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Alex Smith	Environmental Analyst
Julie O'Brien	Environmental Assistant

www.enbridgepartners.com

March 26, 2013

Carrie Stoltz
Wisconsin Department of Natural Resources
107 Sutliff Avenue
Rhinelander WI 54501

Re: Enbridge Energy, Limited Partnership
Enbridge Line 14, Milepost 85 Leaksite
Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Dear Ms. Stoltz:

Please find the enclosed *Annual Operation and Monitoring Report – 2012* prepared by Barr Engineering for the above referenced site.

The SVE/AS systems at the Site were in operation for the majority of 2012. We are currently evaluating another system shutdown and we will be submitting a System Shutdown Work Plan in Q2 2013.

If you have any questions regarding this report or the project in general, please do not hesitate to contact me at (715) 398-4754.

Sincerely,
Enbridge Energy LP

Karl F. Beaster, P.G.
Environmental Analyst

Enclosure

cc: Jon Aspie; Barr Engineering

Annual Operation and Monitoring Report 2012

Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Prepared for
Enbridge Energy, Limited Partnership

March 2013

BARR

Annual Operation and Monitoring Report 2012

Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Prepared for
Enbridge Energy, Limited Partnership

March 2013

BARR

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Annual Operation and Monitoring Report
2012

Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
March 2013

Table of Contents

I. Technical Memorandum

resourceful. naturally.
engineering and environmental consultants

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Technical Memorandum

To: Karl Beaster, Enbridge Energy Limited Partnership
From: Jon Aspie, P.G.
Subject: MP85 System O&M and Groundwater Monitoring Annual Report 2012
WDNR BRRTS # 02-55-548746
Date: March 15, 2013
Project: 49550029.04
c: Hans Wronka

This Technical Memorandum presents a discussion of remediation progress and system operation at the Enbridge MP-85, Exeland, Wisconsin leaksite (Site). Attached are Wisconsin Department of Natural Resources (WDNR) Forms 4400-194, along with supporting tables, charts, and figures for annual reporting of remediation system operation in accordance with Wisconsin Administrative Code NR 724.

Summary of System Operations and Operational Changes

The air sparge (AS) and soil vapor extraction (SVE) system began operation in January 2008. The system was operated mostly continuously except for power outages, requirements for maintenance, and landowner requests for shutdowns during holiday or vacation stays. Shutdowns were usually on the order of days to weeks. A longer planned shutdown of the system was started on August 15, 2011 to evaluate the dynamics of the dissolved phase plume in groundwater when the system was not operational. The AS/SVE system was restarted on January 8, 2012 and operated mostly continually during 2012, until a planned short term system shut down on November 12, 2012 to accommodate a request of the property owner. The system was restarted on December 4, 2012 and is currently in operation.

The SVE system was operated using 12 extraction points – SVE points SVE-1 through SVE-10, RW-1, and RW-3. Monitoring wells MW-7 and MW-33 have also been connected to the SVE system and were used as SVE extraction points during part of the second quarter of 2012. Vapor extraction at MW-7 and MW-33 was discontinued on May 22, 2012, as field screening indicated that minimal extraction of petroleum compounds was occurring from those points (and SVE operation can affect monitoring data from the wells). Total volatile organic compounds (VOC) and benzene concentrations in the SVE

emissions have remained below levels where permitting or treatment would be required since the catalytic oxidation emission treatment system was removed in May 2009. The fresh air dilution valve was closed on September 11, 2009, and has remained closed since that time. Monthly sampling of SVE emissions has been conducted to monitor that concentrations remain below regulatory levels and to evaluate system operation. Monitoring and sampling of SVE emissions has been conducted in accordance with WDNR guidelines.

The source area AS system is composed of seven AS points. The airflow to the each of the AS points has been manually adjusted during site visits. During 2012, airflow of approximately 4 to 5 standard cubic feet per minute (scfm) per point was directed to each of the points. The AS system was manually shut off for approximately 15 minutes during each site visit (conducted at two-week intervals) to allow the aquifer formation to collapse and potentially close any preferential airflow pathways that may have formed from long term sparge pressure. The AS system was then restarted and readjusted to match airflow at each point. The on/off action of the system is meant to allow better dispersal of airflow over time throughout the aquifer formation, instead of along limited preferential airflow pathways that may have developed through continual pressure.

The supplemental air sparge system was manually shut off on March 24, 2009. Concentrations of dissolved phase hydrocarbons were less than detection limits in samples collected from wells located within, and up gradient of, the operational area of the supplemental sparge system.

Free Product and Recovery

Free product had historically been observed in wells RW-1, RW-2, RW-3, MW-7, and MW-11 (Table 2), with anomalous observations of product in MW-2 in fall 2009. Water and product levels are measured on a quarterly basis in RW-1 and RW-3 as these wells are used as SVE points. Water and product levels are measured in the other mentioned wells at two-week intervals.

During 2012, product was not observed in RW-1 or RW-2. A trace amount of product was observed in RW-3 in March and June of 2012 at a thickness of less than 0.01 feet, and 0.01 feet, respectively. Water levels in RW-1, RW-2, and RW-3 were approximately 0.5 to 1 foot higher in December 2012 than when product was last observed in those wells at a measurable thickness.

A trace amount of product was observed in MW-11 in March 2012 at a thickness less than 0.01 feet, but was not observed in MW-11 at any other time during 2012. Product was observed in MW-7 in February 2012, and July through December 2012 at a thickness ranging from less than 0.01 feet to 0.04 feet. Product was only observed during periods when the lowest water levels were measured in 2012. Water elevation, product elevation and product thickness for MW-7 are shown on Chart 4. During 2012, when water levels in MW-7 periodically declined to elevations where product has historically been observed, product was observed in the well, but, not when water levels rose above those elevations.

All of the wells where product historically had been observed are located within an area effectively influenced by the SVE system, as negative pressure is measured at all these wells. Additionally, free product had historically been removed from the wells (other than RW-1 and RW-2) by bailing or with absorbent pads. A limited amount (less than 1 gallon) of product was removed from MW-7 with absorbent pads during 2012.

Trends in SVE Emissions

The SVE system was put into operation in January 2008. Concentrations of total VOCs (sampled as Total Petroleum Hydrocarbons (TPH)) in SVE emissions have declined since startup, but have been relatively stable within the range of approximately 20 to 130 parts per million (ppm) from September 2010 through December 2012 (Chart 2, Table 6). In general, TPH concentrations declined rapidly from a high of 51,000 ppm in March 2008 to less than 1,000 ppm in September 2008 then rebounded and stabilized in the range of approximately 1,400 to 3,400 ppm between October 2008 and December 2009, then declined again through September 2010 to the currently observed levels.

Total VOC emissions ranged from less than 0.1 pounds per hour to 0.17 pounds per hour during 2012. Benzene concentrations in the SVE emissions remained just above detection limits during 2012. Total benzene discharged from the system during 2012 was approximately 0.3 pounds. Therefore, emissions stayed well below regulatory levels for total VOC emission rates and total benzene mass in 2012.

Oxygen and carbon dioxide concentrations in the SVE emissions indicate that biodegradation of petroleum compounds is occurring at a rate greater than the mass removal through SVE emissions, based on calculations provided in WDNR guidance documents (WDNR File Ref: 4440, Guidance on Air Sampling and Emission Monitoring at Petroleum Contaminated Soil and Groundwater Remediation Projects).

Carbon dioxide concentrations in the SVE emissions were high and oxygen levels were low when the system was restarted in January 2012 after a 5 month shut down period starting in August 2011(Table 5) and returned to levels consistent with previous long term operation by the time measurements were taken two weeks later. Similar trends have been observed during shorter system shut down periods, however, the concentrations of carbon dioxide were not as high, or oxygen levels as low, as during the longer shut down. For example, on January 10, 2012 when the system was restarted after a 5 month shutdown, the oxygen level was 12.5% and carbon dioxide was 5.1% compared to the system restart on December 4, 2012 after a 3 week shut down when the oxygen level was 17.4% and carbon dioxide was 1.8%. During long term operation, oxygen is commonly at 19.5 to 20% and carbon dioxide is at 0.7 to 1.1%. This does indicate that air exchange in the subsurface via operation of the system is providing effective treatment of residual petroleum by delivering oxygen to enhance bioremediation, although direct removal of hydrocarbon mass has declined based on reduced VOC concentrations in SVE emissions.

The mass of VOCs removed by SVE through stack emissions in 2012 was approximately 1,166 pounds (equivalent to approximately 2 barrels in volume) (Chart 3, Table 7). The mass of VOCs removed through biodegradation during 2012 was approximately 41,500 pounds (equivalent to approximately 142 barrels in volume). These volumes are less than previous years.

Trends in Groundwater Quality

Water samples were collected quarterly from select monitoring wells in 2012. Dissolved phase hydrocarbon concentrations declined or remained relatively stable at all monitoring wells sampled relative to the concentrations observed in 2011(Table 1, Chart 1 and 1a). Benzene was not detected in samples collected in 2012 from wells MW-15, MW-21 and MW-27 where low concentrations of benzene (less than enforcement standards) were detected on occasion in 2011.

Benzene isoconcentration maps are presented for each of the quarterly sample rounds in 2012 as Figures 3a-d. The aerial extent of the dissolved phase plume is very similar for each of the four events in 2012 and had receded slightly from the extent observed in November and December of 2011when low concentrations benzene were detected at MW-15. However, the extent is generally consistent with extents observed since September 2009, with some fluctuations. While the extent of the plume has remained relatively consistent since 2009, dissolved phase benzene concentrations within the plume have declined by an order of magnitude or more at most wells within the footprint of the plume (Table 1, Chart 1 and 1a).

Recommended System Operation

System O&M and groundwater monitoring site visits will be conducted on a monthly basis while the system is operated. Due to the low VOC concentrations in the SVE emissions, SVE points with low VOC emissions based on field screening will be closed in an attempt to concentrate remediation efforts in higher concentration areas. Analytical groundwater samples will be collected quarterly from select wells as part of remediation system monitoring.

Also, it appears that the system can be turned off, at least periodically, based on the low SVE emissions. Groundwater monitoring results from past system shut down periods indicate that no rapid expansion of the dissolved phase plume is expected to occur due to system shut down. Continued groundwater monitoring will provide data to determine plume dynamics when the system is off.

If product reappears in wells, the system could be started to remediate product in the effective treatment area of the system. Otherwise it appears that turning off the system and conducting quarterly monitoring would be feasible at this time. Periodic, short-term operation of the system may be then conducted based on the monitoring results and/or the presence of free product in wells.

A system shut down and monitoring plan will be submitted as a separate document.

II. WI DNR Form 4400-194

PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 724.13(e), Wis. Adm. Code. Use of this form is mandatory. Failure to submit this form as require is a violation of s. NR 724.13, Wis. Adm. Code, and is subject to the penalties in s. 144.99, Wis. Stats. This form must be submitted every six months for active soil and groundwater remediation projects and every twelve months for passive (natural attenuation) remediation projects that are regulated under the NR 700 series of Wis. Adm. Code. Specifically, for sites meeting any of the following criteria:

- Soil or groundwater remediation projects that report progress in accordance with s. NR 700.11(1), Wis. Adm. Code.
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.13(3), Wis. Adm. Code. (Note: s. NR 724.13(3) requires progress reports for operation and maintenance of active systems to be submitted every three months however the Department considers submittal of this form every six months to satisfy the requirements of the rules, unless otherwise directed by the Department on a site specific basis.)
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.17(3), Wis. Adm. Code. (Note: s. NR 724.17(3) requires progress reports every time that samples are collected however the Department considers submittal of this form every twelve months to satisfy the requirements of the rules for monitoring natural attenuation, unless otherwise directed by the Department on a site specific basis.)

Submittal of this form is not a substitute for reporting required by Department programs such as Wastewater or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Please refer to the instructions that are attached to the back of these forms starting on page INS-1. In all cases, when asked to "explain," those explanations are to be included on separate sheets of paper. Explanations must include a title that refers to the page and item number, for example: Page GI-2, C.1 .a.

A. GENERAL INFORMATION:

1. Site name: Enbridge Energy, Limited Partnership, Line 14, MP-85 Crude Oil Release Site
2. Reporting period from: 01/01/11 To 12/31/11 Days in period: 365
3. Regulatory agency (enter DNR, DCOM, DATCP and/or other): DNR
4. DNR issued site number: WDNR BRRTS #02-55-548746
5. State reimbursement fund claim number and fund name (if not applicable, enter NA): NA
6. Site location:
   a. DNR region and county: Rusk
   b. Street address and municipality: 9150 Reichel Road, Bruce, WI 54819
   c. Township, range, section and quarter quarter section: SW ¼ of NW ¼, Section 9, Township 36 N, Range 7 W
7. Responsible party:
   a. Name: Enbridge Energy, Limited Partnership, attn: Karl Beaster
   b. Mailing address: 1320 Grand Avenue, Superior, WI 54880
   c. Phone number: 715-398-4754
8. Consultant:
   a. Company name: Barr Engineering Co., attn: Jon Aspie
   b. Mailing address: 332 W Superior St, Suite 600, Duluth, MN 55802
   c. Phone number: 218-529-8200
9. Contaminants: Petroleum hydrocarbons related to crude oil.
10. Soil types (USCS or USDA): CL (0-5' bgs), SP - SM (5+ ft bgs)
11. Hydraulic conductivity (cm/sec): 120 feet/day
12. Average linear velocity of groundwater (ft/yr): 0.4 to 0.8 feet/day

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Enbridge Energy, Limited Partnership, Line 14, MP-85 Crude Oil Release Site

Reporting period from: 01/01/12 To: 12/31/12 Days in period: 366

A. GENERAL INFORMATION (CONTINUED):

13. If soil is treated ex situ, is the treatment location off site? (Y/N) If yes, give location: NA

    a. DNR region and county: _____

    b. Township, range, section and quarter quarter section: _____

B. REMEDIATION METHOD: Only submit pages that apply to an individual site. Check all that apply:

- ☐ ___ Groundwater extraction (submit a completed page GW-1).
- ☐ ___ Free product recovery (submit a completed page GW-1).
- ☒ ___ In situ air sparging (submit a completed page GW-2).
- ☐ ___ Groundwater natural attenuation (submit a completed page GW-3).
- ☐ ___ Other groundwater remediation method (submit a completed page GW-4).
- ☒ ___ Soil venting (including soil vapor extraction and bioventing, submit a completed page IS-1).
- ☐ ___ Soil natural attenuation (submit a completed page IS-2).
- ☐ ___ Other in situ soil remediation method (submit a completed page IS-3).
- ☐ ___ Biopiles (submit a completed page ES-1).
- ☐ ___ Landspreading/thinspreading of petroleum contaminated soil (submit a completed page ES-2).
- ☐ ___ Other ex situ soil remediation method (submit a completed page ES-3).

C. GENERAL EFFECTIVENESS EVALUATION FOR ALL ACTIVE SYSTEMS: If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications? (Y/N): Y

   If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.

2. Are modifications to the system warranted to improve effectiveness? (Y/N) If yes, explain: N

3. Is natural attenuation an effective low cost option at this time? (Y/N): N

4. Is closure sampling warranted at this time? (Y/N): N

5. Are there any modifications that can be made to the remediation to improve cost effectiveness? (Y/N) If yes, explain: N

D. ECONOMIC AND COST DATA TO DATE:

1. Total investigation costs ($): Costs are not provided at this time.

2. Implementation costs (design, capital and installation costs, excluding investigation costs) ($):NA

3. Total costs during the previous reporting period ($): NA

4. Total costs during this reporting period ($): NA

5. Total anticipated costs for the next reporting period ($): NA

6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? (Y/N) If yes explain: NA

7. If close out is anticipated within 12 months, estimated costs for project closeout ($): NA

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Enbridge Energy, Limited Partnership, Line 14, MP-85 Crude Oil Release Site

Reporting period from: 01/01/12 To: 12/31/12 Days in period: 366

E. NAME(S), SIGNATURE(S) AND DATE OF PERSON(S) SUBMITTING FORM: Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form.

Registered Professional Engineers:

I (print name) _____, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title, P.E. Number and date: _____

Hydrogeologists:

I (print name) _____, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title and date: _____

Scientists:

I (print name) _____, hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title and date: _____

Professional Seal(s), if applicable:

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Enbridge Energy, Limited Partnership, Line 14, MP-85 Crude Oil Release Site

Reporting period from: 01/01/12 To: 12/31/12 Days in period: 366

E. NAME(S), SIGNATURE(S) AND DATE OF PERSON(S) SUBMITTING FORM: Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form.

Registered Professional Engineers:

I (print name) _____, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title, P.E. Number and date: _____

Hydrogeologists:

I (print name) Jon Aspie, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

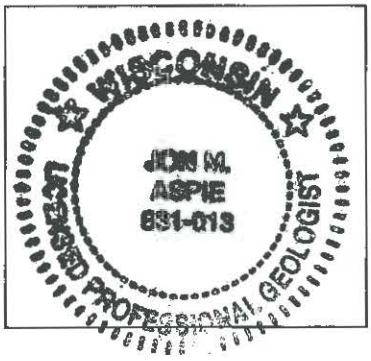
Signature, title and date: Jon M Aspie, P.G., Hydrogeologist, 03/15/2013

Scientists:

I (print name) _____, hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title and date: _____

Professional Seal(s), If applicable:



IN SITU AIR SPARGING SYSTEMS

SITE NAME AND REPORTING PERIOD:

Site name: Enbridge Energy, Limited Partnership, Line 14, MP-85 Crude Oil Release Site

Reporting period from: 01/01/12 To: 12/31/12 Days in period: 366

Date that the system was first started up: 3/10/08 (Line 3), 4/1/08 (Lines 1 and 2), 4/8/08 (Source Area)

A. IN SITU AIR SPARGING SYSTEM OPERATION:

1. Number of air injection wells at the site and the number actually in use during the period: A total of 75 sparge points, including 68 points associated with the supplemental sparge system located downgradient of the source area, are present at the site. The source area sparge system contains 7 sparge points operating in conjunction with source area SVE system. The seven source area sparge points were operated cotinually or on a planned rotation based on field screening and analytical data during 2012, except: the AS system was down for approximately 8 days at the beginning of January as part of a planned shudown; approximately 18 days in July for maintenance/repair; and approximately 22 days in November/December as part of a planned shutdown. The supplemental sparge system was not operated during 2012. The supplemental sparge system was manually turned off March 24, 2009 because dissolved phase hydrocarbon concentrations in groundwater were less than detection limits in the area of the supplemental sparge system. The compressor for the supplemental sparge system was removed in September 2012, as no future use of the supplemental sparge system is expected to be conducted.

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): Supplemental AS System: 0 days / Source Areas AS System: 318 days

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: Supplemental AS System: 0% Source Areas AS System: 87%.

B. SYSTEM EFFECTIVENESS EVALUATION:

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in B.1.a.

a. Contaminant: Free Product

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: NA

c. Maximum contaminant concentration level in any monitoring well (µg/L): Benzene: 230 ug/L at MW-5 on March 26, 2012, during this reporting period (samples were not collected from wells with free product).

2. Is there any evidence that air is short circuiting through natural or man-made pathways? (Y/N) If so, explain: N

3. Is the size of the plume increasing, stabilized, or decreasing (if increasing, explain): Stabilized, concentrations within the plume were declining in 2012

C. ADDITIONAL ATTACHMENTS: Attach the following to this form:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Site map with all air injection wells and groundwater monitoring points.
- Graph of contaminant concentrations versus time for the contaminant listed in B.1 .a. (above) for the monitoring point with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

SOIL VENTING (INCLUDING BOTH SOIL VAPOR EXTRACTION AND BIOVENTING)

SITE NAME AND REPORTING PERIOD:

Site name: Enbridge Energy, Limited Partnership, Line 14, MP-85 Crude Oil Release Site

Reporting period from: 01/01/12 To: 12/31/12 Days in period: 366

Date that the system was first started up: 1/17/08

A. SOIL VENTING SYSTEM OPERATION:

1. Number of air extraction wells available and number of wells actually in use during the period: 14 total SVE wells, including 12 dedicated SVE wells and two monitoring wells connected to the SVE system. MW-33 was connected to the SVE line for SVE-7, and MW-7 was connected to the SVE-5 line. Vapor extraction was conducted at MW-7 and MW-33 in 2012 from April 10 to May 22 as piping is above ground and freezes in the winter. The points were closed based on field screening readings indicating that hydrocarbon recovery was not enhanced with the points open and SVE operation hindered groundwater monitoring in the monitoring wells.

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): 336

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If less than 80%, explain: 92% based on system timer. The system was operated on a continual basis to the extent possible, except the system was down for approximately 8 days at the beginning of January as part of a planned shutdown; and approximately 22 days in November/December as part of a planned shutdown.

4. Average depth to groundwater: 35 feet (in the area of the SVE system)

B. EFFECTIVENESS EVALUATION: [START HERE]

1. Average contaminant removal rate for the entire system (pounds per day): Direct removal via SVE emissions averaged approximately 2.2 pounds per day during the operational period of January 10 to December 31, plus an additional average removal of approximately 124 pounds per day due to biodegradation

2. Average contaminant removal rate per well (pounds per day): 0.18 pounds per day per SVE well by direct removal, plus an additional 10.3 pounds per day average per well for biodegradation.

3. If the average contaminant removal rate is less than one pound per day for the entire system, or if the average contaminant removal rate per well is less than one tenth of a pound per day, evaluate the following:

a. If contaminants are aerobically biodegradable and confirmation borings have not been drilled in the past year:
   i. Oxygen levels in extracted air (percent): 14 to 20%
   Methane levels in extracted air (ppm_v) If over 10 ppm_v, explain: N/A
   iii. If methane is not present above 10 ppm_v and if oxygen is greater than 20 percent in extracted air, you should either:
      - Drill confirmation borings during the next reporting period, if the entire site should be considered for closure.
      - Or, perform an in situ respirometry test in a zone of high contamination. Do not perform the test in an air extraction well, use a gas probe or water table well. If a zero order rate of decay based on oxygen depletion is less than 2 mg/kg per day, then you should drill confirmation borings, if the entire site should be considered for closure. If the rate of decay is between 2 and 10 mg/kg, operate for one more reporting period before evaluating further. If the zero order rate of decay is greater than 10 mg/kg total hydrocarbons, continue operating the system in a manner than maximizes aerobic biodegradation.

b. If contaminants are not aerobically biodegradable and confirmation borings have not been recently drilled during the past year, you should drill confirmation borings during the next reporting period if the entire site should be considered for closure.

c. If soil borings were drilled during the past year and soil contamination remains above acceptable levels, explain if the system effectiveness can be increased and/or if other options need to be considered to achieve cleanup criteria.

C. ADDITIONAL ATTACHMENTS: Attach the following to this form:

- Well and soil sample location map indicating all air extraction wells. If forced air injection wells are also in use, identify those wells.
- If water table monitoring wells are present at the site, a map of well locations.
- Time versus vapor phase contaminant concentration graph.
- Time versus cumulative contaminant removal graph.
- Groundwater elevations table, if water table wells are present at the site; also list screen lengths and elevations.Table of soil contaminant chemistry data.
- Soil gas data, if gas probes are used to monitor subsurface conditions in locations other than where air is extracted.System operational data table.

III. Figures

Release Location: NW 1/4, Section 9
Township 36 N, Range 7 W

N

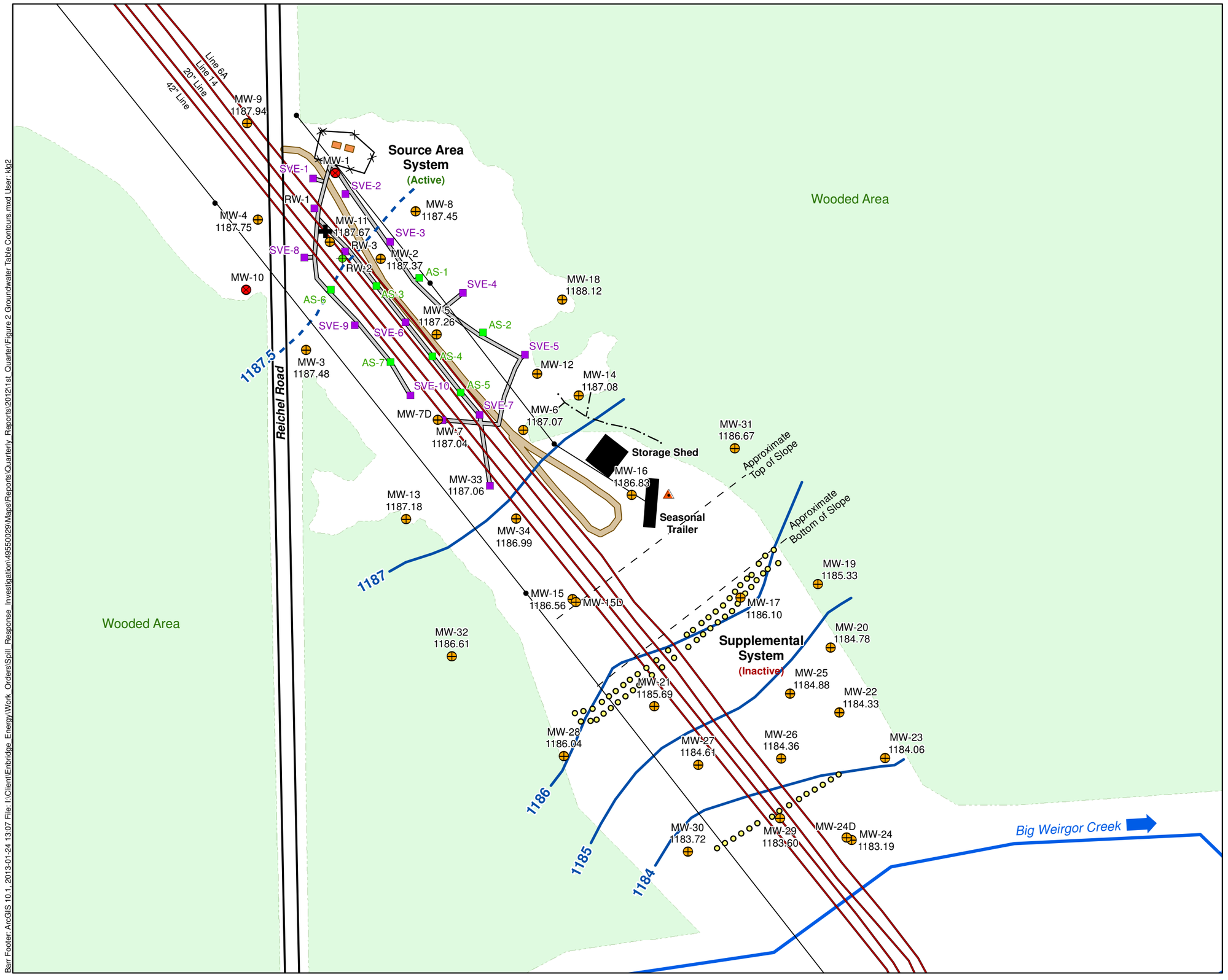
2,000 0 2,000

Feet

BARR

Figure 1

SITE LOCATION MAP
Enbridge Energy, Limited Partnership
Line 14, MP-85 Crude Oil Release Site
Rusk County, Wisconsin



