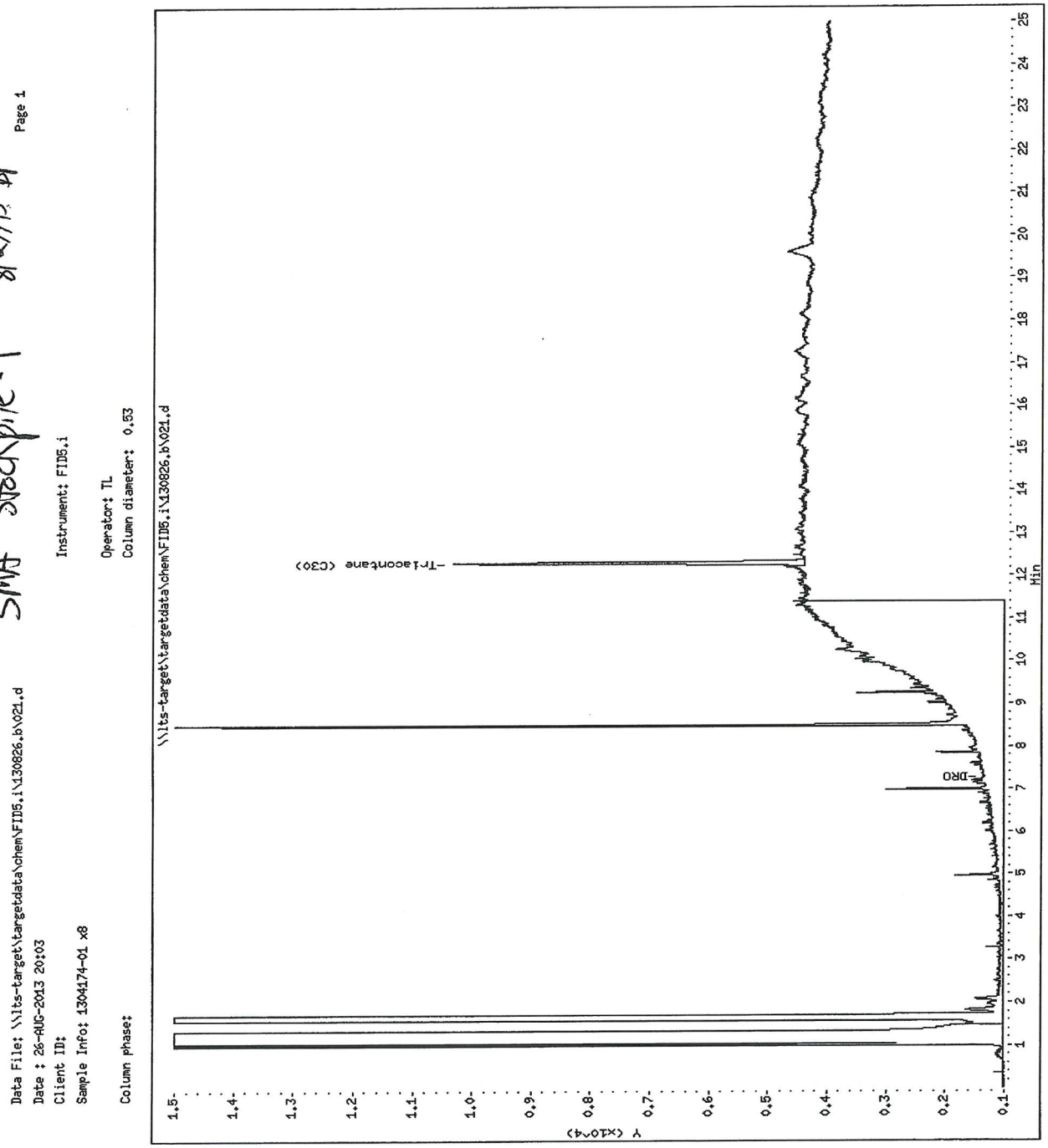
SMA Stockpile-1 8/27/13 BP



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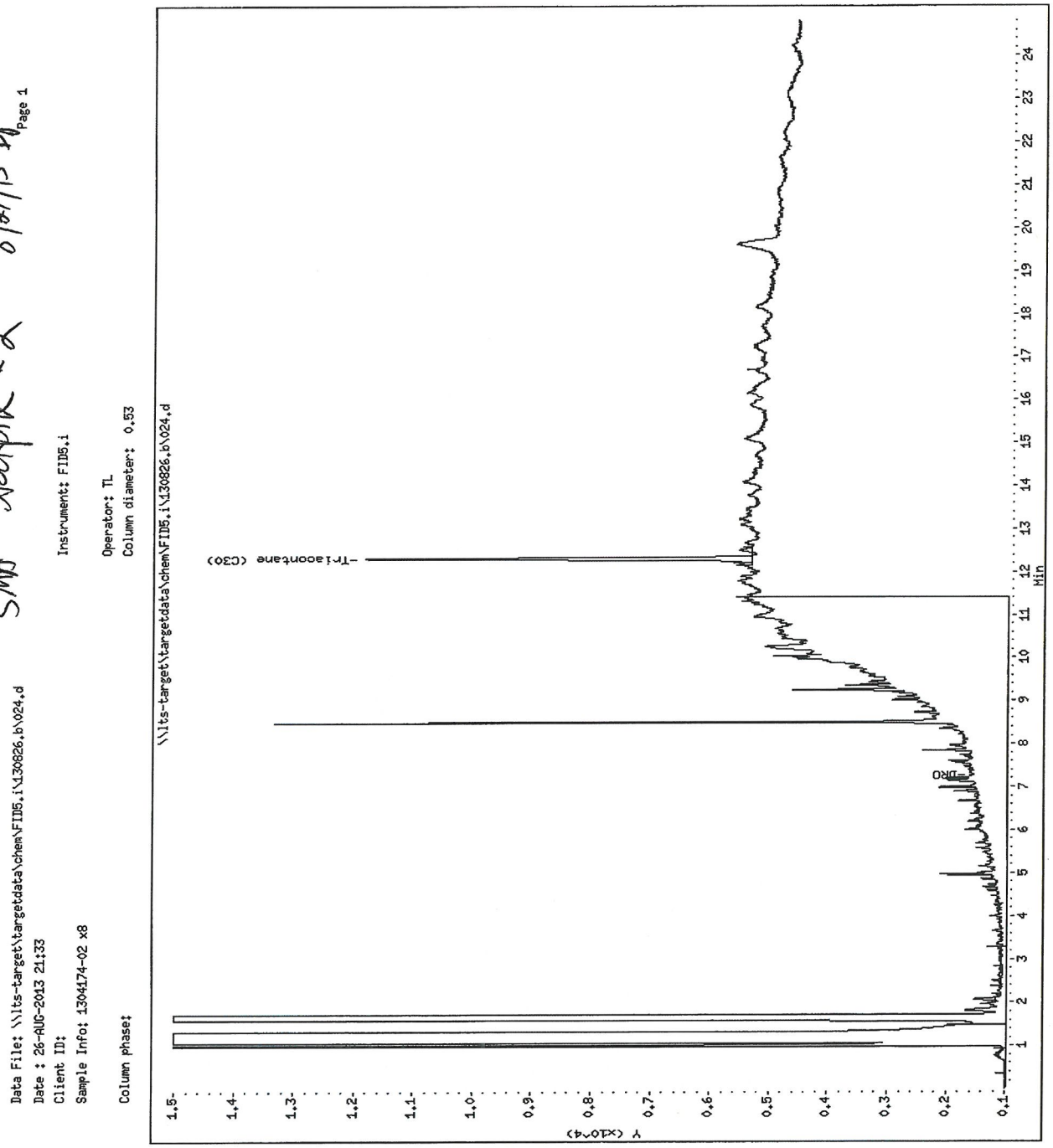
SMA Stockpile - 2 8/27/13 BP



Shamrock Landfill

August 30, 2013

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

RE: CL13-0040 Crude Contamnated Soil - SMA Destruction

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

Environmental Analyst

Steve Opstad

Customer ACCEPTED BY: (name, position)

DATE: 9-3-2013

WASTE APPROVAL Period: 8/30/2013 to 8/22/2015

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

Shamrock Landfill

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 Contamnated Soil - SMA Destruction

Estimated Volume: 350 YARDS / ONE TIME ONLY

Disposal Method: Secure Non-Hazardous Landfill

Treatment Method: None Expected For Conforming Waste

Pricing

Disposal	$16.00	Per Ton	Crude Contamnated Soil - SMA Destruction

Shamrock Landfill

Notification of Waste Acceptance

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 #: CL13-0040
Waste Name: Crude Contamnated Soil - SMA Destruction

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 350 YARDS / ONE TIME ONLY

This waste is acceptable for delivery beginning on 8/30/2013 thru 8/22/2015 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.

Shamrock Landfill

WASTE STREAM ANALYSIS INFORMATION

Waste Name:	Crude Contamnated Soil - SMA Destruction
Physical State:	Solid
Process Producing Waste:	pipeline operation activities

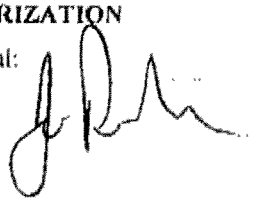
PRE-ACCEPTANCE SAMPLE RESULTS

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

COMMENTS

AUTHORIZATION

Approval: 

Date: 8/30/13

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

SKB SLOQUET

REPORT NAME: **Tons Each Load By WSID**
DESCRIPTION: **Tonnage for EACH LOAD, grouped by customer**
DATE RANGE: **01/01/2013 to 01/10/2014**