Groundwater Table Contours
Dashed at Intervals Less Than 1 Foot

Release Location

Monitoring Wells

Abandoned Monitoring Wells

Recovery Wells

Supplemental Sparge Wells

Residential Well

Source Area Sparge Wells

SVE Points

Fence

Ravine

Approximate Pipeline Locations

Overhead Powerlines and Poles

Remediation System Sheds

SVE / AS Trench

Driveway

Structures

Approximate River Flow Direction

1186.25 Water Elevation in Well

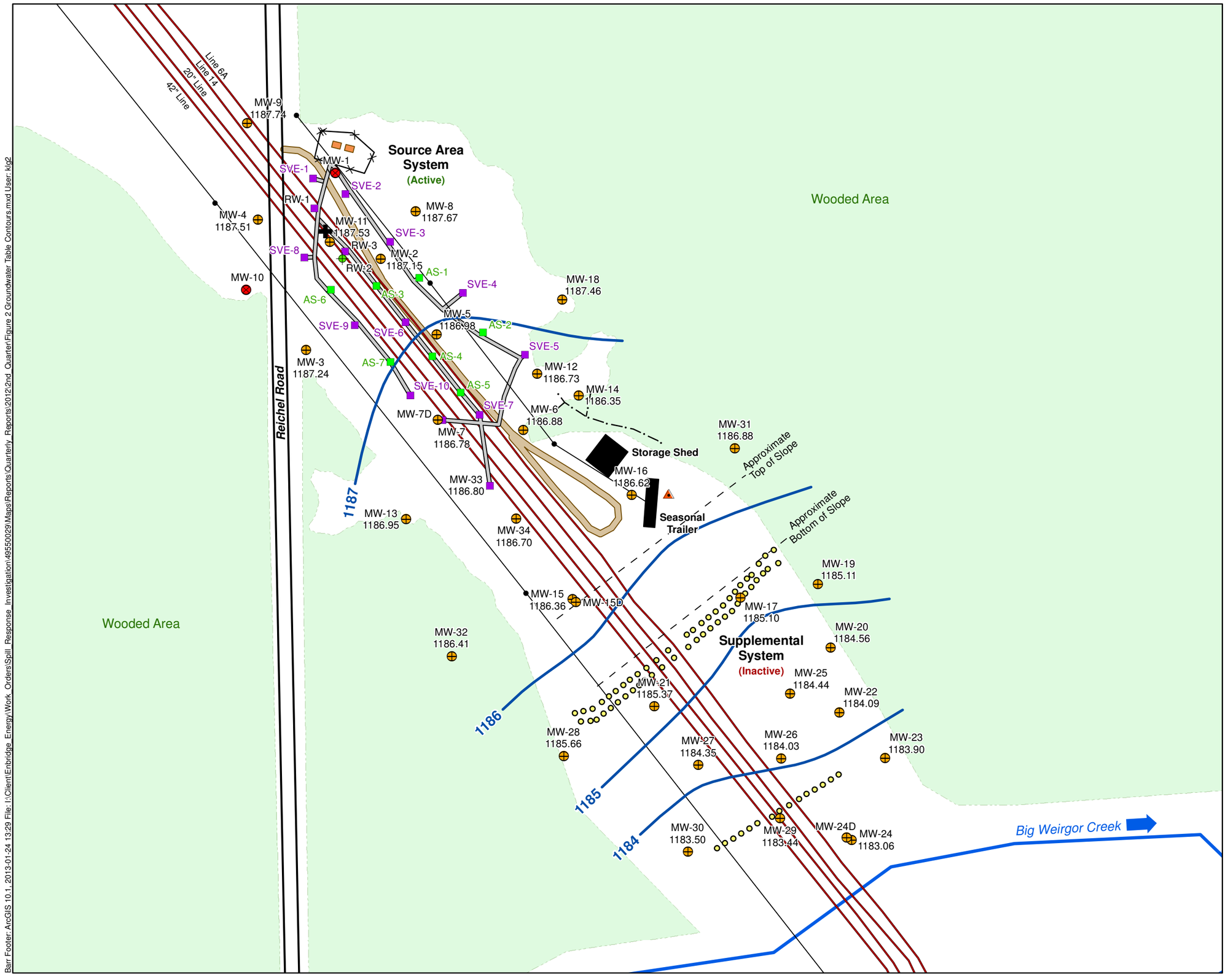
N

150 0 150
Feet

BARR

Figure 2a

GROUNDWATER TABLE CONTOURS
March 26, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Groundwater Table Contours
Release Location
Monitoring Wells
Abandoned Monitoring Wells
Recovery Wells
Supplemental Sparge Wells
Residential Well
Source Area Sparge Wells
SVE Points
Fence
Ravine
Approximate Pipeline Locations
Overhead Powerlines and Poles
Remediation System Sheds
SVE / AS Trench
Driveway
Structures
Approximate River Flow Direction
1186.25 Water Elevation in Well

N

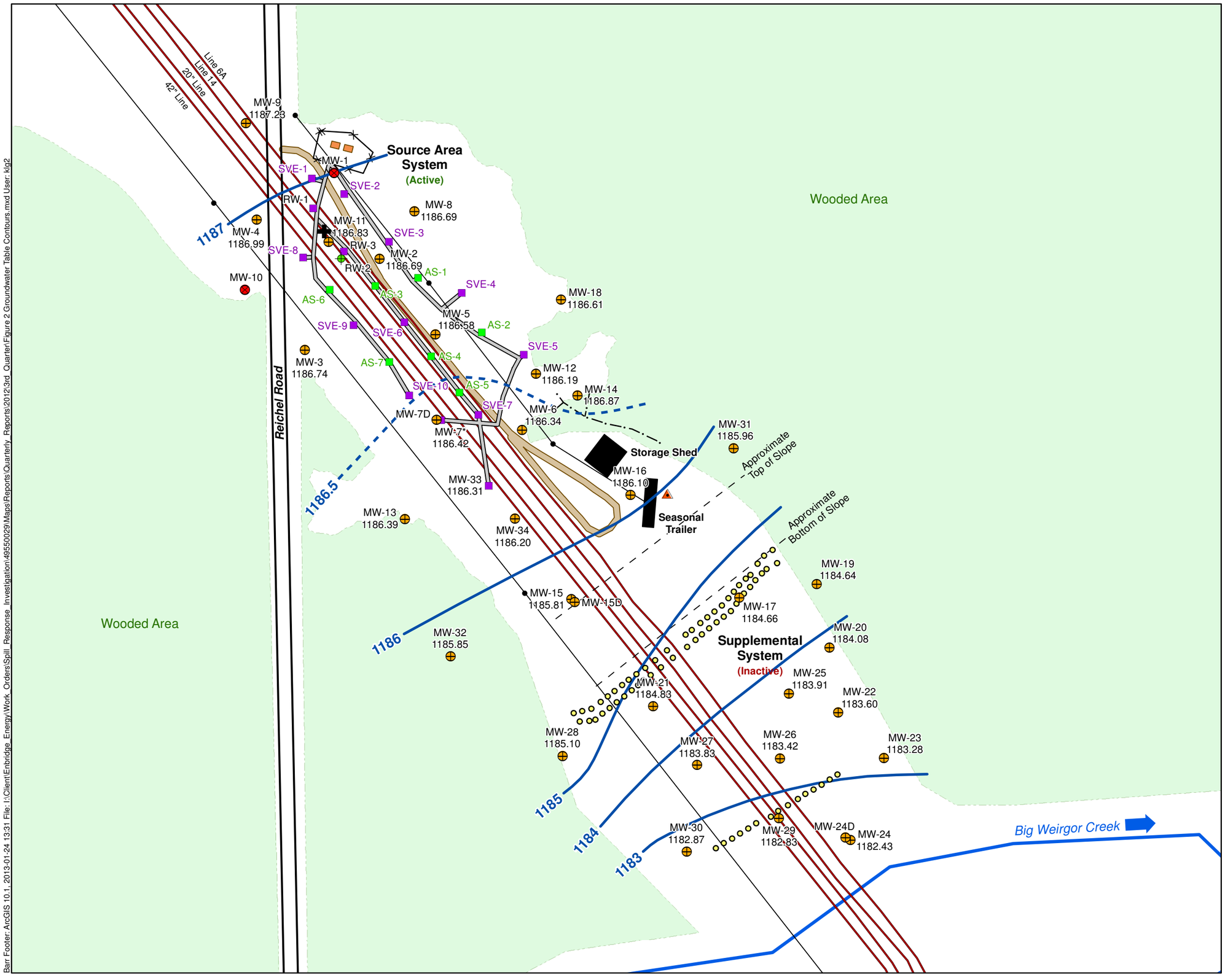
150 0 150
Feet

BARR

Figure 2b

GROUNDWATER TABLE CONTOURS
June 19, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin

Barr Footer: ArcGIS 10.1, 2013-01-24 13:29 File: I:\Client\Enbridge_Energy\Work_Orders\Spill_Response_Investigation\49550029\Maps\Reports\Quarterly_Reports\2012\2nd_Quarter\Figure 2 Groundwater Table Contours.mxd User: klg2



Groundwater Table Contours
Dashed at Intervals Less Than 1 Foot

Release Location

Monitoring Wells

Abandoned Monitoring Wells

Recovery Wells

Supplemental Sparge Wells

Residential Well

Source Area Sparge Wells

SVE Points

Fence

Ravine

Approximate Pipeline Locations

Overhead Powerlines and Poles

Remediation System Sheds

SVE / AS Trench

Driveway

Structures

Approximate River Flow Direction

1186.25 Water Elevation in Well

* Free Product Present

N

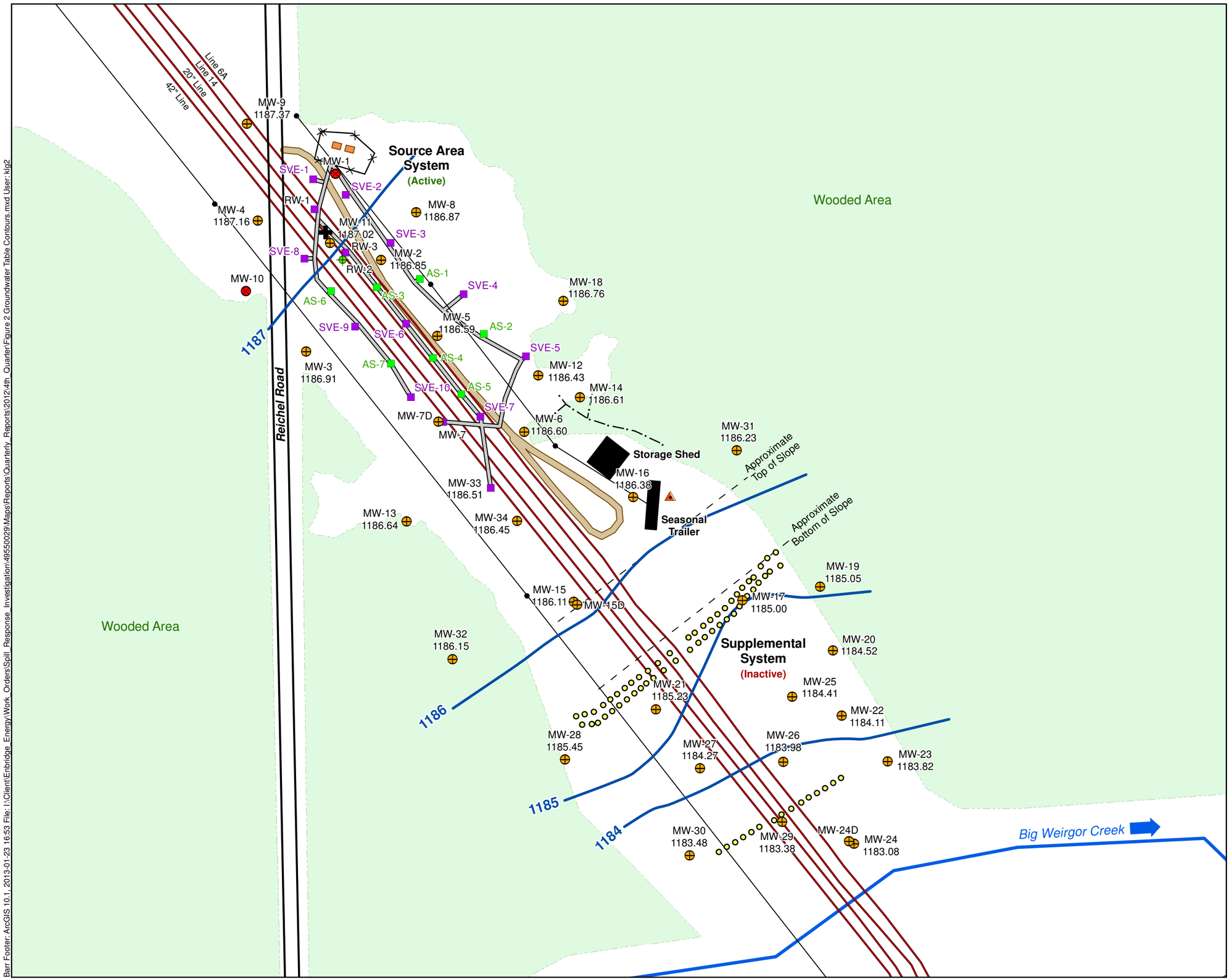
150 0 150

Feet

BARR

Figure 2c

GROUNDWATER TABLE CONTOURS
September 26, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Groundwater Table Contours
Release Location
Monitoring Wells
Abandoned Monitoring Wells
Recovery Wells
Supplemental Sparge Wells
Residential Well
Source Area Sparge Wells
SVE Points
Fence
Ravine
Approximate Pipeline Locations
Overhead Powerlines and Poles
Remediation System Sheds
SVE / AS Trench
Driveway
Structures
Approximate River Flow Direction
1186.25 Water Elevation in Well
* Free Product Present

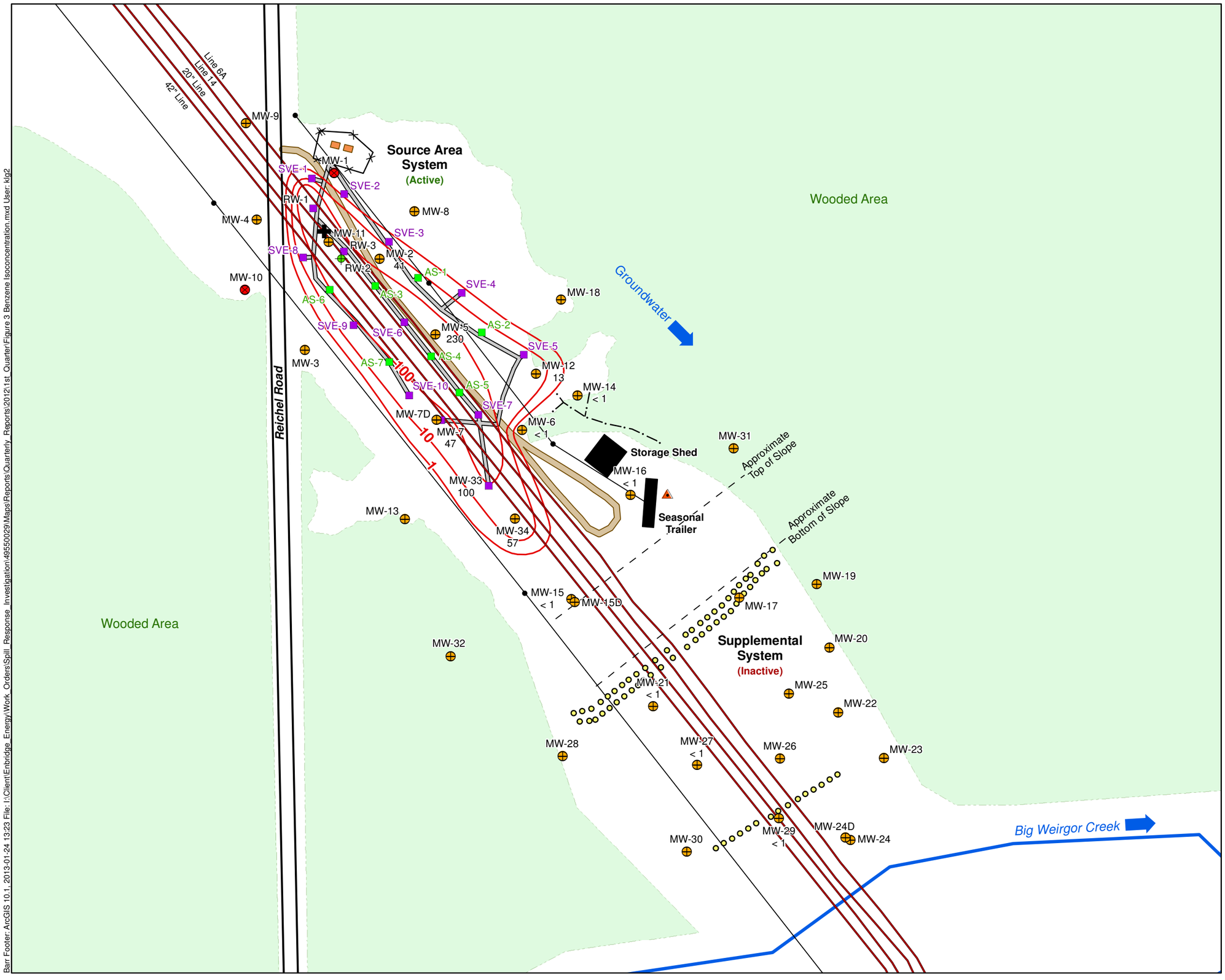
N

150 0 150
Feet

BARR

Figure 2

GROUNDWATER TABLE CONTOURS
December 17, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Benzene Isoconcentration Contours Micrograms per Liter (ug/L)

Release Location

Monitoring Wells

Abandoned Monitoring Wells

Recovery Wells

Supplemental Sparge Wells

Residential Well

Source Area Sparge Wells

SVE Points

Fence

Ravine

Approximate Pipeline Locations

Overhead Powerlines and Poles

Remediation System Sheds

SVE / AS Trench

Driveway

Structures

Approximate Groundwater and River Flow Direction

680 Benzene Concentration in Water Sample from Well (ug/L)

< 1 Concentration Less than Indicated Method Detection Limit (ug/L)

N

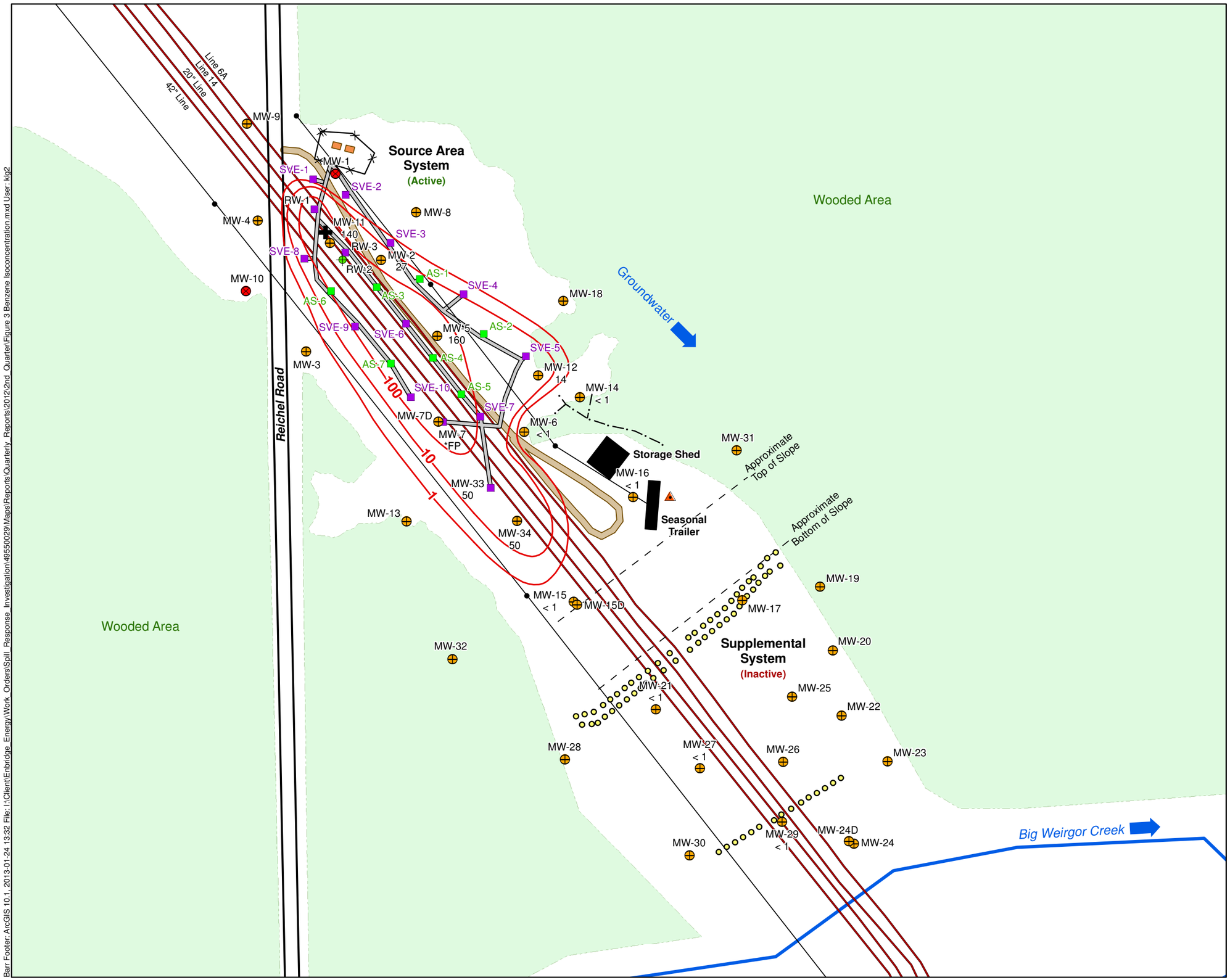
150 0 150

Feet

BARR

Figure 3a

BENZENE ISOCONCENTRATION
March 26 - 27, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Benzene Isoconcentration Contours Micrograms per Liter (ug/L)

Release Location

Monitoring Wells

Abandoned Monitoring Wells

Recovery Wells

Supplemental Sparge Wells

Residential Well

Source Area Sparge Wells

SVE Points

Fence

Ravine

Approximate Pipeline Locations

Overhead Powerlines and Poles

Remediation System Sheds

SVE / AS Trench

Driveway

Structures

Approximate Groundwater and River Flow Direction

680 Benzene Concentration in Water Sample from Well (ug/L)

< 1 Concentration Less than Indicated Method Detection Limit (ug/L)

*FP Free Product Present

N

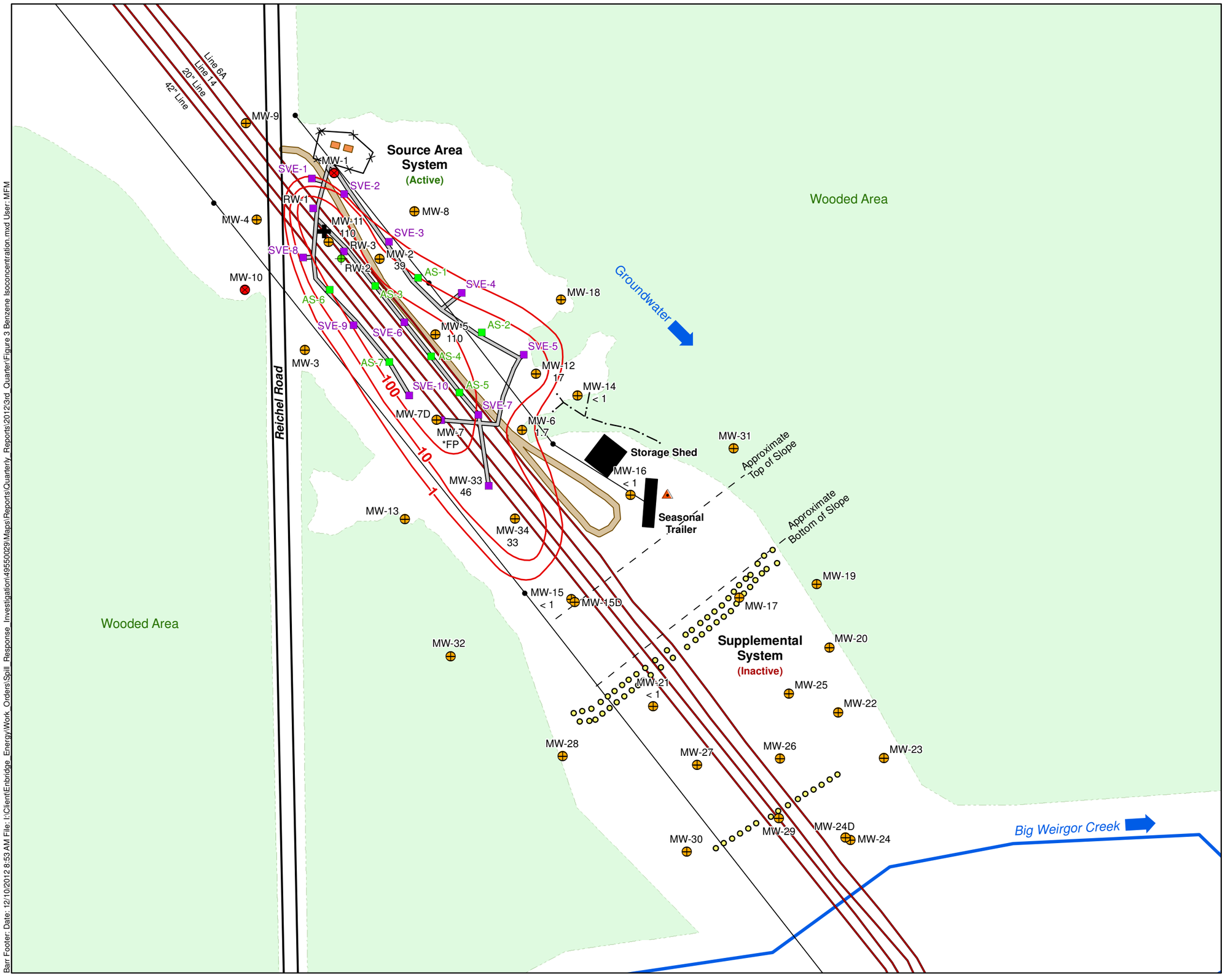
150 0 150

Feet

BARR

Figure 3b

BENZENE ISOCONCENTRATION
July 17, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Benzene Isoconcentration Contours Micrograms per Liter (ug/L)

Release Location

Monitoring Wells

Abandoned Monitoring Wells

Recovery Wells

Supplemental Sparge Wells

Residential Well

Source Area Sparge Wells

SVE Points

Fence

Ravine

Approximate Pipeline Locations

Overhead Powerlines and Poles

Remediation System Sheds

SVE / AS Trench

Driveway

Structures

Approximate Groundwater and River Flow Direction

680 Benzene Concentration in Water Sample from Well (ug/L)

< 1 Concentration Less than Indicated Method Detection Limit (ug/L)

*FP Free Product Present

N

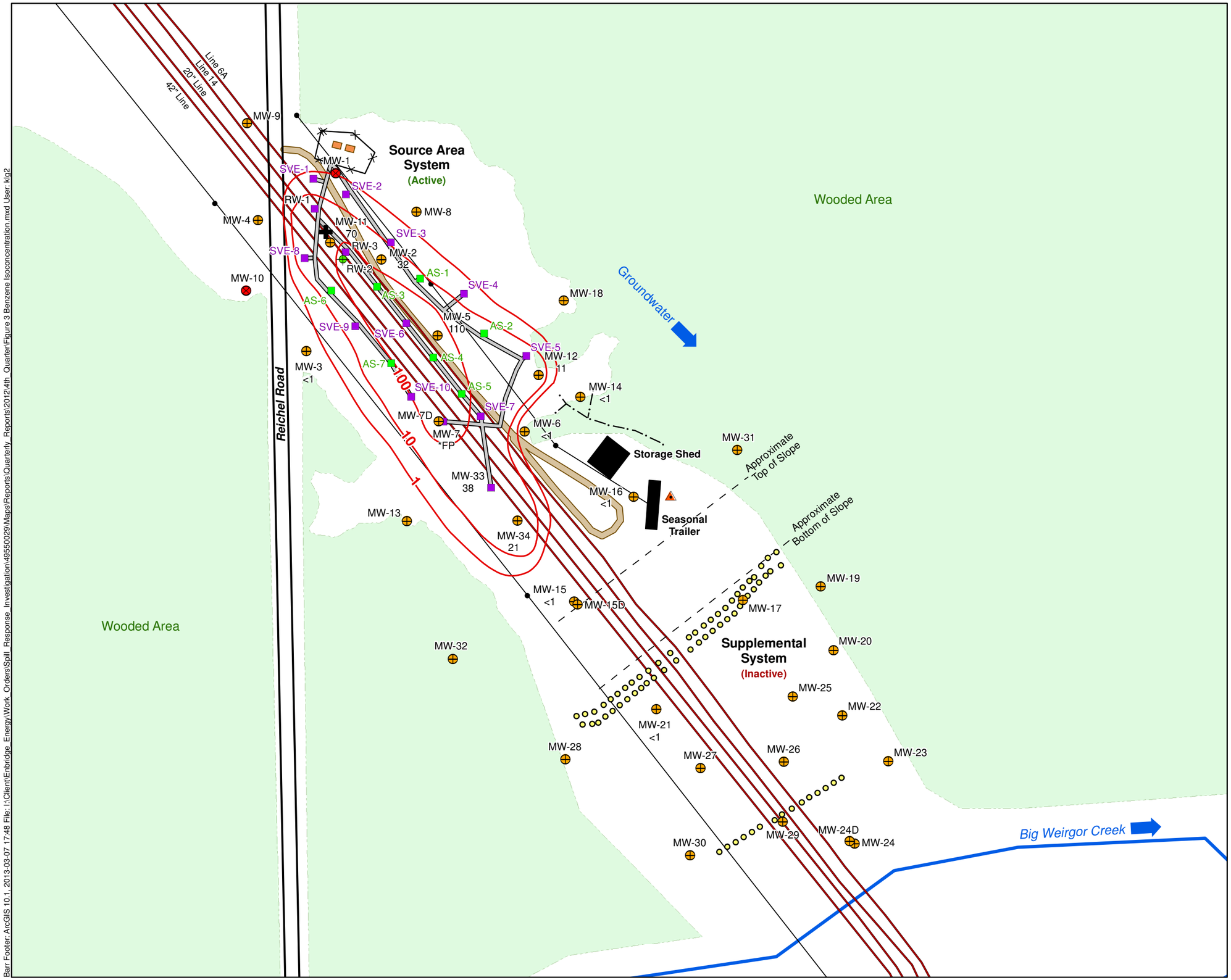
150 0 150

Feet

BARR

Figure 3c

BENZENE ISOCONCENTRATION
September 26, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Barr Footer: ArcGIS 10.1, 2013-03-07 17:48 File: I:\Client\Enbridge_Energy\Work_Orders\Spill_Response_Investigation\49550029\Maps\Reports\Quarterly_Reports\2012\4th_Quarter\Figure 3 Benzene Isoconcentration.mxd User: klg2

Benzene Isoconcentration Contours
Micrograms per Liter (ug/L)

Release Location

Monitoring Wells

Abandoned Monitoring Wells

Recovery Wells

Supplemental Sparge Wells

Residential Well

Source Area Sparge Wells

SVE Points

Fence

Ravine

Approximate Pipeline Locations

Overhead Powerlines and Poles

Remediation System Sheds

SVE / AS Trench

Driveway

Structures

Approximate Groundwater and River Flow Direction

680 — Benzene Concentration in Water Sample from Well (ug/L)

< 1 — Concentration Less than Indicated Method Detection Limit (ug/L)

*FP — Free Product Present

N

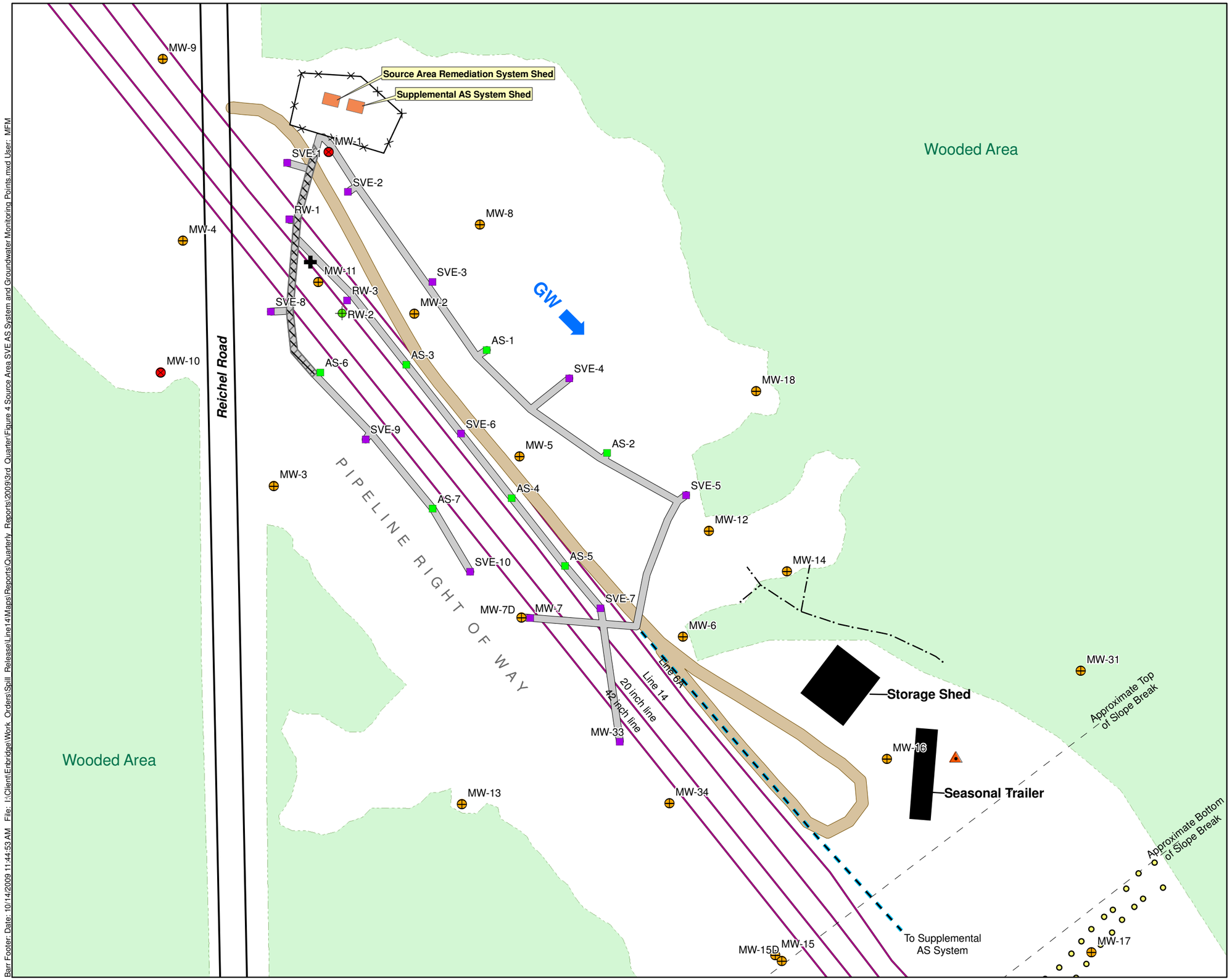
150 0 150

Feet

BARR

Figure 3d

BENZENE ISOCONCENTRATION
December 17, 2012
Enbridge Energy, Limited Partnership
Line 14, MP 85 Crude Oil Release Site
Rusk County, Wisconsin



Release Location
Monitoring Well
Abandoned Monitoring Well
Recovery Well
Supplemental Sparge Well
Residential Well
Source Area Sparge Well
SVE Point
Approximate Supplemental AS System Trench Location
Fence
Ravine
Approximate Pipeline Location
Remediation System Sheds
SVE/AS Trench
Insulated Portion of SVE/AS Trench
Driveway
Structures
Approximate Groundwater Flow Direction

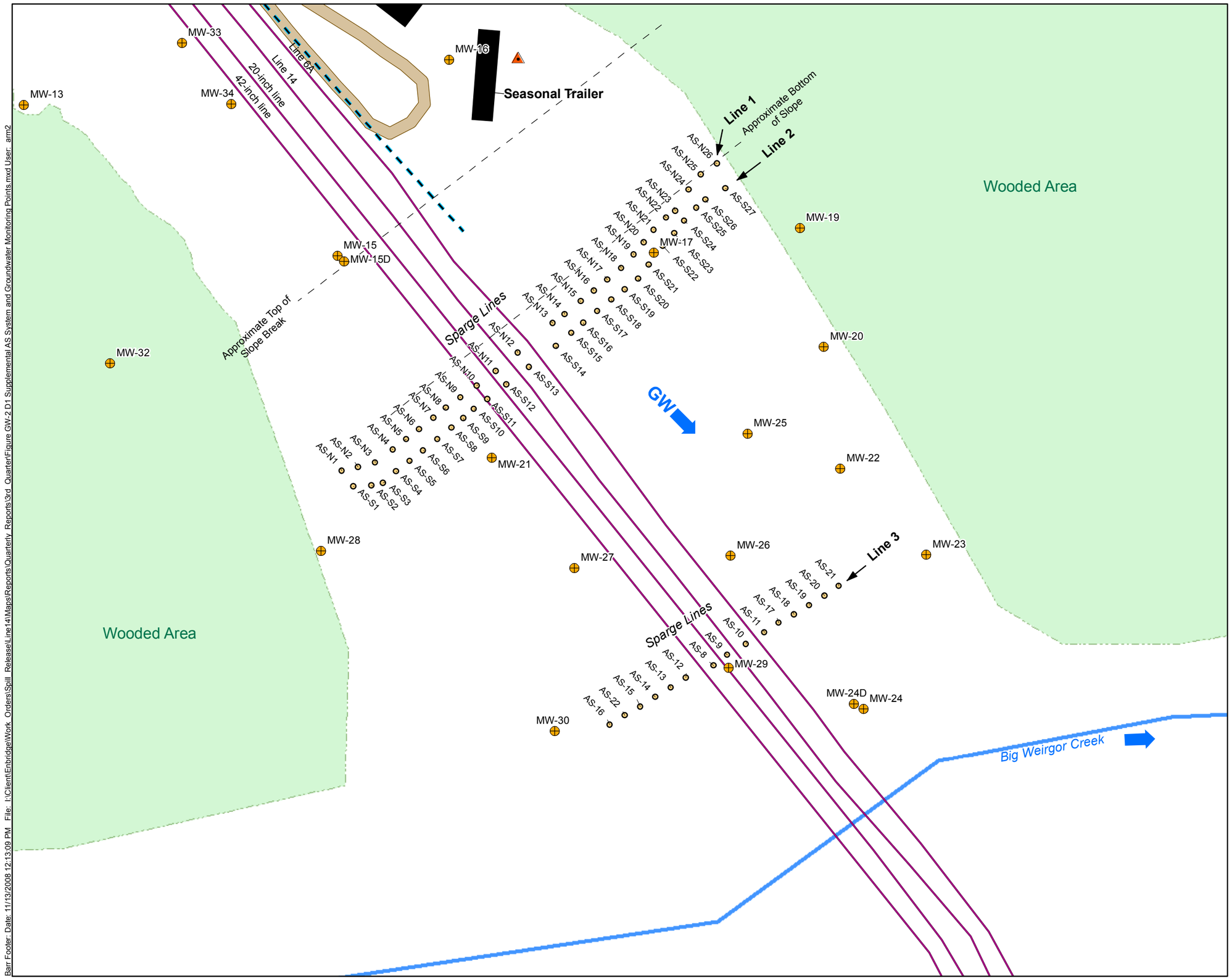
N

100 0 100
Feet

BARR

Figure 4

SOURCE AREA SVE/AS SYSTEM AND GROUNDWATER MONITORING POINTS
Enbridge Energy, Limited Partnership
Line 14, MP-85 Crude Oil Release Site
Rusk County, Wisconsin



Monitoring Well

Supplemental Sparge Well

Residential Well

Approximate Supplemental AS System Trench Location

Approximate Pipeline Location

Driveway

Structures

Approximate Groundwater and River Flow Direction

Note: Supplemental AS System piping is above ground and not shown.

N

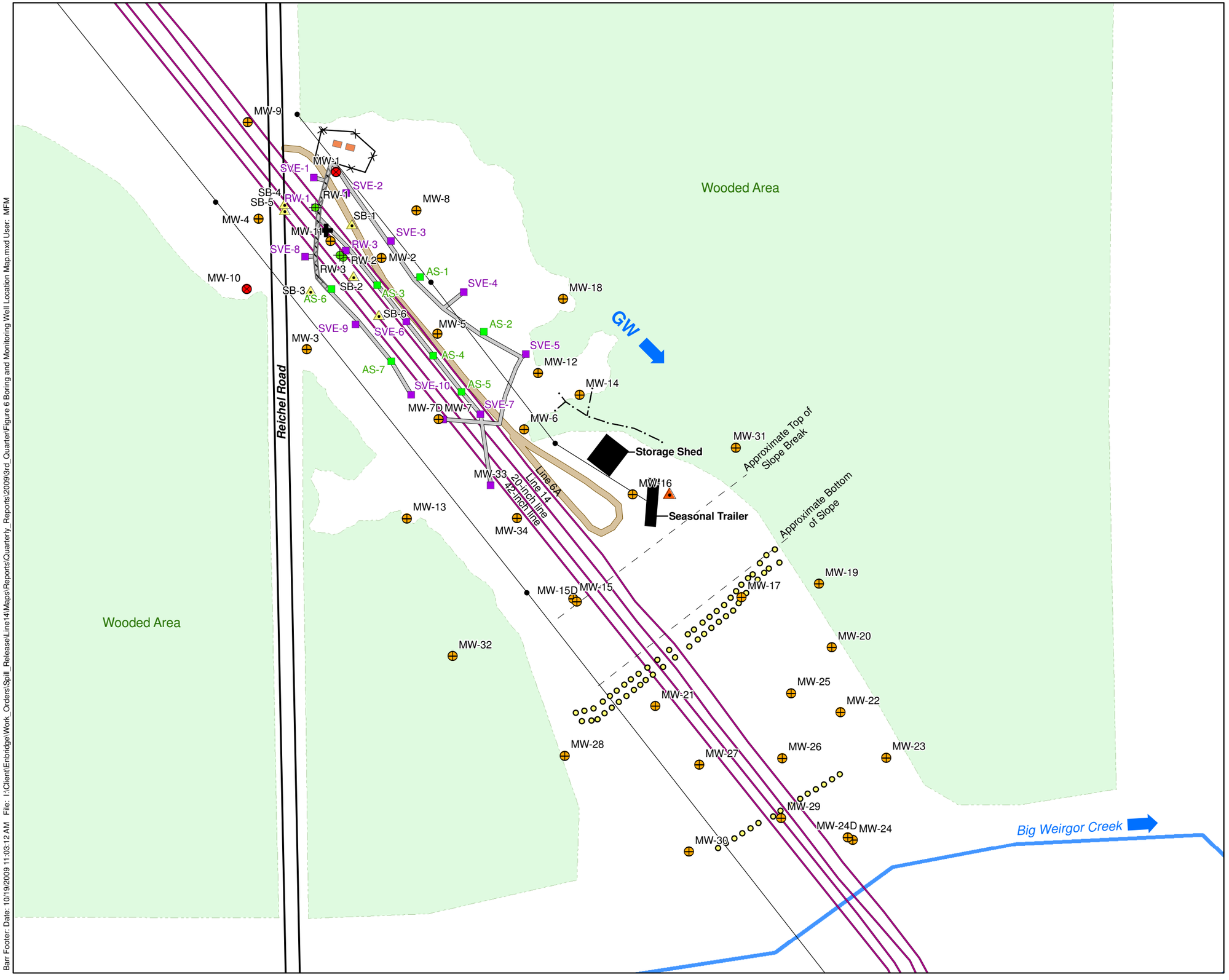
100 0 100

Feet

BARR

Figure 5

SUPPLEMENTAL AS SYSTEM AND GROUNDWATER MONITORING POINTS
Enbridge Energy, Limited Partnership
Line 14, MP-85 Crude Oil Release Site
Rusk County, Wisconsin



Release Location
Soil Boring
Monitoring Well
Abandoned Monitoring Well
Recovery Well
Supplemental Sparge Well
Residential Well
Source Area Sparge Well
SVE Point
Fence
Ravine
Approximate Pipeline Location
Overhead Powerlines and Poles
Remediation System Sheds
SVE/AS Trench
Insulated Portion of SVE/AS Trench
Driveway
Structures
Approximate Groundwater and River Flow Direction

N

150 0 150
Feet

BARR

Figure 6

BORING AND MONITORING WELL LOCATION MAP
Enbridge Energy, Limited Partnership
Line 14, MP-85 Crude Oil Release Site
Rusk County, Wisconsin

Barr Footer: Date: 10/19/2009 11:03:12 AM File: I:\Client\Enbridge\Work_Orders\Spill_Release\Line14\Maps\Reports\Quarterly_Reports\2009\3rd_Quarter\Figure 6 Boring and Monitoring Well Location Map.mxd User: MFM

IV. Charts

Chart 1
Benzene Concentration vs Time
Wells Where Maximum Concentrations Exceeded 1,000 ug/l
Enbridge Energy Limited Parternship - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

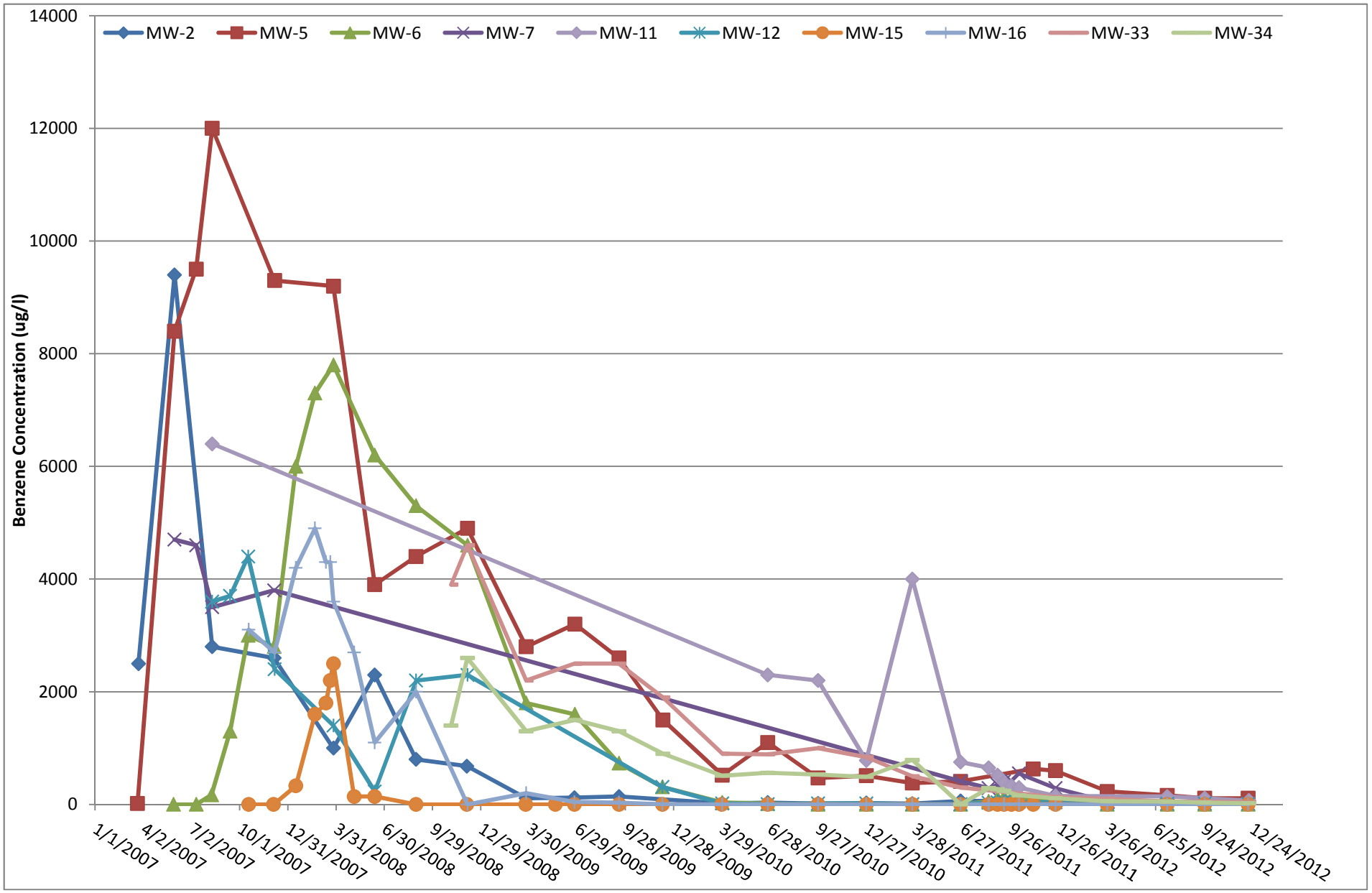


Chart 1a
Benzene Concentrations vs Time
Wells from Chart 1 Displaying Data starting in 2010
Enbridge Energy Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

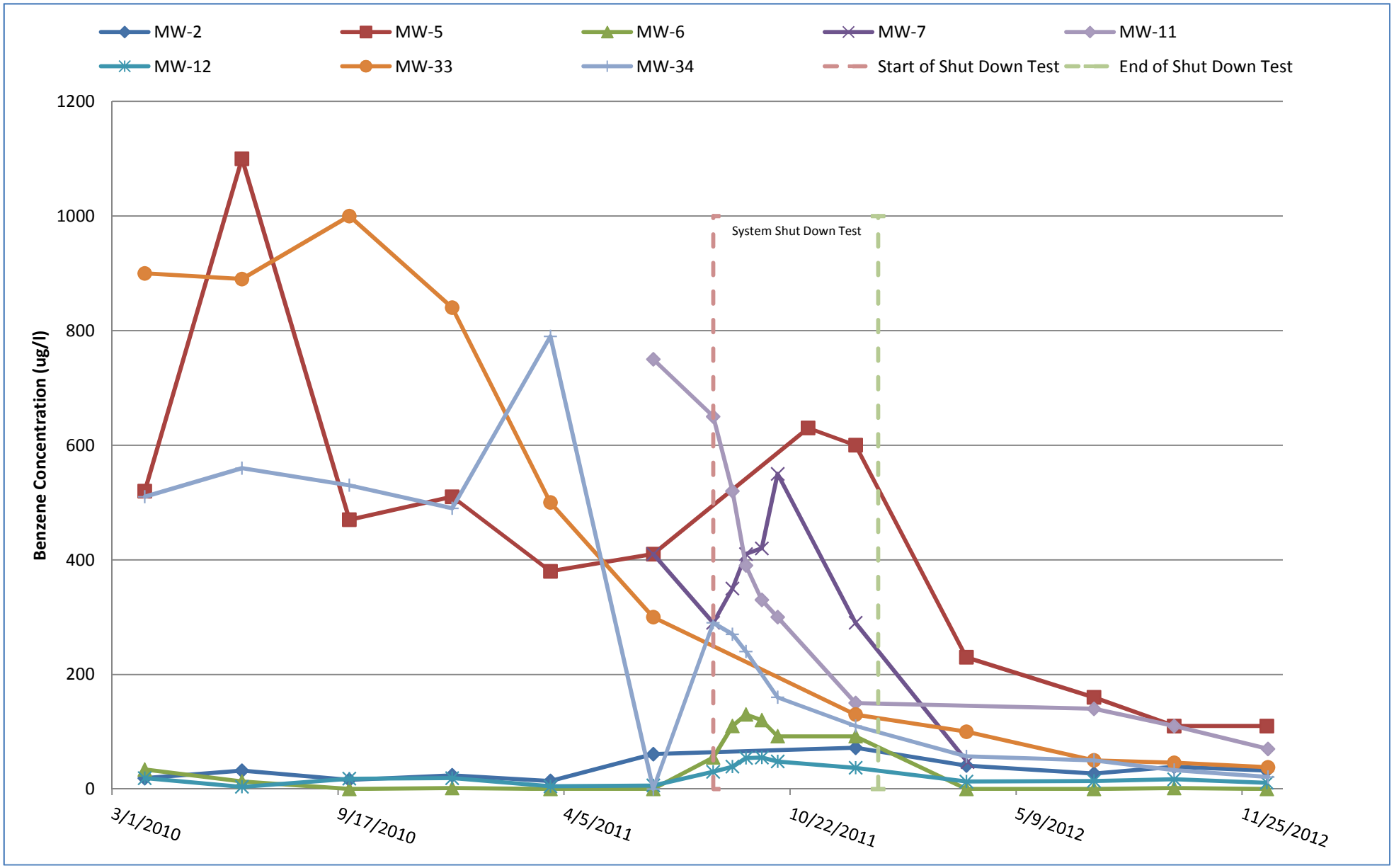


Chart 2
SVE Emissions Total Petroleum Hydrocarbon Vapor Concentration vs. Time
Logarithmic Scale to Show Low Concentrations
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