PRINTED ON (DATE): **Friday, January 10, 2014**

ENBS1
Enbridge Pipelines Limited Partnership,
2800 East 21st St
Superior WI 54880

LOAD #	MANIFEST	ARRIVED	WASTE STREAM	WASTE NAME	CELL	SPOT	LIFT	TONS
12545 (A)	16611	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	17.06
12546 (A)	16610	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	17.63
12554 (A)	16616	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	18.62
12557 (A)	16614	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	14.64
12559 (A)	16615	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	17.10
12562 (A)	16617	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	16.88
12566 (A)	16371	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	V43	1175	16.30
12568 (A)	16372	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	16.78
12570 (A)	16376	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	19.65
12577 (A)	16374	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	18.49
12578 (A)	16373	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	17.58
12580 (A)	16377	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	20.91
12581 (A)	16375	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	18.74
12584 (A)	16378	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	16.66
12585 (A)	16379	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	15.52
12588 (A)	16381	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	19.02
12589 (A)	16380	9/4/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	18.30
12593 (A)	16383	9/5/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	19.51
12601 (A)	16382	9/5/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	19.14
12609 (A)	16384	9/5/2013	CL13-0040	Crude Contaminated Soil - SMA De	2A	W45	1175	17.12

Total # of Loads: 20 **Total Tons: 355.65**

Grand Total (Tons): 355.65
Grand Total (Loads): 20