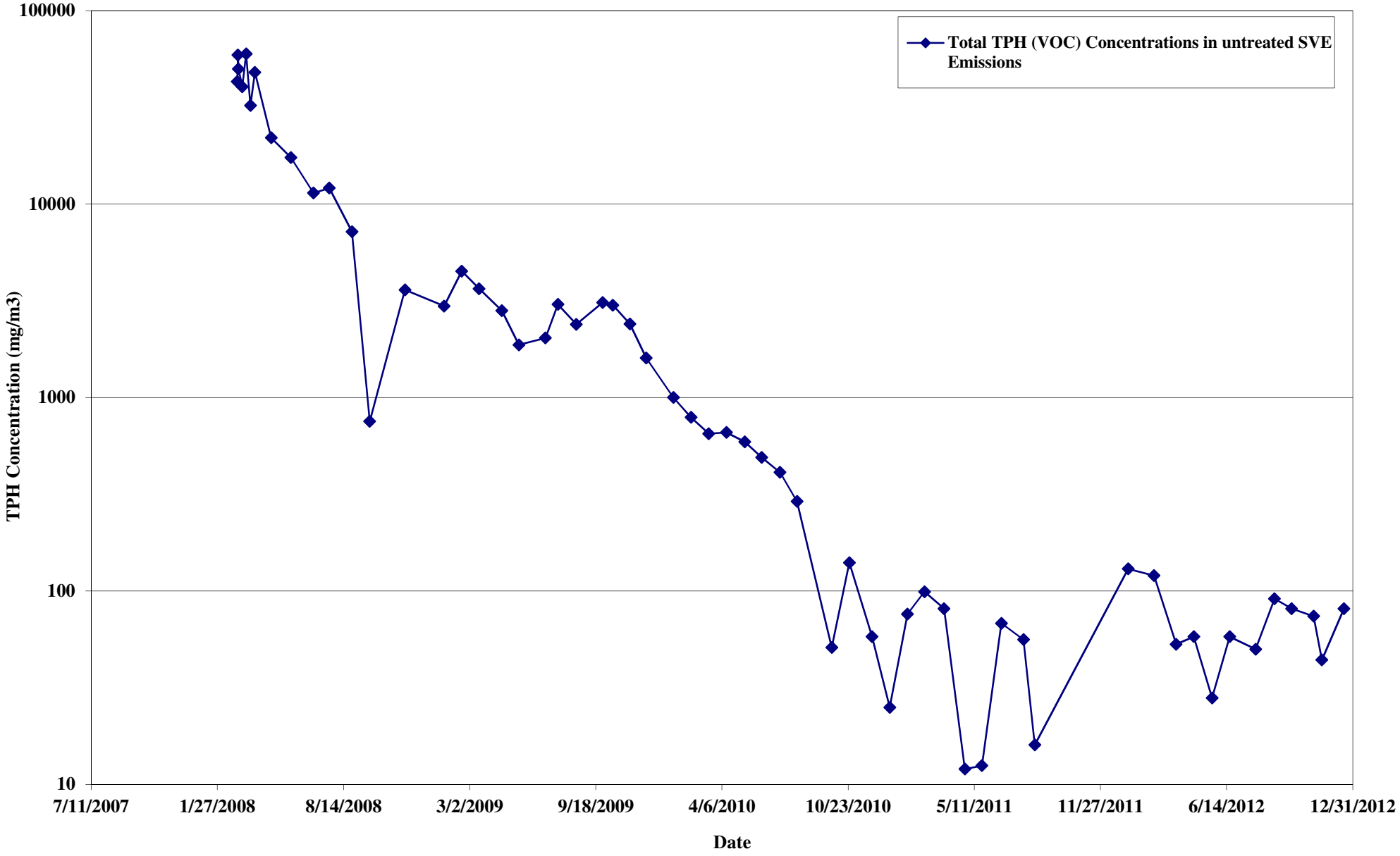
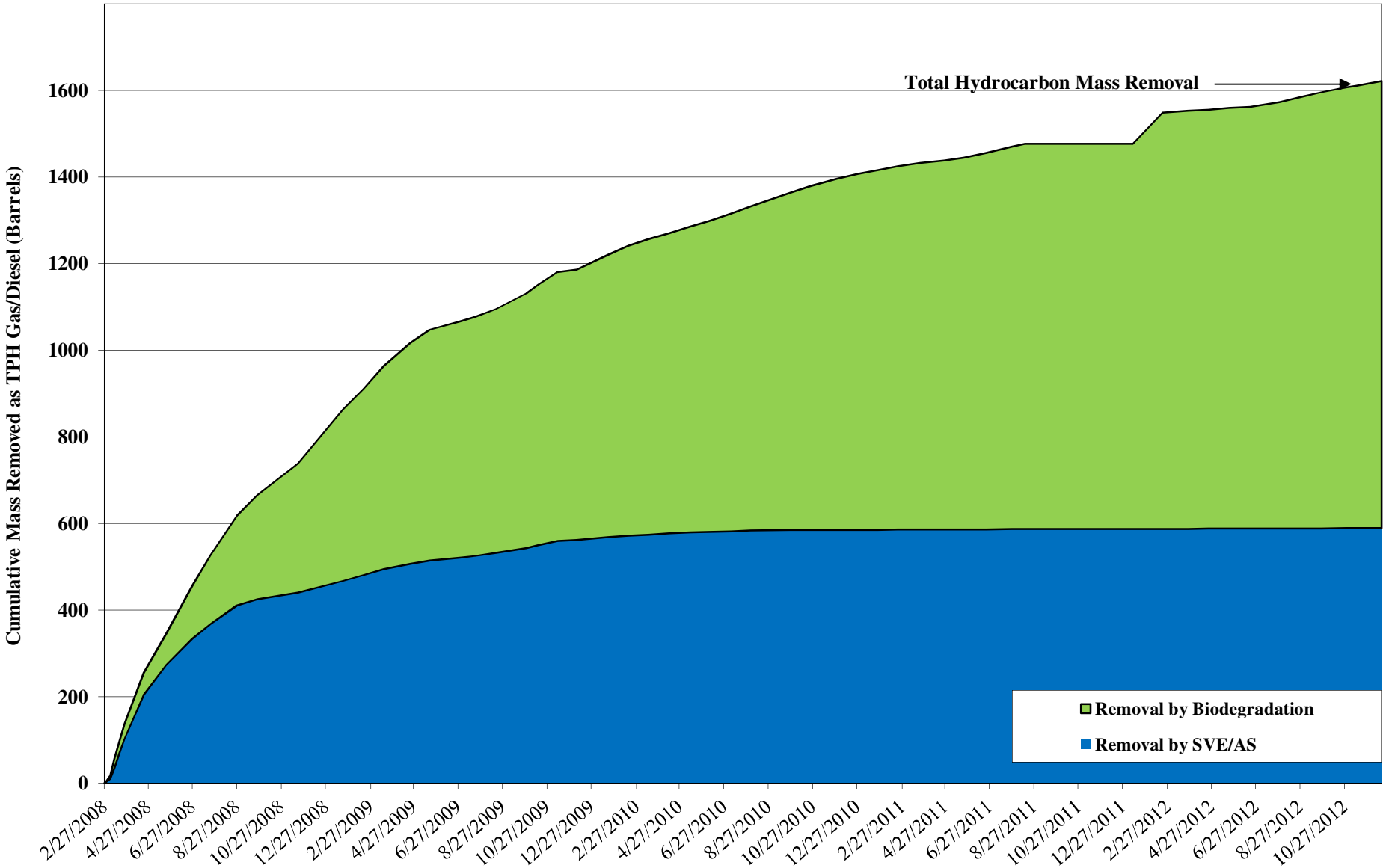
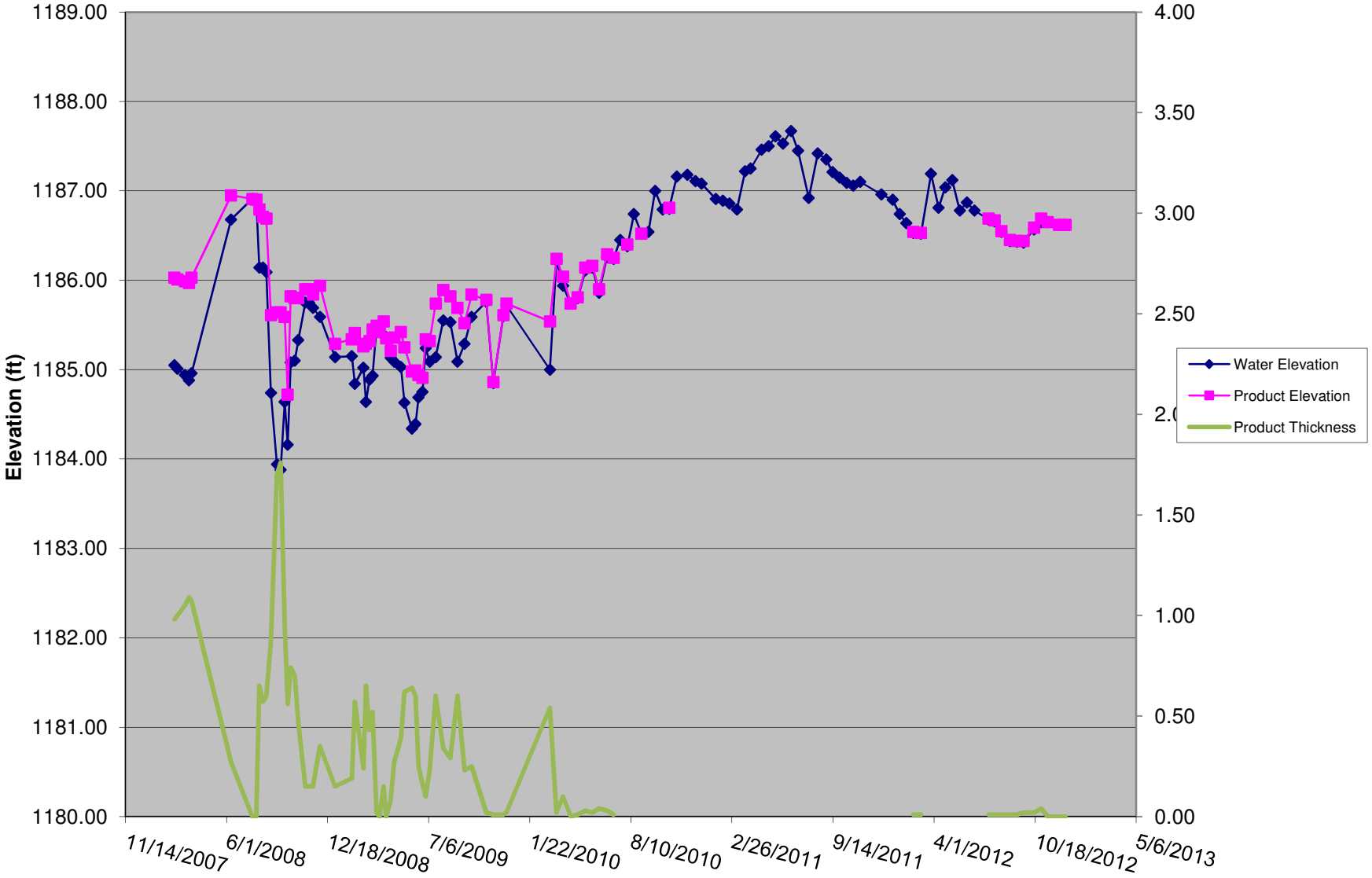


Chart 3
Cumulative Hydrocarbon Mass Removal by SVE/AS and Biodegradation
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin



P:\Duluth\49 WI\55\4955029 MP85 Leak Response\WorkFiles\System Operation Data Tables\Emission and Removal rate Calculations_table_graphs.xlsx

Chart 4
Water and Product Level Hydrograph MW-7
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin



V. Tables

Table 1
Groundwater Analytical Data - TPH and PVOC
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-1	**3/24/2007**	--	<500	ND	**11**	<1.0	<5.0	10	2.1
MW-1	**5/31/2007**	--	<460	ND	**2.2**	<1.0	--	<1.0	<3.0
MW-1	**8/9/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-1	**12/5/2007**	--	--	ND	**6.7**	<1.0	<5.0	<1.0	<3.0
MW-1	**3/25/2008**	--	--	ND	**2.2**	<1.0	--	<1.0	<3.0
MW-1	**6/12/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-2	**3/24/2007**	--	2900	**108**	**2500**	130	**22**	**1800**	710
MW-2	**5/31/2007**	--	3800	**378**	**9400**	**370**	--	**7100**	**2200**
MW-2	**8/10/2007**	--	1100	**198**	**2800**	**230**	--	**980**	**1200**
MW-2	**12/5/2007**	--	--	77	**2600**	**240**	**71**	150	460
MW-2	**3/26/2008**	--	--	36	**1000**	56	--	130	130
MW-2	**6/12/2008**	--	--	**216**	**2300**	**140**	--	**800**	580
MW-2	**8/29/2008**	--	--	**99**	**800**	120	--	120	190
MW-2	**12/3/2008**	--	--	72	**680**	120	--	120	200
MW-2	**3/25/2009**	--	--	17.5	**110**	31	--	33	49
MW-2	**6/24/2009**	--	--	93	**120**	110	--	100	170
MW-2	**9/16/2009**	--	--	34	**140**	40	--	83	90
MW-2	**3/30/2010**	--	--	9.2	**19**	7.8	--	16	30
MW-2	**6/24/2010**	--	--	46	**32**	100	--	3.1	130
MW-2	**9/27/2010**	--	--	19.3	**16**	28	--	<1.0	9.3
MW-2	**12/27/2010**	--	--	25.1	**24**	25	--	<1.0	17
MW-2	**3/24/2011**	--	--	15.1	**14**	7.8	--	<1.0	<3.0
MW-2	**6/23/2011**	--	--	**153**	**61**	130	--	<1.0	130
MW-2	**12/19/2011**	--	--	79	**72**	86	--	<1.0	73
MW-2	**3/26/2012**	--	--	37	**41**	49	--	<1.0	40
MW-2	**7/17/2012**	--	--	**99**	**27**	110	--	<1.0	80
MW-2	**9/26/2012**	--	--	84	**39**	85	--	<1.0	52
MW-2	**12/17/2012**	--	--	42	**32**	57	--	<1.0	36
MW-3	**3/22/2007**	--	<500	ND	**7.3**	<1.0	<5.0	5.8	ND
MW-3	**5/31/2007**	--	<500	ND	<1.0	<1.0	--	<1.0	<3.0
MW-3	**7/11/2007**	--	<460	ND	**17**	1.3	--	7.4	<3.0
MW-3	**8/9/2007**	--	<460	ND	**23**	1.3	--	6.1	<3.0
MW-3	**12/5/2007**	--	--	ND	**1.7**	<1.0	<5.0	<1.0	<3.0
MW-3	**3/25/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-3	**6/10/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-3	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-3	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-3	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-3	**12/18/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-4	**3/24/2007**	--	<500	4.2	**110**	9.2	<5.0	110	41.8
MW-4	**5/30/2007**	--	<460	8.2	**180**	9.7	--	130	41
MW-4	**8/10/2007**	--	<460	ND	**7.9**	<1.0	--	2.6	<3.0
MW-4	**12/5/2007**	--	--	ND	**1.1**	<1.0	<5.0	<1.0	<3.0
MW-4	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-4	**6/10/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-4	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-4	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-5	**3/22/2007**	--	<500	ND	**17**	<1.0	<5.0	1.5	3.3
MW-5	**5/31/2007**	--	940 *	**215**	**8400**	**230**	--	**4500**	**1500**
MW-5	**7/11/2007**	--	1500 *	**210**	**9500**	**300**	--	**5900**	**1800**
MW-5	**8/10/2007**	--	1900	**459**	**12000**	**310**	--	**5600**	**1800**
MW-5	**12/6/2007**	--	--	**349**	**9300**	**390**	<250	<50	**1900**
MW-5	**3/26/2008**	--	--	**365**	**9200**	**450**	--	<50	930
MW-5	**6/12/2008**	--	--	79	**3900**	110	--	100	240
MW-5	**8/29/2008**	--	--	**140**	**4400**	97	--	<50	370
MW-5	**12/4/2008**	--	--	**296**	**4900**	79	--	<50	450
MW-5	**3/25/2009**	--	--	**124**	**2800**	89	--	<20	230
MW-5	**6/25/2009**	--	--	**240**	**3200**	**270**	--	**390**	590
MW-5	**9/16/2009**	--	--	**191**	**2600**	**240**	--	56	290
MW-5	**12/8/2009**	--	--	82	**1500**	130	--	<20	130
MW-5	**3/30/2010**	--	--	16.6	**520**	55	--	<1.0	12
MW-5	**6/24/2010**	--	--	**133**	**1100**	**250**	--	15	280
MW-5	**9/27/2010**	--	--	44	**470**	110	--	5.7	46
MW-5	**12/27/2010**	--	--	45.7	**510**	110	--	8	28
MW-5	**3/24/2011**	--	--	50.2	**380**	110	--	6.2	15
MW-5	**6/23/2011**	--	--	41	**410**	93	--	2.7	57
MW-5	**11/7/2011**	--	--	**138**	**630**	**210**	--	9.6	260
MW-5	**12/19/2011**	--	--	**213**	**600**	**250**	--	<5	200
MW-5	**3/26/2012**	--	--	60.3	**230**	**170**	--	<1.0	16
MW-5	**7/17/2012**	--	--	68	**160**	**170**	--	1.6	57
MW-5	**9/26/2012**	--	--	42.7	**110**	110	--	<1.0	20

Table 1
Groundwater Analytical Data - TPH and PVOC
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-5	**12/17/2012**	--	--	43.9	**110**	120	--	<1.0	8.6
MW-6	**5/29/2007**	--	<500	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-6	**7/11/2007**	--	<520	ND	<1.0	<1.0	--	<1.0	<3.0
MW-6	**8/9/2007**	--	<460	4.2	**170**	5.2	--	84	30
MW-6	**9/13/2007**	--	<460	32	**1300**	37	--	31	210
MW-6	**10/17/2007**	--	<460	76	**3000**	85	--	<10	480
MW-6	**12/5/2007**	--	--	55	**2800**	94	<50	<10	370
MW-6	**1/15/2008**	--	--	56	**6000**	**170**	<50	<10	500
MW-6	**2/20/2008**	--	--	ND	**7300**	**240**	**66**	<50	480
MW-6	**3/26/2008**	--	--	ND	**7800**	**200**	--	<50	490
MW-6	**6/12/2008**	--	--	ND	**6200**	81	--	<50	200
MW-6	**8/29/2008**	--	--	ND	**5300**	<50	--	<50	<150
MW-6	**12/4/2008**	--	--	ND	**4600**	<50	--	<50	<150
MW-6	**3/25/2009**	--	--	ND	**1800**	<10	--	<10	<30
MW-6	**6/25/2009**	--	--	ND	**1600**	11	--	<10	<30
MW-6	**9/16/2009**	--	--	ND	**730**	7.5	--	<5.0	<15
MW-6	**12/7/2009**	--	--	ND	**310**	2.2	--	<2.0	<6
MW-6	**3/30/2010**	--	--	1.4	**34**	<1.0	--	<1.0	<3.0
MW-6	**6/24/2010**	--	--	1.1	**13**	<1.0	--	<1.0	<3.0
MW-6	**9/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-6	**12/27/2010**	--	--	ND	**1.7**	1.4	--	<1.0	<3.0
MW-6	**3/24/2011**	--	--	2.4	<1.0	<1.0	--	<1.0	<3.0
MW-6	**6/23/2011**	--	--	1.1	<1.0	<1.0	--	<1.0	<3.0
MW-6	**8/15/2011**	--	--	<1.0	**55**	<1.0	--	<1.0	<3.0
MW-6	**9/1/2011**	--	--	<1.0	**110**	<1.0	--	<1.0	<3.0
MW-6	**9/13/2011**	--	--	<1.0	**130**	<1.0	--	<1.0	<3.0
MW-6	**9/27/2011**	--	--	1.4	**120**	<1.0	--	<1.0	<3.0
MW-6	**10/11/2011**	--	--	<1.0	**92**	<1.0	--	<1.0	<3.0
MW-6	**12/19/2011**	--	--	<1.0	**92**	<1.0	--	<1.0	<3.0
MW-6	**3/26/2012**	--	--	<1.0	<1.0	<1.0	--	<1.0	<3.0
MW-6	**7/17/2012**	--	--	<1.0	<1.0	<1.0	--	<1.0	<3.0
MW-6	**9/26/2012**	--	--	<1.0	**1.7**	<1.0	--	<1.0	<3.0
MW-6	**12/17/2012**	--	--	<1.0	<1.0	<1.0	--	<1.0	<3.0
MW-7	**5/31/2007**	--	750	85	**4700**	130	**19**	**2900**	750
MW-7	**7/11/2007**	--	850	**141**	**4600**	**180**	--	**3100**	**1000**
MW-7	**8/10/2007**	--	1100	**123**	**3500**	**140**	--	**1800**	750
MW-7	**12/5/2007**	--	--	51	**3800**	**200**	<100	88	570
MW-7	**6/23/2011**	--	--	**870**	**410**	**230**	--	160	790
MW-7	**8/15/2011**	--	--	**124**	**290**	**280**	--	28	270
MW-7	**9/1/2011**	--	--	**191**	**350**	110	--	30	330
MW-7	**9/13/2011**	--	--	**214**	**410**	120	--	35	380
MW-7	**9/27/2011**	--	--	**214**	**420**	120	--	25	370
MW-7	**10/11/2011**	--	--	**249**	**550**	**160**	--	19	470
MW-7	**12/19/2011**	--	--	**177**	**290**	100	--	<5	260
MW-7	**3/27/2012**	--	--	**182**	**47**	44	--	5.3	110
MW-7D	**8/9/2007**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-7D	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-7D	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-7D	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-7D	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-7D	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-7D	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-8	**5/30/2007**	--	<500	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-8	**8/9/2007**	--	<500	ND	<1.0	<1.0	--	<1.0	<3.0
MW-8	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-8	**3/25/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-8	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-8	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-9	**5/30/2007**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-9	**8/9/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-9	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-9	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-9	**6/10/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-9	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-9	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-9	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-10	**8/10/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-10	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-10	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0

Table 1
Groundwater Analytical Data - TPH and PVOC
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-10	**6/10/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-11	**8/10/2007**	--	1700	**269**	**6400**	**320**	--	**4900**	**1800**
MW-11	**6/24/2010**	--	--	**245**	**2300**	**260**	--	**450**	**1400**
MW-11	**9/27/2010**	--	--	**188**	**2200**	**180**	--	62	**1000**
MW-11	**12/27/2010**	--	--	**256**	**780**	**220**	--	6.8	**1000**
MW-11	**3/24/2011**	--	--	**293**	**4000**	**270**	--	120	**1100**
MW-11	**6/23/2011**	--	--	**271**	**750**	**260**	--	37	**1400**
MW-11	**8/15/2011**	--	--	**251**	**650**	**280**	--	150	**1500**
MW-11	**9/1/2011**	--	--	**290**	**520**	**330**	--	71	**1700**
MW-11	**9/13/2011**	--	--	**369**	**390**	**330**	--	96	**1900**
MW-11	**9/27/2011**	--	--	**382**	**330**	**300**	--	29	**1700**
MW-11	**10/11/2011**	--	--	**420**	**300**	**310**	--	12	**1600**
MW-11	**12/19/2011**	--	--	**378**	**150**	**230**	--	6	**1100**
MW-11	**7/17/2012**	--	--	**390**	**140**	**220**	--	17	**1200**
MW-11	**9/26/2012**	--	--	**347**	**110**	**170**	--	2.1	700
MW-11	**12/18/2012**	--	--	**197**	**70**	120	--	1.1	490
MW-12	**8/10/2007**	--	530	**120**	**3600**	130	**22**	**1600**	**1390**
MW-12	**9/13/2007**	--	<460	**161**	**3700**	**200**	--	**300**	970
MW-12	**10/17/2007**	--	480	**194**	**4400**	**230**	--	**500**	**1200**
MW-12	**12/6/2007**	--	--	**101**	**2400**	**150**	<100	**230**	610
MW-12	**3/26/2008**	--	--	23	**1400**	68	--	170	170
MW-12	**6/12/2008**	--	--	13.7	**230**	14	--	87	48
MW-12	**8/29/2008**	--	--	**195**	**2200**	**150**	--	**710**	480
MW-12	**12/4/2008**	--	--	**289**	**2300**	**220**	--	**850**	730
MW-12	**12/7/2009**	--	--	**165**	**310**	83	--	**250**	450
MW-12	**3/30/2010**	--	--	19.1	**19**	7.3	--	3.3	38
MW-12	**6/24/2010**	--	--	9.9	**3.8**	2.0	--	<1.0	19
MW-12	**9/27/2010**	--	--	74	**18**	12	--	2.8	120
MW-12	**12/27/2010**	--	--	81	**19**	13	--	<1.0	91
MW-12	**3/24/2011**	--	--	28.3	**4.8**	3.9	--	<1.0	27
MW-12	**6/23/2011**	--	--	17.3	**6.2**	2.0	--	<1.0	20
MW-12	**8/15/2011**	--	--	50	**30**	6.9	--	<1.0	46
MW-12	**9/1/2011**	--	--	69	**39**	8.3	--	<1.0	62
MW-12	**9/13/2011**	--	--	**111**	**54**	13.0	--	<1.0	88
MW-12	**9/27/2011**	--	--	**125**	**55**	14.0	--	<1.0	93
MW-12	**10/11/2011**	--	--	**97**	**48**	12.0	--	<1.0	77
MW-12	**12/19/2011**	--	--	85	**37**	11.0	--	<1.0	56
MW-12	**3/26/2012**	--	--	39	**13**	6.1	--	<1.0	26
MW-12	**7/17/2012**	--	--	52	**14**	8.8	--	<1.0	30
MW-12	**9/26/2012**	--	--	**100**	**17**	13.0	--	<1.0	53
MW-12	**12/17/2012**	--	--	67	**11**	8.9	--	<1.0	35
MW-13	**8/9/2007**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-13	**9/13/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-13	**10/17/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-13	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-13	**1/15/2008**	--	--	ND	**1.3**	<1.0	<5.0	<1.0	<3.0
MW-13	**2/20/2008**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-13	**3/25/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-13	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-13	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-13	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**8/9/2007**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-14	**9/13/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**10/17/2007**	--	<460	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-14	**1/15/2008**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-14	**2/20/2008**	--	--	ND	**2**	<1.0	<5.0	<1.0	<3.0
MW-14	**3/25/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**6/10/2008**	--	--	ND	**95**	4.5	--	<1.0	18
MW-14	**7/24/2008**	--	--	ND	**150**	7.4	--	<1.0	41
MW-14	**8/28/2008**	--	--	1.3	**120**	4.6	--	<1.0	32
MW-14	**12/3/2008**	--	--	ND	**42**	<1.0	--	<1.0	<3.0
MW-14	**3/25/2009**	--	--	1.1	**4.8**	<1.0	--	<1.0	<3.0
MW-14	**6/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**9/16/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**9/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**12/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**3/24/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-14	**6/23/2011**	--	--	ND	<1.0	<1.0		<1.0	<3.0
MW-14	**12/19/2011**	--	--	ND	<1.0	<1.0		<1.0	<3.0
MW-14	**3/26/2012**	--	--	ND	<1.0	<1.0		<1.0	<3.0

Table 1
Groundwater Analytical Data - TPH and PVOC
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-14	**7/17/2012**	--	--	ND	<1.0	<1.0		<1.0	<3.0
MW-14	**9/26/2012**	--	--	ND	<1.0	<1.0		<1.0	<3.0
MW-14	**12/17/2012**	--	--	ND	<1.0	<1.0		<1.0	<3.0
MW-15	**10/18/2007**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	ND
MW-15	**12/4/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-15	**1/15/2008**	--	--	ND	**330**	<1.0	<5.0	<1.0	7.5
MW-15	**2/20/2008**	--	--	ND	**1600**	<10	6.1	<10	<30
MW-15	**3/12/2008**	--	<460	ND	**1800**	<10	<50	<10	<30
MW-15	**3/20/2008**	--	<460	11	**2200**	<10	<50	<10	<30
MW-15	**3/26/2008**	--	--	ND	**2500**	12	--	<10	<30
MW-15	**5/4/2008**	--	--	ND	**140**	<1.0	--	<1.0	<3.0
MW-15	**6/12/2008**	--	--	ND	**140**	<1.0	--	<1.0	<3.0
MW-15	**8/29/2008**	--	--	3.0	<1.0	<1.0	--	<1.0	<3.0
MW-15	**12/3/2008**	--	--	1.5	<1.0	<1.0	--	<1.0	<3.0
MW-15	**3/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**5/19/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**6/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**9/16/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**12/7/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**6/24/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**9/27/2010**	--	--	ND	**2.5**	<1.0	--	<1.0	<3.0
MW-15	**12/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**3/24/2011**	--	--	ND	**1.9**	<1.0	--	<1.0	<3.0
MW-15	**6/23/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**8/15/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**9/1/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**9/13/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**9/27/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**10/11/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**11/7/2011**	--	--	ND	**1.2**	<1.0	--	<1.0	<3.0
MW-15	**12/19/2011**	--	--	ND	**2.2**	<1.0	--	<1.0	<3.0
MW-15	**3/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**7/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**9/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15	**12/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15D	**3/25/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-15D	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15D	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15D	**3/29/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-15D	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**10/18/2007**	--	490	75	**3100**	76	**11**	19 *	580
MW-16	**12/6/2007**	--	--	44	**2700**	95	<100	<20	460
MW-16	**1/15/2008**	--	--	43	**4200**	**160**	<50	<10	350
MW-16	**2/20/2008**	--	--	16.1	**4900**	**180**	**34**	5.4	450
MW-16	**3/12/2008**	--	<500	35	**4300**	70	<100	<20	390
MW-16	**3/20/2008**	--	<460	ND	**4300**	53	<120	<25	390
MW-16	**3/26/2008**	--	--	ND	**3600**	30	--	<20	300
MW-16	**5/4/2008**	--	--	ND	**2700**	<5.0	--	<5.0	250
MW-16	**6/12/2008**	--	--	2.1	**1100**	2.3	--	3.4	61
MW-16	**8/29/2008**	--	--	ND	**2000**	14	--	11	47
MW-16	**12/4/2008**	--	--	ND	**2400 ***	<20	--	<20	<60
MW-16	**3/25/2009**	--	--	1.8	**200**	<1.0	--	<1.0	<3.0
MW-16	**6/24/2009**	--	--	2.4	**43**	<1.0	--	<1.0	<3.0
MW-16	**9/16/2009**	--	--	1.2	**32**	2.7	--	<1.0	<3.0
MW-16	**12/7/2009**	--	--	ND	**3.1**	<1.0	--	<1.0	<3.0
MW-16	**3/30/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**6/24/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**9/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**12/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**3/24/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**6/23/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**8/15/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**9/13/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**10/11/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**3/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**7/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**9/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-16	**12/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**10/18/2007**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	ND

Table 1
Groundwater Analytical Data - TPH and PVOC
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-17	**12/4/2007**	--	--	ND	**27**	1.1	<5.0	<1.0	4.9
MW-17	**1/15/2008**	--	--	5	**200**	5.4	<5.0	<1.0	33
MW-17	**2/20/2008**	--	--	4.5	**760**	14	<5.0	<1.0	48
MW-17	**3/11/2008**	--	<460	1.7	**730**	21	<5.0	<1.0	50
MW-17	**3/20/2008**	--	<460	ND	**420**	13	<25	<5.0	30
MW-17	**3/26/2008**	--	--	ND	**29**	1.1	--	<1.0	<3.0
MW-17	**4/9/2008**	--	--	ND	**950**	2.1	--	<1.0	42
MW-17	**4/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**5/4/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**6/12/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**8/29/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**3/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**5/19/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**6/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**9/16/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**12/7/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**3/30/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**6/24/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**9/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**12/27/2010**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**8/15/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**9/27/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**10/11/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-17	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-18	**11/1/2007**	--	<460	ND	<1.0 h	<1.0 h	--	<1.0 h	<3.0 h
MW-18	**12/5/2007**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-18	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-18	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-18	**3/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-18	**6/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-18	**9/16/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-19	**2/26/2008**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-19	**3/11/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-19	**3/20/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-19	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-19	**4/9/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-19	**4/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-19	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-19	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-19	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-20	**2/29/2008**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-20	**3/11/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-20	**3/20/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-20	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**2/27/2008**	--	--	ND	**1.7**	<1.0	<5.0	<1.0	<3.0
MW-21	**3/12/2008**	--	<460	ND	**10**	<1.0	<5.0	<1.0	<3.0
MW-21	**3/20/2008**	--	<460	ND	**8.2**	<1.0	<5.0	<1.0	<3.0
MW-21	**3/26/2008**	--	--	ND	**8**	<1.0	--	<1.0	<3.0
MW-21	**6/12/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**8/29/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**8/15/2011**	--	--	ND	**4.3**	<1.0	--	<1.0	<3.0
MW-21	**9/13/2011**	--	--	ND	**1.2**	<1.0	--	<1.0	<3.0
MW-21	**9/27/2011**	--	--	1.2	**4**	<1.0	--	<1.0	<3.0
MW-21	**10/11/2011**	--	--	ND	**4**	<1.0	--	<1.0	<3.0
MW-21	**11/7/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**3/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**7/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**9/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-21	**12/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-22	**2/28/2008**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-22	**3/11/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-22	**3/20/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-22	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-23	**3/25/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-23	**4/8/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-23	**4/23/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0

Table 1
Groundwater Analytical Data - TPH and PVOC
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Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-23	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-23	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-23	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24	**2/26/2008**	--	--	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-24	**3/11/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-24	**3/19/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-24	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24	**4/8/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24	**4/23/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24	**8/28/2008**	--	--	ND	<1.0	<1.0	--	1.1	<3.0
MW-24	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24D	**3/19/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-24D	**3/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24D	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-24D	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-25	**2/26/2008**	--	--	ND	**41**	1.2	<5.0	<1.0	5.2
MW-25	**3/12/2008**	--	<500	1.3	**140**	2.9	<5.0	<1.0	17
MW-25	**3/20/2008**	--	<460	1.5	**120**	3.1	<5.0	<1.0	19
MW-25	**3/26/2008**	--	--	ND	**93**	2.4	--	<1.0	14
MW-25	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-25	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-25	**8/29/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**2/28/2008**	<93	--	ND	**26**	<1.0	<5.0	<1.0	<3.0
MW-26	**3/12/2008**	--	<460	ND	**16**	<1.0	<5.0	<1.0	<3.0
MW-26	**3/20/2008**	--	<460	ND	**27**	<1.0	<5.0	<1.0	<3.0
MW-26	**3/26/2008**	--	--	ND	**67**	<1.0	--	<1.0	4.6
MW-26	**5/4/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**6/12/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**8/29/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**12/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**3/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**6/24/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**9/16/2009**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-26	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-27	**2/27/2008**	--	--	3.6	**55**	<1.0	<5.0	<1.0	3.5
MW-27	**3/12/2008**	--	<460	ND	**77**	<1.0	<5.0	<1.0	4.4
MW-27	**3/20/2008**	--	<460	ND	**57**	<1.0	<5.0	<1.0	3.3
MW-27	**3/26/2008**	--	--	ND	**40**	<1.0	--	<1.0	<3.0
MW-27	**6/12/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-27	**8/29/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-27	**11/7/2011**	--	--	ND	**3.5**	<1.0	--	<1.0	<3.0
MW-27	**12/19/2011**	--	--	ND	**1.4**	<1.0	--	<1.0	<3.0
MW-27	**3/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-27	**7/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-28	**3/25/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-28	**4/8/2008**	--	--	ND	**2.2**	<1.0	--	<1.0	<3.0
MW-28	**4/23/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-28	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-28	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-28	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-28	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**2/27/2008**	--	--	ND	**14**	<1.0	<5.0	<1.0	<3.0
MW-29	**3/12/2008**	--	<460	2.6	**150**	4.0	<5.0	<1.0	23
MW-29	**3/19/2008**	--	<460	ND	**2.7**	<1.0	--	<1.0	<3.0
MW-29	**3/26/2008**	--	--	ND	**1.4**	<1.0	--	<1.0	<3.0
MW-29	**4/9/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**4/24/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**8/29/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**3/26/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-29	**7/17/2012**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-30	**3/25/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-30	**4/8/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0

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Rusk County, Wisconsin
(concentrations in ug/L)

Location	Date	Diesel Range Organics	DRO Extended Range C10-C32	Sum of trimethyl-benzenes	Benzene	Ethyl benzene	Naphthalene	Toluene	Xylenes total
WI Public Health Groundwater Preventive Action Limit	**Bold**	--	--	96 c	0.5	140	8	200	1000
WI Public Health Groundwater Enforcement Standards	Underline	--	--	480 c	5	700	40	1000	10000 (4)
MW-30	**4/23/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-30	**5/3/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-30	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-30	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-30	**12/19/2011**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-31	**3/25/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-31	**6/10/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-31	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-32	**3/25/2008**	--	<460	ND	<1.0	<1.0	<5.0	<1.0	<3.0
MW-32	**6/11/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-32	**8/28/2008**	--	--	ND	<1.0	<1.0	--	<1.0	<3.0
MW-33	**11/3/2008**	--	--	83	**3900**	69	--	**240**	310
MW-33	**12/4/2008**	--	--	20	**4600**	<20	--	<20	200
MW-33	**3/25/2009**	--	--	15	**2200**	13	--	22	51
MW-33	**6/25/2009**	--	--	28	**2500**	40	--	44	62
MW-33	**9/16/2009**	--	--	68	**2500**	73	--	53	91
MW-33	**12/8/2009**	--	--	31	**1900**	69	--	99	94
MW-33	**3/30/2010**	--	--	16.7	**900**	30	--	46	34
MW-33	**6/24/2010**	--	--	22	**890**	27	--	23	59
MW-33	**9/27/2010**	--	--	41	**1000**	61	--	7.7	40
MW-33	**12/27/2010**	--	--	67	**840**	70	--	21	59
MW-33	**3/24/2011**	--	--	15.3	**500**	59	--	<5.0	<15
MW-33	**6/23/2011**	--	--	20.9	**300**	44	--	<1.0	11
MW-33	**12/19/2011**	--	--	32	**130**	51	--	<1.0	21
MW-33	**3/26/2012**	--	--	34	**100**	53	--	<1.0	16
MW-33	**7/17/2012**	--	--	22.9	**50**	33	--	<1.0	7
MW-33	**9/26/2012**	--	--	27.7	**46**	49	--	<1.0	11
MW-33	**12/18/2012**	--	--	24.1	**38**	43	--	<1.0	11
MW-34	**11/3/2008**	--	--	12.5	**1400**	13	--	26	79
MW-34	**12/4/2008**	--	--	14	**2600**	13	--	18	110
MW-34	**3/25/2009**	--	--	ND	**1300**	5.4	--	<5.0	<15
MW-34	**6/25/2009**	--	--	10	**1500**	38	--	<10	30
MW-34	**9/16/2009**	--	--	29	**1300**	56	--	<5.0	45
MW-34	**12/8/2009**	--	--	14	**900**	54	--	39	38
MW-34	**3/30/2010**	--	--	9.4	**510**	21	--	6.6	13
MW-34	**6/24/2010**	--	--	11.4	**560**	26	--	8.0	<15
MW-34	**9/27/2010**	--	--	21	**530**	42	--	8.2	32
MW-34	**12/27/2010**	--	--	31	**490**	52	--	6.0	47
MW-34	**3/24/2011**	--	--	60	**790**	79	--	<5.0	23
MW-34	**6/23/2011**	--	--	4.3	<1.0	<1.0	--	<1.0	<3.0
MW-34	**8/15/2011**	--	--	13.6	**290**	40	--	<2.0	<6.0
MW-34	**9/1/2011**	--	--	14.9	**270**	47	--	<1.0	3.7
MW-34	**9/13/2011**	--	--	18.1	**240**	49	--	<1.0	5.7
MW-34	**10/11/2011**	--	--	10.4	**160**	30	--	<1.0	3.3
MW-34	**12/19/2011**	--	--	12.6	**110**	34	--	<1.0	8.5
MW-34	**3/26/2012**	--	--	8.7	**57**	26	--	<1.0	4
MW-34	**7/17/2012**	--	--	7.7	**50**	33	--	<1.0	7
MW-34	**9/26/2012**	--	--	9.6	**33**	28	--	<1.0	<3.0
MW-34	**12/18/2012**	--	--	6.6	**21**	19	--	<1.0	<3.0

--	No criteria/not analyzed.
*	Estimated value, QA/QC criteria not met.
ND	Not detected.
(4)	Xylene includes meta-, ortho-, and para-xylene combined. The preventive action limit has been set at a concentration that is intended to address taste and odor concerns associated with this substance.
c	The listed criteria is for 1,2,4- and 1,3,5- Trimethylbenzenes combined.
h	EPA recommended sample preservation, extraction or analysis holding time was exceeded, or temperature exceedance, results can be considered potentially biased low.

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-1	3/24/2007	1226.68	1227.69	1190.69	1180.69	41.09			1186.60	
MW-1	4/2/2007	1226.68	1227.69	1190.69	1180.69	40.57			1187.12	
MW-1	4/17/2007	1226.68	1227.69	1190.69	1180.69	40.86			1186.83	
MW-1	5/29/2007	1226.68	1227.69	1190.69	1180.69	40.96			1186.73	
MW-1	6/12/2007	1226.68	1227.69	1190.69	1180.69	40.96			1186.73	
MW-1	6/21/2007	1226.68	1227.69	1190.69	1180.69	41.05			1186.64	
MW-1	7/2/2007	1226.68	1227.69	1190.69	1180.69	41.20			1186.49	
MW-1	7/11/2007	1226.68	1227.69	1190.69	1180.69	41.22			1186.47	
MW-1	7/24/2007	1226.68	1227.69	1190.69	1180.69	41.26			1186.43	
MW-1	8/2/2007	1226.68	1227.69	1190.69	1180.69	41.27			1186.42	
MW-1	8/9/2007	1226.68	1227.69	1190.69	1180.69	41.33			1186.36	
MW-1	10/17/2007	1226.68	1227.69	1190.69	1180.69	40.86			1186.83	
MW-1	11/9/2007	1226.68	1227.69	1190.69	1180.69	40.93			1186.76	
MW-1	12/3/2007	1226.68	1227.69	1190.69	1180.69	40.96			1186.73	
MW-1	1/14/2008	1226.68	1227.69	1190.69	1180.69	41.30			1186.39	
MW-1	2/19/2008	1226.68	1227.69	1190.69	1180.69	41.45			1186.24	
MW-1	03/24/2008	1226.68	1227.69	1190.69	1180.69	41.50			1186.19	
MW-1	04/01/2008	1226.68	1227.69	1190.69	1180.69	41.43			1186.26	
MW-1	06/10/2008	1226.68	1227.69	1190.69	1180.69	40.41			1187.28	
MW-1	Abandoned									
MW-2	3/24/2007	1225.61	1227.77	1191.77	1181.77	41.35			1186.42	
MW-2	4/2/2007	1225.61	1227.77	1191.77	1181.77	40.79			1186.98	
MW-2	4/17/2007	1225.61	1227.77	1191.77	1181.77	41.12			1186.65	
MW-2	5/29/2007	1225.61	1227.77	1191.77	1181.77	41.21			1186.56	
MW-2	6/12/2007	1225.61	1227.77	1191.77	1181.77	41.25			1186.52	
MW-2	6/21/2007	1225.61	1227.77	1191.77	1181.77	41.35			1186.42	
MW-2	7/2/2007	1225.61	1227.77	1191.77	1181.77	41.47			1186.30	
MW-2	7/11/2007	1225.61	1227.77	1191.77	1181.77	41.45			1186.32	
MW-2	7/24/2007	1225.61	1227.77	1191.77	1181.77	41.54			1186.23	
MW-2	8/2/2007	1225.61	1227.77	1191.77	1181.77	41.53			1186.24	
MW-2	8/9/2007	1225.61	1227.77	1191.77	1181.77	41.60			1186.17	
MW-2	10/17/2007	1225.61	1227.77	1191.77	1181.77	41.11			1186.66	
MW-2	11/9/2007	1225.61	1227.77	1191.77	1181.77	41.20			1186.57	
MW-2	12/3/2007	1225.61	1227.77	1191.77	1181.77	41.22			1186.55	
MW-2	1/14/2008	1225.61	1227.77	1191.77	1181.77	41.57			1186.20	
MW-2	2/19/2008	1225.61	1227.77	1191.77	1181.77	41.72			1186.05	
MW-2	03/19/2008	1225.61	1227.77	1191.77	1181.77	41.80			1185.97	
MW-2	03/24/2008	1225.61	1227.77	1191.77	1181.77	41.70			1186.07	
MW-2	04/01/2008	1225.61	1227.77	1191.77	1181.77	41.69			1186.08	
MW-2	06/10/2008	1225.61	1227.77	1191.77	1181.77	40.69			1187.08	
MW-2	08/28/2008	1225.61	1227.77	1191.77	1181.77	41.02			1186.75	
MW-2	12/03/2008	1225.61	1227.77	1191.77	1181.77	40.83			1186.94	
MW-2	03/25/2009	1225.61	1227.77	1191.77	1181.77	41.04			1186.73	
MW-2	03/31/2009	1225.61	1227.77	1191.77	1181.77	41.01			1186.76	
MW-2	04/08/2009	1225.61	1227.77	1191.77	1181.77	41.11			1186.66	
MW-2	04/13/2009	1225.61	1227.77	1191.77	1181.77	41.27			1186.50	
MW-2	05/12/2009	1225.61	1227.77	1191.77	1181.77	41.14			1186.63	
MW-2	05/19/2009	1225.61	1227.77	1191.77	1181.77	41.40			1186.37	
MW-2	6/3/2009	1225.61	1227.77	1191.77	1181.77	41.56			1186.21	
MW-2	6/10/2009	1225.61	1227.77	1191.77	1181.77	41.58			1186.19	
MW-2	6/16/2009	1225.61	1227.77	1191.77	1181.77	41.65			1186.12	
MW-2	6/24/2009	1225.61	1227.77	1191.77	1181.77	41.65			1186.12	
MW-2	6/30/2009	1225.61	1227.77	1191.77	1181.77	41.73			1186.04	
MW-2	7/8/2009	1225.61	1227.77	1191.77	1181.77	41.76			1186.01	
MW-2	7/20/2009	1225.61	1227.77	1191.77	1181.77	41.82			1185.95	
MW-2	8/4/2009	1225.61	1227.77	1191.77	1181.77	41.88			1185.89	
MW-2	8/18/2009	1225.61	1227.77	1191.77	1181.77	41.97			1185.80	
MW-2	9/1/2009	1225.61	1227.77	1191.77	1181.77	41.98			1185.79	
MW-2	9/15/2009	1225.61	1227.77	1191.77	1181.77	42.05			1185.72	
MW-2	9/29/2009	1225.61	1227.77	1191.77	1181.77	42.03			1185.74	
MW-2	10/15/2009	1225.61	1227.77	1191.77	1181.77	40.25	39.09	1.16	1187.52	1188.68
MW-2	10/28/2009	1225.61	1227.77	1191.77	1181.77	41.78	41.76	0.02	1185.99	1186.01
MW-2	11/11/2009	1225.61	1227.77	1191.77	1181.77	40.82			1186.95	
MW-2	12/1/2009	1225.61	1227.77	1191.77	1181.77	41.98			1185.79	
MW-2	12/7/2009	1225.61	1227.77	1191.77	1181.77	42.03	42.00	0.03	1185.74	1185.77
MW-2	12/22/2009	1225.61	1227.77	1191.77	1181.77	42.04			1185.73	
MW-2	1/5/2010	1225.61	1227.77	1191.77	1181.77	41.99			1185.78	
MW-2	1/19/2010	1225.61	1227.77	1191.77	1181.77	42.04			1185.73	
MW-2	2/3/2010	1225.61	1227.77	1191.77	1181.77	42.03			1185.74	
MW-2	2/16/2010	1225.61	1227.77	1191.77	1181.77	42.05			1185.72	
MW-2	3/3/2010	1225.61	1227.77	1191.77	1181.77	42.06			1185.71	
MW-2	3/16/2010	1225.61	1227.77	1191.77	1181.77	41.32			1186.45	
MW-2	3/30/2010	1225.61	1227.77	1191.77	1181.77	41.55			1186.22	
MW-2	4/13/2010	1225.61	1227.77	1191.77	1181.77	41.79			1185.98	
MW-2	4/27/2010	1225.61	1227.77	1191.77	1181.77	41.74			1186.03	
MW-2	5/12/2010	1225.61	1227.77	1191.77	1181.77	41.72			1186.05	
MW-2	5/26/2010	1225.61	1227.77	1191.77	1181.77	41.68			1186.09	
MW-2	6/8/2010	1225.61	1227.77	1191.77	1181.77	41.72			1186.05	
MW-2	6/24/2010	1225.61	1227.77	1191.77	1181.77	41.35			1186.42	
MW-2	7/7/2010	1225.61	1227.77	1191.77	1181.77	41.40			1186.37	
MW-2	7/20/2010	1225.61	1227.77	1191.77	1181.77	41.10			1186.67	
MW-2	8/3/2010	1225.61	1227.77	1191.77	1181.77	41.15			1186.62	
MW-2	8/16/2010	1225.61	1227.77	1191.77	1181.77	40.80			1186.97	
MW-2	8/31/2010	1225.61	1227.77	1191.77	1181.77	41.00			1186.77	
MW-2	9/14/2010	1225.61	1227.77	1191.77	1181.77	41.00			1186.77	
MW-2	9/27/2010	1225.61	1227.77	1191.77	1181.77	40.40			1187.37	
MW-2	10/12/2010	1225.61	1227.77	1191.77	1181.77	40.65			1187.12	
MW-2	10/25/2010	1225.61	1227.77	1191.77	1181.77	40.61			1187.16	
MW-2	11/9/2010	1225.61	1227.77	1191.77	1181.77	40.39			1187.38	
MW-2	11/30/2010	1225.61	1227.77	1191.77	1181.77	40.37			1187.40	
MW-2	12/16/2010	1225.61	1227.77	1191.77	1181.77	40.37			1187.40	
MW-2	12/28/2010	1225.61	1227.77	1191.77	1181.77	40.44			1187.33	
MW-2	1/25/2011	1225.61	1227.77	1191.77	1181.77	40.58			1187.19	
MW-2	2/8/2011	1225.61	1227.77	1191.77	1181.77	40.62			1187.15	
MW-2	2/21/2011	1225.61	1227.77	1191.77	1181.77	40.65			1187.12	
MW-2	3/8/2011	1225.61	1227.77	1191.77	1181.77	40.76			1187.01	
MW-2	3/24/2011	1225.61	1227.77	1191.77	1181.77	40.34			1187.43	
MW-2	4/4/2011	1225.61	1227.77	1191.77	1181.77	40.40			1187.37	
MW-2	4/26/2011	1225.61	1227.77	1191.77	1181.77	40.10			1187.67	
MW-2	5/10/2011	1225.61	1227.77	1191.77	1181.77	39.95			1187.82	
MW-2	5/23/2011	1225.61	1227.77	1191.77	1181.77	39.98			1187.79	
MW-2	6/7/2011	1225.61	1227.77	1191.77	1181.77	39.93			1187.84	
MW-2	6/23/2011	1225.61	1227.77	1191.77	1181.77	39.89			1187.88	
MW-2	7/7/2011	1225.61	1227.77	1191.77	1181.77	40.13			1187.64	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-2	7/28/2011	1225.61	1227.77	1191.77	1181.77	40.21			1187.56	
MW-2	8/15/2011	1225.61	1227.77	1191.77	1181.77	40.03			1187.74	
MW-2	10/11/2011	1225.61	1227.77	1191.77	1181.77	40.31			1187.46	
MW-2	10/24/2011	1225.61	1227.77	1191.77	1181.77	40.32			1187.45	
MW-2	11/7/2011	1225.61	1227.77	1191.77	1181.77	40.30			1187.47	
MW-2	12/19/2011	1225.61	1227.77	1191.77	1181.77	40.45			1187.32	
MW-2	1/10/2012	1225.61	1227.77	1191.77	1181.77	40.49			1187.28	
MW-2	1/24/2012	1225.61	1227.77	1191.77	1181.77	40.78			1186.99	
MW-2	2/6/2012	1225.61	1227.77	1191.77	1181.77	40.84			1186.93	
MW-2	2/20/2012	1225.61	1227.77	1191.77	1181.77	40.93			1186.84	
MW-2	3/6/2012	1225.61	1227.77	1191.77	1181.77	40.99			1186.78	
MW-2	3/26/2012	1225.61	1227.77	1191.77	1181.77	40.40			1187.37	
MW-2	4/10/2012	1225.61	1227.77	1191.77	1181.77	40.69			1187.08	
MW-2	4/23/2012	1225.61	1227.77	1191.77	1181.77	40.50			1187.27	
MW-2	5/7/2012	1225.61	1227.77	1191.77	1181.77	40.44			1187.33	
MW-2	5/22/2012	1225.61	1227.77	1191.77	1181.77	40.67			1187.10	
MW-2	6/5/2012	1225.61	1227.77	1191.77	1181.77	40.64			1187.13	
MW-2	6/20/2012	1225.61	1227.77	1191.77	1181.77	40.62			1187.15	
MW-2	7/18/2012	1225.61	1227.77	1191.77	1181.77	40.85			1186.92	
MW-2	7/30/2012	1225.61	1227.77	1191.77	1181.77	40.79			1186.98	
MW-2	8/12/2012	1225.61	1227.77	1191.77	1181.77	40.99			1186.78	
MW-2	8/29/2012	1225.61	1227.77	1191.77	1181.77	41.08			1186.69	
MW-2	9/12/2012	1225.61	1227.77	1191.77	1181.77	41.10			1186.67	
MW-2	9/25/2012	1225.61	1227.77	1191.77	1181.77	41.08			1186.69	
MW-2	10/16/2012	1225.61	1227.77	1191.77	1181.77	40.96			1186.81	
MW-2	10/30/2012	1225.61	1227.77	1191.77	1181.77	40.83			1186.94	
MW-2	11/12/2012	1225.61	1227.77	1191.77	1181.77	40.88			1186.89	
MW-2	12/4/2012	1225.61	1227.77	1191.77	1181.77	40.93			1186.84	
MW-2	12/17/2012	1225.61	1227.77	1191.77	1181.77	40.92			1186.85	
MW-2	1/2/2013	1225.61	1227.77	1191.77	1181.77	41.02			1186.75	
MW-3	3/24/2007	1224.58	1226.74	1189.74	1179.74	40.31			1186.43	
MW-3	4/2/2007	1224.58	1226.74	1189.74	1179.74	39.77			1186.97	
MW-3	4/17/2007	1224.58	1226.74	1189.74	1179.74	40.04			1186.70	
MW-3	5/29/2007	1224.58	1226.74	1189.74	1179.74	40.16			1186.58	
MW-3	6/12/2007	1224.58	1226.74	1189.74	1179.74	40.15			1186.59	
MW-3	6/21/2007	1224.58	1226.74	1189.74	1179.74	40.23			1186.51	
MW-3	7/2/2007	1224.58	1226.74	1189.74	1179.74	40.38			1186.36	
MW-3	7/11/2007	1224.58	1226.74	1189.74	1179.74	40.40			1186.34	
MW-3	7/24/2007	1224.58	1226.74	1189.74	1179.74	40.43			1186.31	
MW-3	8/2/2007	1224.58	1226.74	1189.74	1179.74	40.45			1186.29	
MW-3	8/9/2007	1224.58	1226.74	1189.74	1179.74	40.51			1186.23	
MW-3	10/17/2007	1224.58	1226.74	1189.74	1179.74	39.98			1186.76	
MW-3	11/9/2007	1224.58	1226.74	1189.74	1179.74	40.11			1186.63	
MW-3	12/3/2007	1224.58	1226.74	1189.74	1179.74	40.14			1186.60	
MW-3	1/14/2008	1224.58	1226.74	1189.74	1179.74	40.49			1186.25	
MW-3	2/19/2008	1224.58	1226.74	1189.74	1179.74	40.63			1186.11	
MW-3	03/11/2008	1224.58	1226.74	1189.74	1179.74	40.70			1186.04	
MW-3	03/19/2008	1224.58	1226.74	1189.74	1179.74	40.73			1186.01	
MW-3	03/24/2008	1224.58	1226.74	1189.74	1179.74	40.70			1186.04	
MW-3	04/01/2008	1224.58	1226.74	1189.74	1179.74	40.61			1186.13	
MW-3	06/10/2008	1224.58	1226.74	1189.74	1179.74	39.60			1187.14	
MW-3	08/28/2008	1224.58	1226.74	1189.74	1179.74	39.90			1186.84	
MW-3	12/03/2008	1224.58	1226.74	1189.74	1179.74	39.74			1187.00	
MW-3	03/25/2009	1224.58	1226.74	1189.74	1179.74	39.99			1186.75	
MW-3	03/31/2009	1224.58	1226.74	1189.74	1179.74	39.97			1186.77	
MW-3	04/08/2009	1224.58	1226.74	1189.74	1179.74	40.10			1186.64	
MW-3	04/13/2009	1224.58	1226.74	1189.74	1179.74	40.35			1186.39	
MW-3	05/12/2009	1224.58	1226.74	1189.74	1179.74	40.13			1186.61	
MW-3	05/19/2009	1224.58	1226.74	1189.74	1179.74	40.32			1186.42	
MW-3	6/3/2009	1224.58	1226.74	1189.74	1179.74	40.49			1186.25	
MW-3	6/10/2009	1224.58	1226.74	1189.74	1179.74	40.44			1186.30	
MW-3	6/16/2009	1224.58	1226.74	1189.74	1179.74	40.57			1186.17	
MW-3	6/24/2009	1224.58	1226.74	1189.74	1179.74	40.57			1186.17	
MW-3	6/30/2009	1224.58	1226.74	1189.74	1179.74	40.68			1186.06	
MW-3	7/8/2009	1224.58	1226.74	1189.74	1179.74	40.75			1185.99	
MW-3	07/20/2009	1224.58	1226.74	1189.74	1179.74	40.81			1185.93	
MW-3	08/04/2009	1224.58	1226.74	1189.74	1179.74	40.76			1185.98	
MW-3	8/18/2009	1224.58	1226.74	1189.74	1179.74	40.84			1185.90	
MW-3	9/1/2009	1224.58	1226.74	1189.74	1179.74	40.83			1185.91	
MW-3	9/15/2009	1224.58	1226.74	1189.74	1179.74	40.97			1185.77	
MW-3	9/29/2009	1224.58	1226.74	1189.74	1179.74	40.98			1185.76	
MW-3	10/28/2009	1224.58	1226.74	1189.74	1179.74	40.71			1186.03	
MW-3	11/11/2009	1224.58	1226.74	1189.74	1179.74	39.72			1187.02	
MW-3	12/1/2009	1224.58	1226.74	1189.74	1179.74	39.95			1186.79	
MW-3	12/7/2009	1224.58	1226.74	1189.74	1179.74	40.97			1185.77	
MW-3	12/22/2009	1224.58	1226.74	1189.74	1179.74	40.99			1185.75	
MW-3	1/5/2010	1224.58	1226.74	1189.74	1179.74	40.94			1185.80	
MW-3	1/19/2010	1224.58	1226.74	1189.74	1179.74	41.00			1185.74	
MW-3	2/3/2010	1224.58	1226.74	1189.74	1179.74	40.98			1185.76	
MW-3	2/16/2010	1224.58	1226.74	1189.74	1179.74	40.97			1185.77	
MW-3	3/3/2010	1224.58	1226.74	1189.74	1179.74	41.00			1185.74	
MW-3	3/16/2010	1224.58	1226.74	1189.74	1179.74	40.26			1186.48	
MW-3	3/29/2010	1224.58	1226.74	1189.74	1179.74	40.43			1186.31	
MW-3	4/13/2010	1224.58	1226.74	1189.74	1179.74	40.68			1186.06	
MW-3	4/27/2010	1224.58	1226.74	1189.74	1179.74	40.65			1186.09	
MW-3	5/12/2010	1224.58	1226.74	1189.74	1179.74	40.65			1186.09	
MW-3	5/26/2010	1224.58	1226.74	1189.74	1179.74	40.61			1186.13	
MW-3	6/8/2010	1224.58	1226.74	1189.74	1179.74	40.70			1186.04	
MW-3	6/24/2010	1224.58	1226.74	1189.74	1179.74	40.28			1186.46	
MW-3	7/7/2010	1224.58	1226.74	1189.74	1179.74	40.32			1186.42	
MW-3	7/20/2010	1224.58	1226.74	1189.74	1179.74	40.40			1186.34	
MW-3	8/3/2010	1224.58	1226.74	1189.74	1179.74	40.45			1186.29	
MW-3	8/16/2010	1224.58	1226.74	1189.74	1179.74	40.20			1186.54	
MW-3	8/31/2010	1224.58	1226.74	1189.74	1179.74	40.45			1186.29	
MW-3	9/14/2010	1224.58	1226.74	1189.74	1179.74	40.47			1186.27	
MW-3	9/27/2010	1224.58	1226.74	1189.74	1179.74	39.32			1187.42	
MW-3	10/12/2010	1224.58	1226.74	1189.74	1179.74	39.57			1187.17	
MW-3	10/25/2010	1224.58	1226.74	1189.74	1179.74	38.25			1188.49	
MW-3	11/9/2010	1224.58	1226.74	1189.74	1179.74	38.02			1188.72	
MW-3	11/30/2010	1224.58	1226.74	1189.74	1179.74	38.00			1188.74	
MW-3	12/16/2010	1224.58	1226.74	1189.74	1179.74	39.28			1187.46	
MW-3	12/28/2010	1224.58	1226.74	1189.74	1179.74	39.36			1187.38	
MW-3	1/25/2011	1224.58	1226.74	1189.74	1179.74	39.48			1187.26	
MW-3	2/8/2011	1224.58	1226.74	1189.74	1179.74	39.57			1187.17	
MW-3	2/21/2011	1224.58	1226.74	1189.74	1179.74	39.60			1187.14	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-3	3/8/2011	1224.58	1226.74	1189.74	1179.74	39.68			1187.06	
MW-3	3/24/2011	1224.58	1226.74	1189.74	1179.74	39.29			1187.45	
MW-3	4/4/2011	1224.58	1226.74	1189.74	1179.74	39.30			1187.44	
MW-3	5/10/2011	1224.58	1226.74	1189.74	1179.74	38.85			1187.89	
MW-3	5/23/2011	1224.58	1226.74	1189.74	1179.74	38.22			1188.52	
MW-3	6/7/2011	1224.58	1226.74	1189.74	1179.74	38.80			1187.94	
MW-3	6/23/2011	1224.58	1226.74	1189.74	1179.74	38.76			1187.98	
MW-3	7/7/2011	1224.58	1226.74	1189.74	1179.74	39.02			1187.72	
MW-3	7/28/2011	1224.58	1226.74	1189.74	1179.74	39.13			1187.61	
MW-3	8/15/2011	1224.58	1226.74	1189.74	1179.74	39.25			1187.49	
MW-3	10/11/2011	1224.58	1226.74	1189.74	1179.74	39.22			1187.52	
MW-3	12/19/2011	1224.58	1226.74	1189.74	1179.74	39.50			1187.24	
MW-3	1/10/2012	1224.58	1226.74	1189.74	1179.74	39.53			1187.21	
MW-3	1/24/2012	1224.58	1226.74	1189.74	1179.74	39.69			1187.05	
MW-3	2/6/2012	1224.58	1226.74	1189.74	1179.74	39.78			1186.96	
MW-3	2/20/2012	1224.58	1226.74	1189.74	1179.74	39.88			1186.86	
MW-3	3/6/2012	1224.58	1226.74	1189.74	1179.74	39.82			1186.92	
MW-3	3/26/2012	1224.58	1226.74	1189.74	1179.74	39.26			1187.48	
MW-3	4/10/2012	1224.58	1226.74	1189.74	1179.74	39.55			1187.19	
MW-3	4/23/2012	1224.58	1226.74	1189.74	1179.74	39.35			1187.39	
MW-3	5/7/2012	1224.58	1226.74	1189.74	1179.74	39.26			1187.48	
MW-3	5/22/2012	1224.58	1226.74	1189.74	1179.74	39.42			1187.32	
MW-3	6/5/2012	1224.58	1226.74	1189.74	1179.74	39.42			1187.32	
MW-3	6/19/2012	1224.58	1226.74	1189.74	1179.74	39.50			1187.24	
MW-3	7/18/2012	1224.58	1226.74	1189.74	1179.74	38.74			1188.00	
MW-3	7/30/2012	1224.58	1226.74	1189.74	1179.74	39.75			1186.99	
MW-3	8/12/2012	1224.58	1226.74	1189.74	1179.74	39.86			1186.88	
MW-3	8/29/2012	1224.58	1226.74	1189.74	1179.74	38.64			1188.10	
MW-3	9/12/2012	1224.58	1226.74	1189.74	1179.74	38.65			1188.09	
MW-3	9/25/2012	1224.58	1226.74	1189.74	1179.74	40.00			1186.74	
MW-3	10/16/2012	1224.58	1226.74	1189.74	1179.74	39.79			1186.95	
MW-3	10/30/2012	1224.58	1226.74	1189.74	1179.74	39.75			1186.99	
MW-3	11/12/2012	1224.58	1226.74	1189.74	1179.74	39.78			1186.96	
MW-3	12/4/2012	1224.58	1226.74	1189.74	1179.74	39.84			1186.90	
MW-3	12/17/2012	1224.58	1226.74	1189.74	1179.74	39.83			1186.91	
MW-3	1/2/2013	1224.58	1226.74	1189.74	1179.74	39.88			1186.86	
MW-4	3/24/2007	1222.86	1225.37	1188.37	1178.37	38.68			1186.69	
MW-4	4/2/2007	1222.86	1225.37	1188.37	1178.37	38.17			1187.20	
MW-4	4/17/2007	1222.86	1225.37	1188.37	1178.37	38.44			1186.93	
MW-4	5/29/2007	1222.86	1225.37	1188.37	1178.37	38.55			1186.82	
MW-4	6/12/2007	1222.86	1225.37	1188.37	1178.37	38.52			1186.85	
MW-4	6/21/2007	1222.86	1225.37	1188.37	1178.37	38.65			1186.72	
MW-4	7/2/2007	1222.86	1225.37	1188.37	1178.37	38.81			1186.56	
MW-4	7/11/2007	1222.86	1225.37	1188.37	1178.37	38.79			1186.58	
MW-4	7/24/2007	1222.86	1225.37	1188.37	1178.37	38.85			1186.52	
MW-4	8/2/2007	1222.86	1225.37	1188.37	1178.37	38.85			1186.52	
MW-4	8/9/2007	1222.86	1225.37	1188.37	1178.37	38.92			1186.45	
MW-4	10/17/2007	1222.86	1225.37	1188.37	1178.37	38.44			1186.93	
MW-4	11/9/2007	1222.86	1225.37	1188.37	1178.37	38.51			1186.86	
MW-4	12/3/2007	1222.86	1225.37	1188.37	1178.37	38.54			1186.83	
MW-4	1/14/2008	1222.86	1225.37	1188.37	1178.37	38.85			1186.52	
MW-4	2/19/2008	1222.86	1225.37	1188.37	1178.37	39.03			1186.34	
MW-4	03/24/2008	1222.86	1225.37	1188.37	1178.37	39.11			1186.26	
MW-4	04/01/2008	1222.86	1225.37	1188.37	1178.37	39.05			1186.32	
MW-4	06/10/2008	1222.86	1225.37	1188.37	1178.37	37.99			1187.38	
MW-4	08/28/2008	1222.86	1225.37	1188.37	1178.37	38.27			1187.10	
MW-4	12/03/2008	1222.86	1225.37	1188.37	1178.37	36.16			1189.21	
MW-4	03/25/2009	1222.86	1225.37	1188.37	1178.37	38.41			1186.96	
MW-4	06/24/2009	1222.86	1225.37	1188.37	1178.37	38.96			1186.41	
MW-4	09/15/2009	1222.86	1225.37	1188.37	1178.37	39.37			1186.00	
MW-4	12/7/2009	1222.86	1225.37	1188.37	1178.37	39.35			1186.02	
MW-4	3/29/2010	1222.86	1225.37	1188.37	1178.37	38.84			1186.53	
MW-4	12/28/2010	1222.86	1225.37	1188.37	1178.37	37.69			1187.68	
MW-4	3/24/2011	1222.86	1225.37	1188.37	1178.37	37.70			1187.67	
MW-4	6/23/2011	1222.86	1225.37	1188.37	1178.37	37.18			1188.19	
MW-4	10/11/2011	1222.86	1225.37	1188.37	1178.37	37.56			1187.81	
MW-4	12/19/2011	1222.86	1225.37	1188.37	1178.37	37.85			1187.52	
MW-4	3/26/2012	1222.86	1225.37	1188.37	1178.37	37.62			1187.75	
MW-4	6/19/2012	1222.86	1225.37	1188.37	1178.37	37.86			1187.51	
MW-4	9/25/2012	1222.86	1225.37	1188.37	1178.37	38.38			1186.99	
MW-4	12/17/2012	1222.86	1225.37	1188.37	1178.37	38.21			1187.16	
MW-5	3/24/2007	1224.68	1226.96	1189.96	1179.96	40.69			1186.27	
MW-5	4/2/2007	1224.68	1226.96	1189.96	1179.96	40.11			1186.85	
MW-5	4/17/2007	1224.68	1226.96	1189.96	1179.96	40.38			1186.58	
MW-5	5/29/2007	1224.68	1226.96	1189.96	1179.96	40.49			1186.47	
MW-5	6/12/2007	1224.68	1226.96	1189.96	1179.96	40.51			1186.45	
MW-5	6/21/2007	1224.68	1226.96	1189.96	1179.96	40.60			1186.36	
MW-5	7/2/2007	1224.68	1226.96	1189.96	1179.96	40.76			1186.20	
MW-5	7/11/2007	1224.68	1226.96	1189.96	1179.96	40.75			1186.21	
MW-5	7/24/2007	1224.68	1226.96	1189.96	1179.96	40.82			1186.14	
MW-5	8/2/2007	1224.68	1226.96	1189.96	1179.96	40.80			1186.16	
MW-5	8/9/2007	1224.68	1226.96	1189.96	1179.96	40.87			1186.09	
MW-5	10/17/2007	1224.68	1226.96	1189.96	1179.96	40.34			1186.62	
MW-5	11/9/2007	1224.68	1226.96	1189.96	1179.96	40.47			1186.49	
MW-5	12/3/2007	1224.68	1226.96	1189.96	1179.96	40.50			1186.46	
MW-5	1/14/2008	1224.68	1226.96	1189.96	1179.96	40.85			1186.11	
MW-5	2/19/2008	1224.68	1226.96	1189.96	1179.96	41.00			1185.96	
MW-5	03/24/2008	1224.68	1226.96	1189.96	1179.96	40.99			1185.97	
MW-5	04/01/2008	1224.68	1226.96	1189.96	1179.96	40.96			1186.00	
MW-5	06/10/2008	1224.68	1226.96	1189.96	1179.96	39.96			1187.00	
MW-5	08/28/2008	1224.68	1226.96	1189.96	1179.96	40.30			1186.66	
MW-5	12/03/2008	1224.68	1226.96	1189.96	1179.96	40.12			1186.84	
MW-5	03/25/2009	1224.68	1226.96	1189.96	1179.96	40.52			1186.44	
MW-5	03/31/2009	1224.68	1226.96	1189.96	1179.96	40.48			1186.48	
MW-5	04/08/2009	1224.68	1226.96	1189.96	1179.96	40.45			1186.51	
MW-5	04/13/2009	1224.68	1226.96	1189.96	1179.96	40.66			1186.30	
MW-5	05/12/2009	1224.68	1226.96	1189.96	1179.96	40.49			1186.47	
MW-5	05/19/2009	1224.68	1226.96	1189.96	1179.96	40.66			1186.30	
MW-5	6/3/2009	1224.68	1226.96	1189.96	1179.96	40.85			1186.11	
MW-5	6/10/2009	1224.68	1226.96	1189.96	1179.96	40.85			1186.11	
MW-5	6/16/2009	1224.68	1226.96	1189.96	1179.96	40.93			1186.03	
MW-5	6/24/2009	1224.68	1226.96	1189.96	1179.96	40.94			1186.02	
MW-5	6/30/2009	1224.68	1226.96	1189.96	1179.96	41.00			1185.96	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-5	7/8/2009	1224.68	1226.96	1189.96	1179.96	41.03			1185.93	
MW-5	7/20/2009	1224.68	1226.96	1189.96	1179.96	41.17			1185.79	
MW-5	8/4/2009	1224.68	1226.96	1189.96	1179.96	41.13			1185.83	
MW-5	8/18/2009	1224.68	1226.96	1189.96	1179.96	41.25			1185.71	
MW-5	9/1/2009	1224.68	1226.96	1189.96	1179.96	41.25			1185.71	
MW-5	9/15/2009	1224.68	1226.96	1189.96	1179.96	41.34			1185.62	
MW-5	9/29/2009	1224.68	1226.96	1189.96	1179.96	41.32			1185.64	
MW-5	10/28/2009	1224.68	1226.96	1189.96	1179.96	41.05			1185.91	
MW-5	11/11/2009	1224.68	1226.96	1189.96	1179.96	41.11			1185.85	
MW-5	12/1/2009	1224.68	1226.96	1189.96	1179.96	41.23			1185.73	
MW-5	12/7/2009	1224.68	1226.96	1189.96	1179.96	41.31			1185.65	
MW-5	12/22/2009	1224.68	1226.96	1189.96	1179.96	41.29			1185.67	
MW-5	1/5/2010	1224.68	1226.96	1189.96	1179.96	41.24			1185.72	
MW-5	1/19/2010	1224.68	1226.96	1189.96	1179.96	41.27			1185.69	
MW-5	2/3/2010	1224.68	1226.96	1189.96	1179.96	41.30			1185.66	
MW-5	2/16/2010	1224.68	1226.96	1189.96	1179.96	41.32			1185.64	
MW-5	3/3/2010	1224.68	1226.96	1189.96	1179.96	41.35			1185.61	
MW-5	3/16/2010	1224.68	1226.96	1189.96	1179.96	40.55			1186.41	
MW-5	3/30/2010	1224.68	1226.96	1189.96	1179.96	40.85			1186.11	
MW-5	4/13/2010	1224.68	1226.96	1189.96	1179.96	41.08			1185.88	
MW-5	4/27/2010	1224.68	1226.96	1189.96	1179.96	41.05			1185.91	
MW-5	5/12/2010	1224.68	1226.96	1189.96	1179.96	40.98			1185.98	
MW-5	5/26/2010	1224.68	1226.96	1189.96	1179.96	40.93			1186.03	
MW-5	6/8/2010	1224.68	1226.96	1189.96	1179.96	41.00			1185.96	
MW-5	6/24/2010	1224.68	1226.96	1189.96	1179.96	40.62			1186.34	
MW-5	7/7/2010	1224.68	1226.96	1189.96	1179.96	40.68			1186.28	
MW-5	7/20/2010	1224.68	1226.96	1189.96	1179.96	40.38			1186.58	
MW-5	8/3/2010	1224.68	1226.96	1189.96	1179.96	40.43			1186.53	
MW-5	8/16/2010	1224.68	1226.96	1189.96	1179.96	40.06			1186.90	
MW-5	8/31/2010	1224.68	1226.96	1189.96	1179.96	40.27			1186.69	
MW-5	9/14/2010	1224.68	1226.96	1189.96	1179.96	40.30			1186.66	
MW-5	9/27/2010	1224.68	1226.96	1189.96	1179.96	39.69			1187.27	
MW-5	10/12/2010	1224.68	1226.96	1189.96	1179.96	39.95			1187.01	
MW-5	10/25/2010	1224.68	1226.96	1189.96	1179.96	39.90			1187.06	
MW-5	11/9/2010	1224.68	1226.96	1189.96	1179.96	39.68			1187.28	
MW-5	11/30/2010	1224.68	1226.96	1189.96	1179.96	39.67			1187.29	
MW-5	12/16/2010	1224.68	1226.96	1189.96	1179.96	39.70			1187.26	
MW-5	12/28/2010	1224.68	1226.96	1189.96	1179.96	39.78			1187.18	
MW-5	1/25/2011	1224.68	1226.96	1189.96	1179.96	39.90			1187.06	
MW-5	2/8/2011	1224.68	1226.96	1189.96	1179.96	39.95			1187.01	
MW-5	2/21/2011	1224.68	1226.96	1189.96	1179.96	39.96			1187.00	
MW-5	3/8/2011	1224.68	1226.96	1189.96	1179.96	40.07			1186.89	
MW-5	3/24/2011	1224.68	1226.96	1189.96	1179.96	39.68			1187.28	
MW-5	4/4/2011	1224.68	1226.96	1189.96	1179.96	39.70			1187.26	
MW-5	4/26/2011	1224.68	1226.96	1189.96	1179.96	39.39			1187.57	
MW-5	5/10/2011	1224.68	1226.96	1189.96	1179.96	39.29			1187.67	
MW-5	5/23/2011	1224.68	1226.96	1189.96	1179.96	39.25			1187.71	
MW-5	6/7/2011	1224.68	1226.96	1189.96	1179.96	39.23			1187.73	
MW-5	6/23/2011	1224.68	1226.96	1189.96	1179.96	39.16			1187.80	
MW-5	7/7/2011	1224.68	1226.96	1189.96	1179.96	39.47			1187.49	
MW-5	7/28/2011	1224.68	1226.96	1189.96	1179.96	39.49			1187.47	
MW-5	8/15/2011	1224.68	1226.96	1189.96	1179.96	39.43			1187.53	
MW-5	10/11/2011	1224.68	1226.96	1189.96	1179.96	39.62			1187.34	
MW-5	10/24/2011	1224.68	1226.96	1189.96	1179.96	39.62			1187.34	
MW-5	12/19/2011	1224.68	1226.96	1189.96	1179.96	39.88			1187.08	
MW-5	1/10/2012	1224.68	1226.96	1189.96	1179.96	39.92			1187.04	
MW-5	1/24/2012	1224.68	1226.96	1189.96	1179.96	40.08			1186.88	
MW-5	2/6/2012	1224.68	1226.96	1189.96	1179.96	40.12			1186.84	
MW-5	2/20/2012	1224.68	1226.96	1189.96	1179.96	40.22			1186.74	
MW-5	3/6/2012	1224.68	1226.96	1189.96	1179.96	40.30			1186.66	
MW-5	3/26/2012	1224.68	1226.96	1189.96	1179.96	39.70			1187.26	
MW-5	4/10/2012	1224.68	1226.96	1189.96	1179.96	39.98			1186.98	
MW-5	4/23/2012	1224.68	1226.96	1189.96	1179.96	39.78			1187.18	
MW-5	5/7/2012	1224.68	1226.96	1189.96	1179.96	39.69			1187.27	
MW-5	5/22/2012	1224.68	1226.96	1189.96	1179.96	39.91			1187.05	
MW-5	6/5/2012	1224.68	1226.96	1189.96	1179.96	39.93			1187.03	
MW-5	6/20/2012	1224.68	1226.96	1189.96	1179.96	39.98			1186.98	
MW-5	7/18/2012	1224.68	1226.96	1189.96	1179.96	40.14			1186.82	
MW-5	7/30/2012	1224.68	1226.96	1189.96	1179.96	40.09			1186.87	
MW-5	8/12/2012	1224.68	1226.96	1189.96	1179.96	40.20			1186.76	
MW-5	8/29/2012	1224.68	1226.96	1189.96	1179.96	40.37			1186.59	
MW-5	9/12/2012	1224.68	1226.96	1189.96	1179.96	40.39			1186.57	
MW-5	9/25/2012	1224.68	1226.96	1189.96	1179.96	40.38			1186.58	
MW-5	10/16/2012	1224.68	1226.96	1189.96	1179.96	40.21			1186.75	
MW-5	10/30/2012	1224.68	1226.96	1189.96	1179.96	40.13			1186.83	
MW-5	11/12/2012	1224.68	1226.96	1189.96	1179.96	40.15			1186.81	
MW-5	12/4/2012	1224.68	1226.96	1189.96	1179.96	40.28			1186.68	
MW-5	12/17/2012	1224.68	1226.96	1189.96	1179.96	40.37			1186.59	
MW-5	1/2/2013	1224.68	1226.96	1189.96	1179.96	40.32			1186.64	
MW-6	5/29/2007	1223.53	1225.19	1191.19	1181.19	38.85			1186.34	
MW-6	6/12/2007	1223.53	1225.19	1191.19	1181.19	38.88			1186.31	
MW-6	6/21/2007	1223.53	1225.19	1191.19	1181.19	38.97			1186.22	
MW-6	7/2/2007	1223.53	1225.19	1191.19	1181.19	39.11			1186.08	
MW-6	7/11/2007	1223.53	1225.19	1191.19	1181.19	39.13			1186.06	
MW-6	7/24/2007	1223.53	1225.19	1191.19	1181.19	39.17			1186.02	
MW-6	8/2/2007	1223.53	1225.19	1191.19	1181.19	39.17			1186.02	
MW-6	8/9/2007	1223.53	1225.19	1191.19	1181.19	39.23			1185.96	
MW-6	10/17/2007	1223.53	1225.19	1191.19	1181.19	38.74			1186.45	
MW-6	11/9/2007	1223.53	1225.19	1191.19	1181.19	38.83			1186.36	
MW-6	12/3/2007	1223.53	1225.19	1191.19	1181.19	38.86			1186.33	
MW-6	1/14/2008	1223.53	1225.19	1191.19	1181.19	39.22			1185.97	
MW-6	2/19/2008	1223.53	1225.19	1191.19	1181.19	39.39			1185.80	
MW-6	03/24/2008	1223.53	1225.19	1191.19	1181.19	39.40			1185.79	
MW-6	04/01/2008	1223.53	1225.19	1191.19	1181.19	39.33			1185.86	
MW-6	06/10/2008	1223.53	1225.19	1191.19	1181.19	38.35			1186.84	
MW-6	08/28/2008	1223.53	1225.19	1191.19	1181.19	38.73			1186.46	
MW-6	12/03/2008	1223.53	1225.19	1191.19	1181.19	38.62			1186.57	
MW-6	03/25/2009	1223.53	1225.19	1191.19	1181.19	38.72			1186.47	
MW-6	03/31/2009	1223.53	1225.19	1191.19	1181.19	38.88			1186.31	
MW-6	04/08/2009	1223.53	1225.19	1191.19	1181.19	38.84			1186.35	
MW-6	04/13/2009	1223.53	1225.19	1191.19	1181.19	39.04			1186.15	
MW-6	05/12/2009	1223.53	1225.19	1191.19	1181.19	39.03			1186.16	
MW-6	05/19/2009	1223.53	1225.19	1191.19	1181.19	39.09			1186.10	
MW-6	6/3/2009	1223.53	1225.19	1191.19	1181.19	39.28			1185.91	
MW-6	6/10/2009	1223.53	1225.19	1191.19	1181.19	39.25			1185.94	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-6	6/16/2009	1223.53	1225.19	1191.19	1181.19	39.33			1185.86	
MW-6	6/24/2009	1223.53	1225.19	1191.19	1181.19	39.35			1185.84	
MW-6	6/30/2009	1223.53	1225.19	1191.19	1181.19	39.41			1185.78	
MW-6	7/8/2009	1223.53	1225.19	1191.19	1181.19	39.44			1185.75	
MW-6	7/20/2009	1223.53	1225.19	1191.19	1181.19	39.58			1185.61	
MW-6	8/4/2009	1223.53	1225.19	1191.19	1181.19	39.52			1185.67	
MW-6	8/18/2009	1223.53	1225.19	1191.19	1181.19	39.61			1185.58	
MW-6	9/1/2009	1223.53	1225.19	1191.19	1181.19	39.62			1185.57	
MW-6	9/15/2009	1223.53	1225.19	1191.19	1181.19	39.73			1185.46	
MW-6	9/29/2009	1223.53	1225.19	1191.19	1181.19	39.71			1185.48	
MW-6	10/28/2009	1223.53	1225.19	1191.19	1181.19	39.43			1185.76	
MW-6	11/11/2009	1223.53	1225.19	1191.19	1181.19	39.49			1185.70	
MW-6	12/1/2009	1223.53	1225.19	1191.19	1181.19	39.65			1185.54	
MW-6	12/7/2009	1223.53	1225.19	1191.19	1181.19	39.72			1185.47	
MW-6	12/22/2009	1223.53	1225.19	1191.19	1181.19	39.72			1185.47	
MW-6	1/5/2010	1223.53	1225.19	1191.19	1181.19	39.68			1185.51	
MW-6	1/19/2010	1223.53	1225.19	1191.19	1181.19	39.73			1185.46	
MW-6	2/3/2010	1223.53	1225.19	1191.19	1181.19	39.72			1185.47	
MW-6	2/16/2010	1223.53	1225.19	1191.19	1181.19	39.73			1185.46	
MW-6	3/3/2010	1223.53	1225.19	1191.19	1181.19	39.72			1185.47	
MW-6	3/16/2010	1223.53	1225.19	1191.19	1181.19	38.91			1186.28	
MW-6	3/30/2010	1223.53	1225.19	1191.19	1181.19	39.26			1185.93	
MW-6	4/13/2010	1223.53	1225.19	1191.19	1181.19	39.49			1185.70	
MW-6	4/27/2010	1223.53	1225.19	1191.19	1181.19	39.46			1185.73	
MW-6	5/12/2010	1223.53	1225.19	1191.19	1181.19	39.40			1185.79	
MW-6	5/26/2010	1223.53	1225.19	1191.19	1181.19	39.36			1185.83	
MW-6	6/8/2010	1223.53	1225.19	1191.19	1181.19	39.41			1185.78	
MW-6	6/24/2010	1223.53	1225.19	1191.19	1181.19	39.02			1186.17	
MW-6	7/7/2010	1223.53	1225.19	1191.19	1181.19	39.06			1186.13	
MW-6	7/20/2010	1223.53	1225.19	1191.19	1181.19	38.81			1186.38	
MW-6	8/3/2010	1223.53	1225.19	1191.19	1181.19	38.83			1186.36	
MW-6	8/16/2010	1223.53	1225.19	1191.19	1181.19	38.46			1186.73	
MW-6	8/31/2010	1223.53	1225.19	1191.19	1181.19	38.71			1186.48	
MW-6	9/14/2010	1223.53	1225.19	1191.19	1181.19	38.73			1186.46	
MW-6	9/27/2010	1223.53	1225.19	1191.19	1181.19	38.13			1187.06	
MW-6	10/12/2010	1223.53	1225.19	1191.19	1181.19	38.40			1186.79	
MW-6	10/25/2010	1223.53	1225.19	1191.19	1181.19	38.33			1186.86	
MW-6	11/9/2010	1223.53	1225.19	1191.19	1181.19	38.13			1187.06	
MW-6	11/30/2010	1223.53	1225.19	1191.19	1181.19	38.11			1187.08	
MW-6	12/16/2010	1223.53	1225.19	1191.19	1181.19	38.17			1187.02	
MW-6	12/28/2010	1223.53	1225.19	1191.19	1181.19	38.15			1187.04	
MW-6	1/25/2011	1223.53	1225.19	1191.19	1181.19	38.36			1186.83	
MW-6	2/8/2011	1223.53	1225.19	1191.19	1181.19	38.43			1186.76	
MW-6	2/21/2011	1223.53	1225.19	1191.19	1181.19	38.45			1186.74	
MW-6	3/8/2011	1223.53	1225.19	1191.19	1181.19	38.53			1186.66	
MW-6	3/24/2011	1223.53	1225.19	1191.19	1181.19	38.03			1187.16	
MW-6	4/4/2011	1223.53	1225.19	1191.19	1181.19	38.00			1187.19	
MW-6	4/26/2011	1223.53	1225.19	1191.19	1181.19	37.82			1187.37	
MW-6	5/10/2011	1223.53	1225.19	1191.19	1181.19	37.77			1187.42	
MW-6	5/23/2011	1223.53	1225.19	1191.19	1181.19	37.68			1187.51	
MW-6	6/7/2011	1223.53	1225.19	1191.19	1181.19	37.72			1187.47	
MW-6	6/23/2011	1223.53	1225.19	1191.19	1181.19	37.67			1187.52	
MW-6	7/7/2011	1223.53	1225.19	1191.19	1181.19	37.95			1187.24	
MW-6	7/28/2011	1223.53	1225.19	1191.19	1181.19	37.27			1187.92	
MW-6	8/15/2011	1223.53	1225.19	1191.19	1181.19	37.81			1187.38	
MW-6	9/1/2011	1223.53	1225.19	1191.19	1181.19	37.90			1187.29	
MW-6	9/13/2011	1223.53	1225.19	1191.19	1181.19	38.06			1187.13	
MW-6	9/27/2011	1223.53	1225.19	1191.19	1181.19	38.11			1187.08	
MW-6	10/11/2011	1223.53	1225.19	1191.19	1181.19	38.06			1187.13	
MW-6	12/19/2011	1223.53	1225.19	1191.19	1181.19	38.32			1186.87	
MW-6	1/10/2012	1223.53	1225.19	1191.19	1181.19	38.36			1186.83	
MW-6	1/24/2012	1223.53	1225.19	1191.19	1181.19	38.50			1186.69	
MW-6	2/6/2012	1223.53	1225.19	1191.19	1181.19	38.57			1186.62	
MW-6	2/20/2012	1223.53	1225.19	1191.19	1181.19	38.68			1186.51	
MW-6	3/6/2012	1223.53	1225.19	1191.19	1181.19	38.92			1186.27	
MW-6	3/26/2012	1223.53	1225.19	1191.19	1181.19	38.12			1187.07	
MW-6	4/10/2012	1223.53	1225.19	1191.19	1181.19	38.45			1186.74	
MW-6	4/23/2012	1223.53	1225.19	1191.19	1181.19	38.25			1186.94	
MW-6	5/7/2012	1223.53	1225.19	1191.19	1181.19	38.12			1187.07	
MW-6	5/22/2012	1223.53	1225.19	1191.19	1181.19	38.42			1186.77	
MW-6	6/5/2012	1223.53	1225.19	1191.19	1181.19	38.38			1186.81	
MW-6	6/19/2012	1223.53	1225.19	1191.19	1181.19	38.31			1186.88	
MW-6	7/18/2012	1223.53	1225.19	1191.19	1181.19	38.52			1186.67	
MW-6	7/30/2012	1223.53	1225.19	1191.19	1181.19	38.57			1186.62	
MW-6	8/12/2012	1223.53	1225.19	1191.19	1181.19	38.71			1186.48	
MW-6	8/29/2012	1223.53	1225.19	1191.19	1181.19	38.80			1186.39	
MW-6	9/12/2012	1223.53	1225.19	1191.19	1181.19	38.82			1186.37	
MW-6	9/25/2012	1223.53	1225.19	1191.19	1181.19	38.85			1186.34	
MW-6	10/16/2012	1223.53	1225.19	1191.19	1181.19	38.65			1186.54	
MW-6	10/30/2012	1223.53	1225.19	1191.19	1181.19	38.54			1186.65	
MW-6	11/12/2012	1223.53	1225.19	1191.19	1181.19	38.56			1186.63	
MW-6	12/4/2012	1223.53	1225.19	1191.19	1181.19	38.62			1186.57	
MW-6	12/17/2012	1223.53	1225.19	1191.19	1181.19	38.59			1186.60	
MW-6	1/2/2013	1223.53	1225.19	1191.19	1181.19	38.74			1186.45	
MW-7	6/12/2007	1223.77	1225.94	1189.94	1179.94	39.59			1186.35	
MW-7	6/21/2007	1223.77	1225.94	1189.94	1179.94	39.67			1186.27	
MW-7	7/2/2007	1223.77	1225.94	1189.94	1179.94	39.82			1186.12	
MW-7	7/11/2007	1223.77	1225.94	1189.94	1179.94	39.83			1186.11	
MW-7	7/24/2007	1223.77	1225.94	1189.94	1179.94	39.89			1186.05	
MW-7	8/2/2007	1223.77	1225.94	1189.94	1179.94	39.88			1186.06	
MW-7	8/9/2007	1223.77	1225.94	1189.94	1179.94	39.94			1186.00	
MW-7	10/17/2007	1223.77	1225.94	1189.94	1179.94	39.41			1186.53	
MW-7	11/9/2007	1223.77	1225.94	1189.94	1179.94	39.54			1186.40	
MW-7	12/3/2007	1223.77	1225.94	1189.94	1179.94	39.56			1186.38	
MW-7	1/14/2008	1223.77	1225.94	1189.94	1179.94	39.92			1186.02	
MW-7	2/19/2008	1223.77	1225.94	1189.94	1179.94	40.89	39.91	0.98	1185.05	1186.03
MW-7	2/25/2008	1223.77	1225.94	1189.94	1179.94	40.93	39.93	1.00	1185.01	1186.01
MW-7	3/11/2008	1223.77	1225.94	1189.94	1179.94	41.00	39.95	1.05	1184.94	1185.99
MW-7	3/19/2008	1223.77	1225.94	1189.94	1179.94	41.06	39.97	1.09	1184.88	1185.97
MW-7	3/24/2008	1223.77	1225.94	1189.94	1179.94	40.98	39.91	1.07	1184.96	1186.03
MW-7	6/10/2008	1223.77	1225.94	1189.94	1179.94	39.26	38.99	0.27	1186.68	1186.95
MW-7	7/22/2008	1223.77	1225.94	1189.94	1179.94	39.03	39.03	0.00	1186.91	1186.91
MW-7	7/30/2008	1223.77	1225.94	1189.94	1179.94	39.04	39.04	0.00	1186.90	1186.90
MW-7	8/5/2008	1223.77	1225.94	1189.94	1179.94	39.80	39.15	0.65	1186.14	1186.79
MW-7	8/12/2008	1223.77	1225.94	1189.94	1179.94	39.80	39.23	0.57	1186.14	1186.71

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-7	8/19/2008	1223.77	1225.94	1189.94	1179.94	39.85	39.25	0.60	1186.09	1186.69
MW-7	8/28/2008	1223.77	1225.94	1189.94	1179.94	41.20	40.33	0.87	1184.74	1185.61
MW-7	9/9/2008	1223.77	1225.94	1189.94	1179.94	42.00	40.30	1.70	1183.94	1185.64
MW-7	9/16/2008	1223.77	1225.94	1189.94	1179.94	42.06	40.30	1.76	1183.88	1185.64
MW-7	9/24/2008	1223.77	1225.94	1189.94	1179.94	41.30	40.35	0.95	1184.64	1185.59
MW-7	9/30/2008	1223.77	1225.94	1189.94	1179.94	41.78	41.22	0.56	1184.16	1184.72
MW-7	10/6/2008	1223.77	1225.94	1189.94	1179.94	40.86	40.12	0.74	1185.08	1185.82
MW-7	10/14/2008	1223.77	1225.94	1189.94	1179.94	40.84	40.14	0.70	1185.10	1185.80
MW-7	10/21/2008	1223.77	1225.94	1189.94	1179.94	40.61	40.14	0.47	1185.33	1185.80
MW-7	11/4/2008	1223.77	1225.94	1189.94	1179.94	40.19	40.04	0.15	1185.75	1185.90
MW-7	11/11/2008	1223.77	1225.94	1189.94	1179.94	40.19	40.04	0.15	1185.75	1185.90
MW-7	11/19/2008	1223.77	1225.94	1189.94	1179.94	40.25	40.10	0.15	1185.69	1185.84
MW-7	12/3/2008	1223.77	1225.94	1189.94	1179.94	40.35	40.00	0.35	1185.59	1185.94
MW-7	1/2/2009	1223.77	1225.94	1189.94	1179.94	40.80	40.65	0.15	1185.14	1185.29
MW-7	2/4/2009	1223.77	1225.94	1189.94	1179.94	40.79	40.60	0.19	1185.15	1185.34
MW-7	2/10/2009	1223.77	1225.94	1189.94	1179.94	41.10	40.53	0.57	1184.84	1185.41
MW-7	2/27/2009	1223.77	1225.94	1189.94	1179.94	40.92	40.68	0.24	1185.02	1185.26
MW-7	3/4/2009	1223.77	1225.94	1189.94	1179.94	41.30	40.65	0.65	1184.64	1185.29
MW-7	3/11/2009	1223.77	1225.94	1189.94	1179.94	41.05	40.62	0.43	1184.89	1185.32
MW-7	3/17/2009	1223.77	1225.94	1189.94	1179.94	41.01	40.49	0.52	1184.93	1185.45
MW-7	3/25/2009	1223.77	1225.94	1189.94	1179.94	40.47	40.45	0.02	1185.47	1185.49
MW-7	3/31/2009	1223.77	1225.94	1189.94	1179.94	40.52	40.52	0.00	1185.42	1185.42
MW-7	4/8/2009	1223.77	1225.94	1189.94	1179.94	40.55	40.40	0.15	1185.39	1185.54
MW-7	4/13/2009	1223.77	1225.94	1189.94	1179.94	40.59	40.59	0.00	1185.35	1185.35
MW-7	4/22/2009	1223.77	1225.94	1189.94	1179.94	40.81	40.73	0.08	1185.13	1185.21
MW-7	4/29/2009	1223.77	1225.94	1189.94	1179.94	40.85	40.58	0.27	1185.09	1185.36
MW-7	5/12/2009	1223.77	1225.94	1189.94	1179.94	40.91	40.52	0.39	1185.03	1185.42
MW-7	5/19/2009	1223.77	1225.94	1189.94	1179.94	41.31	40.69	0.62	1184.63	1185.25
MW-7	6/3/2009	1223.77	1225.94	1189.94	1179.94	41.60	40.96	0.64	1184.34	1184.98
MW-7	6/10/2009	1223.77	1225.94	1189.94	1179.94	41.55	40.95	0.60	1184.39	1184.99
MW-7	6/16/2009	1223.77	1225.94	1189.94	1179.94	41.25	41.00	0.25	1184.69	1184.94
MW-7	6/24/2009	1223.77	1225.94	1189.94	1179.94	41.19	41.03	0.16	1184.75	1184.91
MW-7	6/30/2009	1223.77	1225.94	1189.94	1179.94	40.70	40.60	0.10	1185.24	1185.34
MW-7	7/8/2009	1223.77	1225.94	1189.94	1179.94	40.85	40.62	0.23	1185.09	1185.32
MW-7	7/20/2009	1223.77	1225.94	1189.94	1179.94	40.80	40.20	0.60	1185.14	1185.74
MW-7	8/4/2009	1223.77	1225.94	1189.94	1179.94	40.39	40.05	0.34	1185.55	1185.89
MW-7	8/18/2009	1223.77	1225.94	1189.94	1179.94	40.41	40.12	0.29	1185.53	1185.82
MW-7	9/1/2009	1223.77	1225.94	1189.94	1179.94	40.85	40.25	0.60	1185.09	1185.69
MW-7	9/15/2009	1223.77	1225.94	1189.94	1179.94	40.65	40.42	0.23	1185.29	1185.52
MW-7	9/29/2009	1223.77	1225.94	1189.94	1179.94	40.35	40.10	0.25	1185.59	1185.84
MW-7	10/28/2009	1223.77	1225.94	1189.94	1179.94	40.18	40.16	0.02	1185.76	1185.78
MW-7	11/11/2009	1223.77	1225.94	1189.94	1179.94	41.09	41.08	0.01	1184.85	1184.86
MW-7	12/1/2009	1223.77	1225.94	1189.94	1179.94	40.34	40.33	0.01	1185.60	1185.61
MW-7	12/7/2009	1223.77	1225.94	1189.94	1179.94	40.22	40.20	0.02	1185.72	1185.74
MW-7	3/3/2010	1223.77	1225.94	1189.94	1179.94	40.94	40.40	0.54	1185.00	1185.54
MW-7	3/16/2010	1223.77	1225.94	1189.94	1179.94	39.72	39.70	0.02	1186.22	1186.24
MW-7	3/29/2010	1223.77	1225.94	1189.94	1179.94	40.00	39.90	0.10	1185.94	1186.04
MW-7	4/13/2010	1223.77	1225.94	1189.94	1179.94	40.20	40.20	0.00	1185.74	1185.74
MW-7	4/27/2010	1223.77	1225.94	1189.94	1179.94	40.14	40.13	0.01	1185.80	1185.81
MW-7	5/12/2010	1223.77	1225.94	1189.94	1179.94	39.83	39.80	0.03	1186.11	1186.14
MW-7	5/26/2010	1223.77	1225.94	1189.94	1179.94	39.80	39.78	0.02	1186.14	1186.16
MW-7	6/8/2010	1223.77	1225.94	1189.94	1179.94	40.08	40.04	0.04	1185.86	1185.90
MW-7	6/24/2010	1223.77	1225.94	1189.94	1179.94	39.68	39.65	0.03	1186.26	1186.29
MW-7	7/7/2010	1223.77	1225.94	1189.94	1179.94	39.70	39.69	0.01	1186.24	1186.25
MW-7	7/20/2010	1223.77	1225.94	1189.94	1179.94	39.49			1186.45	
MW-7	8/3/2010	1223.77	1225.94	1189.94	1179.94	39.56	39.54	0.02	1186.38	1186.40
MW-7	8/16/2010	1223.77	1225.94	1189.94	1179.94	39.20			1186.74	
MW-7	8/31/2010	1223.77	1225.94	1189.94	1179.94	39.42	39.42	0.00	1186.52	1186.52
MW-7	9/14/2010	1223.77	1225.94	1189.94	1179.94	39.40			1186.54	
MW-7	9/27/2010	1223.77	1225.94	1189.94	1179.94	38.94			1187.00	
MW-7	10/12/2010	1223.77	1225.94	1189.94	1179.94	39.15			1186.79	
MW-7	10/25/2010	1223.77	1225.94	1189.94	1179.94	39.14	39.13	0.01	1186.80	1186.81
MW-7	11/9/2010	1223.77	1225.94	1189.94	1179.94	38.78			1187.16	
MW-7	11/30/2010	1223.77	1225.94	1189.94	1179.94	38.76			1187.18	
MW-7	12/16/2010	1223.77	1225.94	1189.94	1179.94	38.83			1187.11	
MW-7	12/28/2010	1223.77	1225.94	1189.94	1179.94	38.86			1187.08	
MW-7	1/25/2011	1223.77	1225.94	1189.94	1179.94	39.03			1186.91	
MW-7	2/8/2011	1223.77	1225.94	1189.94	1179.94	39.05			1186.89	
MW-7	2/21/2011	1223.77	1225.94	1189.94	1179.94	39.08			1186.86	
MW-7	3/8/2011	1223.77	1225.94	1189.94	1179.94	39.15			1186.79	
MW-7	3/24/2011	1223.77	1225.94	1189.94	1179.94	38.72			1187.22	
MW-7	4/4/2011	1223.77	1225.94	1189.94	1179.94	38.69			1187.25	
MW-7	4/26/2011	1223.77	1225.94	1189.94	1179.94	38.48			1187.46	
MW-7	5/10/2011	1223.77	1225.94	1189.94	1179.94	38.44			1187.50	
MW-7	5/23/2011	1223.77	1225.94	1189.94	1179.94	38.33			1187.61	
MW-7	6/7/2011	1223.77	1225.94	1189.94	1179.94	38.41			1187.53	
MW-7	6/23/2011	1223.77	1225.94	1189.94	1179.94	38.27			1187.67	
MW-7	7/7/2011	1223.77	1225.94	1189.94	1179.94	38.49			1187.45	
MW-7	7/28/2011	1223.77	1225.94	1189.94	1179.94	39.02			1186.92	
MW-7	8/15/2011	1223.77	1225.94	1189.94	1179.94	38.52			1187.42	
MW-7	9/1/2011	1223.77	1225.94	1189.94	1179.94	38.59			1187.35	
MW-7	9/13/2011	1223.77	1225.94	1189.94	1179.94	38.73			1187.21	
MW-7	9/27/2011	1223.77	1225.94	1189.94	1179.94	38.79			1187.15	
MW-7	10/11/2011	1223.77	1225.94	1189.94	1179.94	38.85			1187.09	
MW-7	10/24/2011	1223.77	1225.94	1189.94	1179.94	38.88			1187.06	
MW-7	11/7/2011	1223.77	1225.94	1189.94	1179.94	38.84			1187.10	
MW-7	12/19/2011	1223.77	1225.94	1189.94	1179.94	38.98			1186.96	
MW-7	1/10/2012	1223.77	1225.94	1189.94	1179.94	39.04			1186.90	
MW-7	1/24/2012	1223.77	1225.94	1189.94	1179.94	39.20		trace	1186.74	
MW-7	2/6/2012	1223.77	1225.94	1189.94	1179.94	39.30			1186.64	
MW-7	2/20/2012	1223.77	1225.94	1189.94	1179.94	39.41	39.40	0.01	1186.53	1186.54
MW-7	3/6/2012	1223.77	1225.94	1189.94	1179.94	39.42	39.41	0.01	1186.52	1186.53
MW-7	3/26/2012	1223.77	1225.94	1189.94	1179.94	38.75			1187.19	
MW-7	4/10/2012	1223.77	1225.94	1189.94	1179.94	39.13			1186.81	
MW-7	4/23/2012	1223.77	1225.94	1189.94	1179.94	38.90			1187.04	
MW-7	5/7/2012	1223.77	1225.94	1189.94	1179.94	38.82			1187.12	
MW-7	5/22/2012	1223.77	1225.94	1189.94	1179.94	39.16			1186.78	
MW-7	6/5/2012	1223.77	1225.94	1189.94	1179.94	39.07			1186.87	
MW-7	6/20/2012	1223.77	1225.94	1189.94	1179.94	39.16			1186.78	
MW-7	7/18/2012	1223.77	1225.94	1189.94	1179.94	39.26	39.25	0.01	1186.68	1186.69
MW-7	7/30/2012	1223.77	1225.94	1189.94	1179.94	39.28	39.27	0.01	1186.66	1186.67
MW-7	8/12/2012	1223.77	1225.94	1189.94	1179.94	39.40	39.39	0.01	1186.54	1186.55
MW-7	8/29/2012	1223.77	1225.94	1189.94	1179.94	39.50	39.49	0.01	1186.44	1186.45
MW-7	9/12/2012	1223.77	1225.94	1189.94	1179.94	39.51	39.50	0.01	1186.43	1186.44
MW-7	9/25/2012	1223.77	1225.94	1189.94	1179.94	39.52	39.50	0.02	1186.42	1186.44
MW-7	10/16/2012	1223.77	1225.94	1189.94	1179.94	39.37	39.35	0.02	1186.57	1186.59
MW-7	10/30/2012	1223.77	1225.94	1189.94	1179.94	39.29	39.25	0.04	1186.65	1186.69

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-7	11/12/2012	1223.77	1225.94	1189.94	1179.94	39.29	39.29	trace	1186.65	1186.65
MW-7	12/4/2012	1223.77	1225.94	1189.94	1179.94	39.32	39.32	trace	1186.62	1186.62
MW-7	12/17/2012	1223.77	1225.94	1189.94	1179.94	39.32	39.32	trace	1186.62	1186.62
MW-7	1/2/2013	1223.77	1225.94	1189.94	1179.94	39.44	39.44	trace	1186.50	1186.50
MW-7D	6/12/2007	1223.77	1226.04	1160.04	1155.04	39.54			1186.50	
MW-7D	6/21/2007	1223.77	1226.04	1160.04	1155.04	39.63			1186.41	
MW-7D	7/2/2007	1223.77	1226.04	1160.04	1155.04	39.77			1186.27	
MW-7D	7/24/2007	1223.77	1226.04	1160.04	1155.04	39.85			1186.19	
MW-7D	8/2/2007	1223.77	1226.04	1160.04	1155.04	39.85			1186.19	
MW-7D	8/9/2007	1223.77	1226.04	1160.04	1155.04	39.90			1186.14	
MW-7D	10/17/2007	1223.77	1226.04	1160.04	1155.04	39.40			1186.64	
MW-7D	11/9/2007	1223.77	1226.04	1160.04	1155.04	39.50			1186.54	
MW-7D	12/3/2007	1223.77	1226.04	1160.04	1155.04	39.51			1186.53	
MW-7D	1/14/2008	1223.77	1226.04	1160.04	1155.04	39.87			1186.17	
MW-7D	2/19/2008	1223.77	1226.04	1160.04	1155.04	40.00			1186.04	
MW-7D	03/11/2008	1223.77	1226.04	1160.04	1155.04	40.08			1185.96	
MW-7D	03/19/2008	1223.77	1226.04	1160.04	1155.04	40.12			1185.92	
MW-7D	03/24/2008	1223.77	1226.04	1160.04	1155.04	40.08			1185.96	
MW-7D	04/01/2008	1223.77	1226.04	1160.04	1155.04	40.00			1186.04	
MW-7D	06/10/2008	1223.77	1226.04	1160.04	1155.04	38.85			1187.19	
MW-7D	08/28/2008	1223.77	1226.04	1160.04	1155.04	39.33			1186.71	
MW-7D	03/25/2009	1223.77	1226.04	1160.04	1155.04	39.45			1186.59	
MW-7D	06/24/2009	1223.77	1226.04	1160.04	1155.04	40.00			1186.04	
MW-7D	9/15/2009	1223.77	1226.04	1160.04	1155.04	40.39			1185.65	
MW-7D	12/7/2009	1223.77	1226.04	1160.04	1155.04	40.37			1185.67	
MW-7D	3/29/2010	1223.77	1226.04	1160.04	1155.04	39.90			1186.14	
MW-7D	6/24/2010	1223.77	1226.04	1160.04	1155.04	39.65			1186.39	
MW-7D	9/27/2010	1223.77	1226.04	1160.04	1155.04	38.90			1187.14	
MW-7D	12/28/2010	1223.77	1226.04	1160.04	1155.04	38.81			1187.23	
MW-7D	3/24/2011	1223.77	1226.04	1160.04	1155.04	38.73			1187.31	
MW-7D	6/23/2011	1223.77	1226.04	1160.04	1155.04	38.28			1187.76	
MW-7D	10/11/2011	1223.77	1226.04	1160.04	1155.04	38.70			1187.34	
MW-7D	12/19/2011	1223.77	1226.04	1160.04	1155.04	38.96			1187.08	
MW-7D	3/26/2012	1223.77	1226.04	1160.04	1155.04	38.69			1187.35	
MW-7D	6/19/2012	1223.77	1226.04	1160.04	1155.04	39.03			1187.01	
MW-7D	9/25/2012	1223.77	1226.04	1160.04	1155.04	39.48			1186.56	
MW-7D	12/17/2012	1223.77	1226.04	1160.04	1155.04	39.34			1186.70	
MW-8	6/12/2007	1226.17	1227.68	1191.68	1181.68	41.04			1186.64	
MW-8	6/21/2007	1226.17	1227.68	1191.68	1181.68	41.12			1186.56	
MW-8	7/2/2007	1226.17	1227.68	1191.68	1181.68	41.28			1186.40	
MW-8	7/11/2007	1226.17	1227.68	1191.68	1181.68	41.28			1186.40	
MW-8	7/24/2007	1226.17	1227.68	1191.68	1181.68	41.33			1186.35	
MW-8	8/2/2007	1226.17	1227.68	1191.68	1181.68	41.36			1186.32	
MW-8	8/9/2007	1226.17	1227.68	1191.68	1181.68	41.40			1186.28	
MW-8	10/17/2007	1226.17	1227.68	1191.68	1181.68	40.92			1186.76	
MW-8	11/9/2007	1226.17	1227.68	1191.68	1181.68	41.01			1186.67	
MW-8	12/3/2007	1226.17	1227.68	1191.68	1181.68	41.04			1186.64	
MW-8	1/14/2008	1226.17	1227.68	1191.68	1181.68	41.38			1186.30	
MW-8	2/19/2008	1226.17	1227.68	1191.68	1181.68	41.58			1186.10	
MW-8	03/11/2008	1226.17	1227.68	1191.68	1181.68	41.65			1186.03	
MW-8	03/19/2008	1226.17	1227.68	1191.68	1181.68	41.66			1186.02	
MW-8	03/24/2008	1226.17	1227.68	1191.68	1181.68	41.61			1186.07	
MW-8	04/01/2008	1226.17	1227.68	1191.68	1181.68	41.52			1186.16	
MW-8	06/10/2008	1226.17	1227.68	1191.68	1181.68	40.51			1187.17	
MW-8	08/28/2008	1226.17	1227.68	1191.68	1181.68	40.84			1186.84	
MW-8	12/03/2008	1226.17	1227.68	1191.68	1181.68	40.63			1187.05	
MW-8	03/25/2009	1226.17	1227.68	1191.68	1181.68	41.97			1185.71	
MW-8	06/24/2009	1226.17	1227.68	1191.68	1181.68	41.47			1186.21	
MW-8	9/15/2009	1226.17	1227.68	1191.68	1181.68	41.87			1185.81	
MW-8	12/7/2009	1226.17	1227.68	1191.68	1181.68	41.88			1185.80	
MW-8	3/29/2010	1226.17	1227.68	1191.68	1181.68	41.32			1186.36	
MW-8	6/24/2010	1226.17	1227.68	1191.68	1181.68	41.14			1186.54	
MW-8	9/27/2010	1226.17	1227.68	1191.68	1181.68	40.25			1187.43	
MW-8	12/28/2010	1226.17	1227.68	1191.68	1181.68	40.30			1187.38	
MW-8	3/24/2011	1226.17	1227.68	1191.68	1181.68	40.21			1187.47	
MW-8	6/23/2011	1226.17	1227.68	1191.68	1181.68	39.73			1187.95	
MW-8	10/11/2011	1226.17	1227.68	1191.68	1181.68	40.21			1187.47	
MW-8	12/19/2011	1226.17	1227.68	1191.68	1181.68	40.60			1187.08	
MW-8	3/26/2012	1226.17	1227.68	1191.68	1181.68	40.23			1187.45	
MW-8	6/19/2012	1226.17	1227.68	1191.68	1181.68	40.01			1187.67	
MW-8	9/25/2012	1226.17	1227.68	1191.68	1181.68	40.99			1186.69	
MW-8	12/17/2012	1226.17	1227.68	1191.68	1181.68	40.81			1186.87	
MW-9	6/12/2007	1224.09	1225.67	1190.67	1180.67	38.66			1187.01	
MW-9	6/21/2007	1224.09	1225.67	1190.67	1180.67	38.76			1186.91	
MW-9	7/2/2007	1224.09	1225.67	1190.67	1180.67	38.91			1186.76	
MW-9	7/11/2007	1224.09	1225.67	1190.67	1180.67	38.90			1186.77	
MW-9	7/24/2007	1224.09	1225.67	1190.67	1180.67	38.96			1186.71	
MW-9	8/2/2007	1224.09	1225.67	1190.67	1180.67	38.93			1186.74	
MW-9	8/9/2007	1224.09	1225.67	1190.67	1180.67	39.03			1186.64	
MW-9	10/17/2007	1224.09	1225.67	1190.67	1180.67	38.56			1187.11	
MW-9	11/9/2007	1224.09	1225.67	1190.67	1180.67	38.65			1187.02	
MW-9	12/3/2007	1224.09	1225.67	1190.67	1180.67	38.65			1187.02	
MW-9	1/14/2008	1224.09	1225.67	1190.67	1180.67	38.95			1186.72	
MW-9	2/19/2008	1224.09	1225.67	1190.67	1180.67	39.13			1186.54	
MW-9	03/11/2008	1224.09	1225.67	1190.67	1180.67	39.22			1186.45	
MW-9	03/19/2008	1224.09	1225.67	1190.67	1180.67	39.24			1186.43	
MW-9	03/24/2008	1224.09	1225.67	1190.67	1180.67	39.21			1186.46	
MW-9	04/01/2008	1224.09	1225.67	1190.67	1180.67	39.16			1186.51	
MW-9	06/10/2008	1224.09	1225.67	1190.67	1180.67	38.12			1187.55	
MW-9	08/28/2008	1224.09	1225.67	1190.67	1180.67	38.37			1187.30	
MW-9	12/03/2008	1224.09	1225.67	1190.67	1180.67	38.29			1187.38	
MW-9	03/25/2009	1224.09	1225.67	1190.67	1180.67	39.52			1186.15	
MW-9	9/15/2009	1224.09	1225.67	1190.67	1180.67	39.48			1186.19	
MW-9	12/7/2009	1224.09	1225.67	1190.67	1180.67	39.47			1186.20	
MW-9	12/22/2009	1224.09	1225.67	1190.67	1180.67	39.49			1186.18	
MW-9	3/29/2010	1224.09	1225.67	1190.67	1180.67	38.99			1186.68	
MW-9	4/13/2010	1224.09	1225.67	1190.67	1180.67	39.20			1186.47	
MW-9	4/27/2010	1224.09	1225.67	1190.67	1180.67	39.15			1186.52	
MW-9	5/12/2010	1224.09	1225.67	1190.67	1180.67	39.18			1186.49	
MW-9	5/26/2010	1224.09	1225.67	1190.67	1180.67	39.14			1186.53	
MW-9	6/8/2010	1224.09	1225.67	1190.67	1180.67	39.26			1186.41	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-9	6/24/2010	1224.09	1225.67	1190.67	1180.67	38.81			1186.86	
MW-9	7/7/2010	1224.09	1225.67	1190.67	1180.67	38.86			1186.81	
MW-9	9/27/2010	1224.09	1225.67	1190.67	1180.67	37.81			1187.86	
MW-9	12/28/2010	1224.09	1225.67	1190.67	1180.67	37.73			1187.94	
MW-9	3/24/2011	1224.09	1225.67	1190.67	1180.67	37.78			1187.89	
MW-9	6/23/2011	1224.09	1225.67	1190.67	1180.67	37.20			1188.47	
MW-9	10/11/2011	1224.09	1225.67	1190.67	1180.67	37.61			1188.06	
MW-9	12/19/2011	1224.09	1225.67	1190.67	1180.67	37.93			1187.74	
MW-9	1/10/2012	1224.09	1225.67	1190.67	1180.67	39.96			1185.71	
MW-9	3/26/2012	1224.09	1225.67	1190.67	1180.67	37.73			1187.94	
MW-9	6/19/2012	1224.09	1225.67	1190.67	1180.67	37.93			1187.74	
MW-9	9/25/2012	1224.09	1225.67	1190.67	1180.67	38.44			1187.23	
MW-9	12/17/2012	1224.09	1225.67	1190.67	1180.67	38.30			1187.37	
MW-9	1/2/2013	1224.09	1225.67	1190.67	1180.67	NC			#VALUE!	
MW-10	5/29/2007	1223.52	1225.30	1186.80	1176.80	38.50			1186.80	
MW-10	6/12/2007	1223.52	1225.30	1186.80	1176.80	38.50			1186.80	
MW-10	6/21/2007	1223.52	1225.30	1186.80	1176.80	38.59			1186.71	
MW-10	7/2/2007	1223.52	1225.30	1186.80	1176.80	38.76			1186.54	
MW-10	7/11/2007	1223.52	1225.30	1186.80	1176.80	38.74			1186.56	
MW-10	7/24/2007	1223.52	1225.30	1186.80	1176.80	38.81			1186.49	
MW-10	8/2/2007	1223.52	1225.30	1186.80	1176.80	38.82			1186.48	
MW-10	8/9/2007	1223.52	1225.30	1186.80	1176.80	38.86			1186.44	
MW-10	10/17/2007	1223.52	1225.30	1186.80	1176.80	38.39			1186.91	
MW-10	11/9/2007	1223.52	1225.30	1186.80	1176.80	38.48			1186.82	
MW-10	12/3/2007	1223.52	1225.30	1186.80	1176.80	38.48			1186.82	
MW-10	1/14/2008	1223.52	1225.30	1186.80	1176.80	38.80			1186.50	
MW-10	2/19/2008	1223.52	1225.30	1186.80	1176.80	38.98			1186.32	
MW-10	03/24/2008	1223.52	1225.30	1186.80	1176.80	39.06			1186.24	
MW-10	04/01/2008	1223.52	1225.30	1186.80	1176.80	39.01			1186.29	
MW-10	06/10/2008	1223.52	1225.30	1186.80	1176.80	37.95			1187.35	
MW-10	Abandoned									
MW-11	6/21/2007	1224.81	1226.87	1190.87	1180.87	40.36			1186.51	
MW-11	7/11/2007	1224.81	1226.87	1190.87	1180.87	40.50			1186.37	
MW-11	8/2/2007	1224.81	1226.87	1190.87	1180.87	40.58			1186.29	
MW-11	10/17/2007	1224.81	1226.87	1190.87	1180.87	40.28	40.08	0.20	1186.59	1186.79
MW-11	12/3/2007	1224.81	1226.87	1190.87	1180.87	40.56	40.19	0.37	1186.31	1186.68
MW-11	1/14/2008	1224.81	1226.87	1190.87	1180.87	41.28	40.47	0.81	1185.59	1186.40
MW-11	03/11/2008	1224.81	1226.87	1190.87	1180.87	41.60	40.63	0.97	1185.27	1186.24
MW-11	03/24/2008	1224.81	1226.87	1190.87	1180.87	41.58	40.56	1.02	1185.29	1186.31
MW-11	04/01/2008	1224.81	1226.87	1190.87	1180.87	40.73	40.70	0.03	1186.14	1186.17
MW-11	04/08/2008	1224.81	1226.87	1190.87	1180.87	40.24	40.24	0.00	1186.63	1186.63
MW-11	04/23/2008	1224.81	1226.87	1190.87	1180.87	39.77	39.77	0.00	1187.10	1187.10
MW-11	05/03/2008	1224.81	1226.87	1190.87	1180.87	39.66	39.66	0.00	1187.21	1187.21
MW-11	06/10/2008	1224.81	1226.87	1190.87	1180.87	39.69	39.67	0.02	1187.18	1187.20
MW-11	07/22/2008	1224.81	1226.87	1190.87	1180.87	39.89	39.89	0.00	1186.98	1186.98
MW-11	07/30/2008	1224.81	1226.87	1190.87	1180.87	39.81	39.81	0.00	1187.06	1187.06
MW-11	08/05/2008	1224.81	1226.87	1190.87	1180.87	39.88	39.88	0.00	1186.99	1186.99
MW-11	08/12/2008	1224.81	1226.87	1190.87	1180.87	39.90	39.89	0.01	1186.97	1186.98
MW-11	08/19/2008	1224.81	1226.87	1190.87	1180.87	39.92	39.92	0.00	1186.95	1186.95
MW-11	08/27/2008	1224.81	1226.87	1190.87	1180.87	39.92	39.92	0.00	1186.95	1186.95
MW-11	08/28/2008	1224.81	1226.87	1190.87	1180.87	40.00	40.00	0.00	1186.87	1186.87
MW-11	09/09/2008	1224.81	1226.87	1190.87	1180.87	40.04	40.02	0.02	1186.83	1186.85
MW-11	09/16/2008	1224.81	1226.87	1190.87	1180.87	40.05	40.03	0.02	1186.82	1186.84
MW-11	09/24/2008	1224.81	1226.87	1190.87	1180.87	40.05	40.03	0.02	1186.82	1186.84
MW-11	09/30/2008	1224.81	1226.87	1190.87	1180.87	40.01	40.01	0.00	1186.86	1186.86
MW-11	10/06/2008	1224.81	1226.87	1190.87	1180.87	39.93	39.93	0.00	1186.94	1186.94
MW-11	10/14/2008	1224.81	1226.87	1190.87	1180.87	39.90	39.90	0.00	1186.97	1186.97
MW-11	10/21/2008	1224.81	1226.87	1190.87	1180.87	39.82	39.80	0.02	1187.05	1187.07
MW-11	11/04/2008	1224.81	1226.87	1190.87	1180.87	39.74	39.68	0.06	1187.13	1187.19
MW-11	11/11/2008	1224.81	1226.87	1190.87	1180.87	39.75	39.65	0.10	1187.12	1187.22
MW-11	11/19/2008	1224.81	1226.87	1190.87	1180.87	39.72	39.68	0.04	1187.15	1187.19
MW-11	12/03/2008	1224.81	1226.87	1190.87	1180.87	40.36	39.72	0.64	1186.51	1187.15
MW-11	01/02/2009	1224.81	1226.87	1190.87	1180.87	40.02	39.97	0.05	1186.85	1186.90
MW-11	02/04/2009	1224.81	1226.87	1190.87	1180.87	40.11			1186.76	
MW-11	02/10/2009	1224.81	1226.87	1190.87	1180.87	40.12			1186.75	
MW-11	02/17/2009	1224.81	1226.87	1190.87	1180.87	40.14	40.13	0.01	1186.73	1186.74
MW-11	02/27/2009	1224.81	1226.87	1190.87	1180.87	40.12	40.11	0.01	1186.75	1186.76
MW-11	03/04/2009	1224.81	1226.87	1190.87	1180.87	40.24	40.22	0.02	1186.63	1186.65
MW-11	03/11/2009	1224.81	1226.87	1190.87	1180.87	40.21			1186.66	
MW-11	03/17/2009	1224.81	1226.87	1190.87	1180.87	40.12			1186.75	
MW-11	03/24/2009	1224.81	1226.87	1190.87	1180.87	39.95			1186.92	
MW-11	03/31/2009	1224.81	1226.87	1190.87	1180.87	40.01			1186.86	
MW-11	04/08/2009	1224.81	1226.87	1190.87	1180.87	40.11			1186.76	
MW-11	04/13/2009	1224.81	1226.87	1190.87	1180.87	40.04			1186.83	
MW-11	05/12/2009	1224.81	1226.87	1190.87	1180.87	40.16			1186.71	
MW-11	05/19/2009	1224.81	1226.87	1190.87	1180.87	40.41			1186.46	
MW-11	6/3/2009	1224.81	1226.87	1190.87	1180.87	40.52	40.50	0.02	1186.35	1186.37
MW-11	6/10/2009	1224.81	1226.87	1190.87	1180.87	40.51	40.49	0.02	1186.36	1186.38
MW-11	6/16/2009	1224.81	1226.87	1190.87	1180.87	40.62	40.61	0.01	1186.25	1186.26
MW-11	6/24/2009	1224.81	1226.87	1190.87	1180.87	40.65	40.64	0.01	1186.22	1186.23
MW-11	6/30/2009	1224.81	1226.87	1190.87	1180.87	40.28	40.26	0.02	1186.59	1186.61
MW-11	07/20/2009	1224.81	1226.87	1190.87	1180.87	40.86	40.20	0.66	1186.01	1186.67
MW-11	8/18/2009	1224.81	1226.87	1190.87	1180.87	40.90	40.88	0.02	1185.97	1185.99
MW-11	9/15/2009	1224.81	1226.87	1190.87	1180.87	41.03	40.99	0.04	1185.84	1185.88
MW-11	10/28/2009	1224.81	1226.87	1190.87	1180.87	40.75			1186.12	
MW-11	11/11/2009	1224.81	1226.87	1190.87	1180.87	40.77			1186.10	
MW-11	12/1/2009	1224.81	1226.87	1190.87	1180.87	40.94			1185.93	
MW-11	12/7/2009	1224.81	1226.87	1190.87	1180.87	40.98			1185.89	
MW-11	12/22/2009	1224.81	1226.87	1190.87	1180.87	40.99			1185.88	
MW-11	1/5/2010	1224.81	1226.87	1190.87	1180.87	41.99			1184.88	
MW-11	1/19/2010	1224.81	1226.87	1190.87	1180.87	42.01			1184.86	
MW-11	2/3/2010	1224.81	1226.87	1190.87	1180.87	41.00			1185.87	
MW-11	2/16/2010	1224.81	1226.87	1190.87	1180.87	41.02	41.01	0.01	1185.85	1185.86
MW-11	3/3/2010	1224.81	1226.87	1190.87	1180.87	41.01			1185.86	
MW-11	3/16/2010	1224.81	1226.87	1190.87	1180.87	40.28			1186.59	
MW-11	03/29/2010	1224.81	1226.87	1190.87	1180.87	40.50	40.50	0.01	1186.37	1186.38
MW-11	4/13/2010	1224.81	1226.87	1190.87	1180.87	40.74	40.72	0.02	1186.13	1186.15
MW-11	4/27/2010	1224.81	1226.87	1190.87	1180.87	40.72			1186.15	
MW-11	5/12/2010	1224.81	1226.87	1190.87	1180.87	40.65			1186.22	
MW-11	5/26/2010	1224.81	1226.87	1190.87	1180.87	40.60	40.60	0.00	1186.27	1186.27
MW-11	6/8/2010	1224.81	1226.87	1190.87	1180.87	40.72	40.72	0.00	1186.15	1186.15
MW-11	6/24/2010	1224.81	1226.87	1190.87	1180.87	40.28			1186.59	
MW-11	7/7/2010	1224.81	1226.87	1190.87	1180.87	40.34			1186.53	
MW-11	7/20/2010	1224.81	1226.87	1190.87	1180.87	40.06			1186.81	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-11	8/3/2010	1224.81	1226.87	1190.87	1180.87	40.11			1186.76	
MW-11	8/16/2010	1224.81	1226.87	1190.87	1180.87	39.77			1187.10	
MW-11	8/31/2010	1224.81	1226.87	1190.87	1180.87	39.99			1186.88	
MW-11	9/14/2010	1224.81	1226.87	1190.87	1180.87	40.01			1186.86	
MW-11	9/27/2010	1224.81	1226.87	1190.87	1180.87	39.48			1187.39	
MW-11	10/12/2010	1224.81	1226.87	1190.87	1180.87	39.76			1187.11	
MW-11	10/25/2010	1224.81	1226.87	1190.87	1180.87	39.70			1187.17	
MW-11	11/9/2010	1224.81	1226.87	1190.87	1180.87	39.30			1187.57	
MW-11	11/30/2010	1224.81	1226.87	1190.87	1180.87	39.29			1187.58	
MW-11	12/16/2010	1224.81	1226.87	1190.87	1180.87	39.36			1187.51	
MW-11	12/28/2010	1224.81	1226.87	1190.87	1180.87	39.37			1187.50	
MW-11	1/25/2011	1224.81	1226.87	1190.87	1180.87	39.52			1187.35	
MW-11	2/8/2011	1224.81	1226.87	1190.87	1180.87	39.60			1187.27	
MW-11	2/21/2011	1224.81	1226.87	1190.87	1180.87	39.62			1187.25	
MW-11	3/8/2011	1224.81	1226.87	1190.87	1180.87	39.72			1187.15	
MW-11	3/24/2011	1224.81	1226.87	1190.87	1180.87	39.32			1187.55	
MW-11	4/4/2011	1224.81	1226.87	1190.87	1180.87	39.30			1187.57	
MW-11	4/26/2011	1224.81	1226.87	1190.87	1180.87	39.02			1187.85	
MW-11	5/10/2011	1224.81	1226.87	1190.87	1180.87	38.89			1187.98	
MW-11	5/23/2011	1224.81	1226.87	1190.87	1180.87	38.93			1187.94	
MW-11	6/7/2011	1224.81	1226.87	1190.87	1180.87	38.85			1188.02	
MW-11	6/23/2011	1224.81	1226.87	1190.87	1180.87	38.82			1188.05	
MW-11	7/7/2011	1224.81	1226.87	1190.87	1180.87	39.08			1187.79	
MW-11	7/28/2011	1224.81	1226.87	1190.87	1180.87	39.14			1187.73	
MW-11	8/15/2011	1224.81	1226.87	1190.87	1180.87	39.00			1187.87	
MW-11	9/1/2011	1224.81	1226.87	1190.87	1180.87	39.04			1187.83	
MW-11	9/13/2011	1224.81	1226.87	1190.87	1180.87	39.18			1187.69	
MW-11	9/27/2011	1224.81	1226.87	1190.87	1180.87	39.26			1187.61	
MW-11	10/11/2011	1224.81	1226.87	1190.87	1180.87	39.25			1187.62	
MW-11	11/7/2011	1224.81	1226.87	1190.87	1180.87	39.30			1187.57	
MW-11	12/19/2011	1224.81	1226.87	1190.87	1180.87	39.40			1187.47	
MW-11	1/10/2012	1224.81	1226.87	1190.87	1180.87	39.44			1187.43	
MW-11	1/24/2012	1224.81	1226.87	1190.87	1180.87	39.69			1187.18	
MW-11	2/6/2012	1224.81	1226.87	1190.87	1180.87	39.79			1187.08	
MW-11	2/20/2012	1224.81	1226.87	1190.87	1180.87	39.90			1186.97	
MW-11	3/6/2012	1224.81	1226.87	1190.87	1180.87	39.40		trace	1187.47	
MW-11	4/10/2012	1224.81	1226.87	1190.87	1180.87	39.65			1187.22	
MW-11	5/7/2012	1224.81	1226.87	1190.87	1180.87	39.37			1187.50	
MW-11	6/5/2012	1224.81	1226.87	1190.87	1180.87	39.59			1187.28	
MW-11	6/19/2012	1224.81	1226.87	1190.87	1180.87	39.54			1187.33	
MW-11	7/18/2012	1224.81	1226.87	1190.87	1180.87	39.80			1187.07	
MW-11	8/12/2012	1224.81	1226.87	1190.87	1180.87	39.92			1186.95	
MW-11	9/12/2012	1224.81	1226.87	1190.87	1180.87	40.01			1186.86	
MW-11	9/25/2012	1224.81	1226.87	1190.87	1180.87	40.04			1186.83	
MW-11	10/16/2012	1224.81	1226.87	1190.87	1180.87	39.90			1186.97	
MW-11	11/12/2012	1224.81	1226.87	1190.87	1180.87	39.81			1187.06	
MW-11	12/4/2012	1224.81	1226.87	1190.87	1180.87	39.89			1186.98	
MW-11	12/17/2012	1224.81	1226.87	1190.87	1180.87	39.85			1187.02	
MW-11	1/2/2013	1224.81	1226.87	1190.87	1180.87	39.90			1186.97	
MW-12	7/25/2007	1223.28	1225.71	1189.71	1179.71	39.52			1186.19	
MW-12	8/2/2007	1223.28	1225.71	1189.71	1179.71	39.53			1186.18	
MW-12	8/9/2007	1223.28	1225.71	1189.71	1179.71	39.58			1186.13	
MW-12	10/17/2007	1223.28	1225.71	1189.71	1179.71	39.09			1186.62	
MW-12	11/9/2007	1223.28	1225.71	1189.71	1179.71	39.20			1186.51	
MW-12	12/3/2007	1223.28	1225.71	1189.71	1179.71	39.21			1186.50	
MW-12	1/14/2008	1223.28	1225.71	1189.71	1179.71	39.58			1186.13	
MW-12	2/19/2008	1223.28	1225.71	1189.71	1179.71	39.82			1185.89	
MW-12	03/24/2008	1223.28	1225.71	1189.71	1179.71	39.85			1185.86	
MW-12	04/01/2008	1223.28	1225.71	1189.71	1179.71	39.82			1185.89	
MW-12	06/10/2008	1223.28	1225.71	1189.71	1179.71	38.81			1186.90	
MW-12	08/28/2008	1223.28	1225.71	1189.71	1179.71	39.18			1186.53	
MW-12	12/03/2008	1223.28	1225.71	1189.71	1179.71	39.10			1186.61	
MW-12	03/25/2009	1223.28	1225.71	1189.71	1179.71	39.24			1186.47	
MW-12	03/31/2009	1223.28	1225.71	1189.71	1179.71	38.29			1187.42	
MW-12	04/08/2009	1223.28	1225.71	1189.71	1179.71	39.31			1186.40	
MW-12	04/13/2009	1223.28	1225.71	1189.71	1179.71	39.50			1186.21	
MW-12	05/12/2009	1223.28	1225.71	1189.71	1179.71	39.38			1186.33	
MW-12	05/19/2009	1223.28	1225.71	1189.71	1179.71	39.60			1186.11	
MW-12	6/3/2009	1223.28	1225.71	1189.71	1179.71	39.73			1185.98	
MW-12	6/10/2009	1223.28	1225.71	1189.71	1179.71	39.69			1186.02	
MW-12	6/16/2009	1223.28	1225.71	1189.71	1179.71	39.82			1185.89	
MW-12	6/24/2009	1223.28	1225.71	1189.71	1179.71	39.82			1185.89	
MW-12	6/30/2009	1223.28	1225.71	1189.71	1179.71	39.91			1185.80	
MW-12	7/8/2009	1223.28	1225.71	1189.71	1179.71	39.94			1185.77	
MW-12	7/20/2009	1223.28	1225.71	1189.71	1179.71	40.01			1185.70	
MW-12	8/4/2009	1223.28	1225.71	1189.71	1179.71	39.99			1185.72	
MW-12	8/18/2009	1223.28	1225.71	1189.71	1179.71	40.08			1185.63	
MW-12	9/1/2009	1223.28	1225.71	1189.71	1179.71	40.06			1185.65	
MW-12	9/15/2009	1223.28	1225.71	1189.71	1179.71	40.19			1185.52	
MW-12	9/29/2009	1223.28	1225.71	1189.71	1179.71	40.20			1185.51	
MW-12	10/28/2009	1223.28	1225.71	1189.71	1179.71	39.92			1185.79	
MW-12	11/11/2009	1223.28	1225.71	1189.71	1179.71	39.97			1185.74	
MW-12	12/1/2009	1223.28	1225.71	1189.71	1179.71	40.11			1185.60	
MW-12	12/7/2009	1223.28	1225.71	1189.71	1179.71	40.20			1185.51	
MW-12	12/22/2009	1223.28	1225.71	1189.71	1179.71	40.20			1185.51	
MW-12	1/5/2010	1223.28	1225.71	1189.71	1179.71	40.18			1185.53	
MW-12	2/3/2010	1223.28	1225.71	1189.71	1179.71	40.19			1185.52	
MW-12	2/16/2010	1223.28	1225.71	1189.71	1179.71	40.22			1185.49	
MW-12	3/3/2010	1223.28	1225.71	1189.71	1179.71	40.30			1185.41	
MW-12	3/16/2010	1223.28	1225.71	1189.71	1179.71	39.09			1186.62	
MW-12	3/30/2010	1223.28	1225.71	1189.71	1179.71	39.73			1185.98	
MW-12	4/13/2010	1223.28	1225.71	1189.71	1179.71	39.98			1185.73	
MW-12	4/27/2010	1223.28	1225.71	1189.71	1179.71	39.95			1185.76	
MW-12	5/12/2010	1223.28	1225.71	1189.71	1179.71	39.91			1185.80	
MW-12	5/26/2010	1223.28	1225.71	1189.71	1179.71	39.87			1185.84	
MW-12	6/8/2010	1223.28	1225.71	1189.71	1179.71	39.26			1186.45	
MW-12	6/24/2010	1223.28	1225.71	1189.71	1179.71	39.58			1186.13	
MW-12	7/7/2010	1223.28	1225.71	1189.71	1179.71	39.64			1186.07	
MW-12	7/20/2010	1223.28	1225.71	1189.71	1179.71	39.31			1186.40	
MW-12	8/3/2010	1223.28	1225.71	1189.71	1179.71	39.35			1186.36	
MW-12	8/16/2010	1223.28	1225.71	1189.71	1179.71	39.01			1186.70	
MW-12	8/31/2010	1223.28	1225.71	1189.71	1179.71	39.18			1186.53	
MW-12	9/14/2010	1223.28	1225.71	1189.71	1179.71	39.20			1186.51	
MW-12	9/27/2010	1223.28	1225.71	1189.71	1179.71	38.61			1187.10	
MW-12	10/12/2010	1223.28	1225.71	1189.71	1179.71	38.88			1186.83	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-12	10/25/2010	1223.28	1225.71	1189.71	1179.71	38.81			1186.90	
MW-12	11/19/2010	1223.28	1225.71	1189.71	1179.71	38.60			1187.11	
MW-12	11/30/2010	1223.28	1225.71	1189.71	1179.71	38.58			1187.13	
MW-12	12/16/2010	1223.28	1225.71	1189.71	1179.71	38.68			1187.03	
MW-12	12/28/2010	1223.28	1225.71	1189.71	1179.71	38.71			1187.00	
MW-12	1/25/2011	1223.28	1225.71	1189.71	1179.71	38.86			1186.85	
MW-12	2/8/2011	1223.28	1225.71	1189.71	1179.71	38.88			1186.83	
MW-12	2/21/2011	1223.28	1225.71	1189.71	1179.71	38.90			1186.81	
MW-12	3/24/2011	1223.28	1225.71	1189.71	1179.71	38.77			1186.94	
MW-12	4/4/2011	1223.28	1225.71	1189.71	1179.71	38.75			1186.96	
MW-12	4/26/2011	1223.28	1225.71	1189.71	1179.71	38.51			1187.20	
MW-12	5/10/2011	1223.28	1225.71	1189.71	1179.71	38.48			1187.23	
MW-12	5/23/2011	1223.28	1225.71	1189.71	1179.71	38.38			1187.33	
MW-12	6/7/2011	1223.28	1225.71	1189.71	1179.71	38.42			1187.29	
MW-12	6/23/2011	1223.28	1225.71	1189.71	1179.71	38.28			1187.43	
MW-12	7/7/2011	1223.28	1225.71	1189.71	1179.71	38.54			1187.17	
MW-12	8/15/2011	1223.28	1225.71	1189.71	1179.71	38.45			1187.26	
MW-12	9/1/2011	1223.28	1225.71	1189.71	1179.71	38.54			1187.17	
MW-12	9/13/2011	1223.28	1225.71	1189.71	1179.71	38.71			1187.00	
MW-12	9/27/2011	1223.28	1225.71	1189.71	1179.71	38.76			1186.95	
MW-12	10/11/2011	1223.28	1225.71	1189.71	1179.71	38.73			1186.98	
MW-12	12/19/2011	1223.28	1225.71	1189.71	1179.71	39.01			1186.70	
MW-12	1/10/2012	1223.28	1225.71	1189.71	1179.71	39.07			1186.64	
MW-12	1/24/2012	1223.28	1225.71	1189.71	1179.71	39.18			1186.53	
MW-12	2/6/2012	1223.28	1225.71	1189.71	1179.71	39.25			1186.46	
MW-12	2/20/2012	1223.28	1225.71	1189.71	1179.71	39.37			1186.34	
MW-12	3/6/2012	1223.28	1225.71	1189.71	1179.71	39.41			1186.30	
MW-12	3/26/2012	1223.28	1225.71	1189.71	1179.71	38.81			1186.90	
MW-12	4/10/2012	1223.28	1225.71	1189.71	1179.71	39.10			1186.61	
MW-12	4/23/2012	1223.28	1225.71	1189.71	1179.71	38.90			1186.81	
MW-12	5/7/2012	1223.28	1225.71	1189.71	1179.71	38.90			1186.81	
MW-12	5/22/2012	1223.28	1225.71	1189.71	1179.71	38.50			1187.21	
MW-12	6/5/2012	1223.28	1225.71	1189.71	1179.71	38.35			1187.36	
MW-12	6/19/2012	1223.28	1225.71	1189.71	1179.71	38.98			1186.73	
MW-12	7/18/2012	1223.28	1225.71	1189.71	1179.71	39.22			1186.49	
MW-12	7/30/2012	1223.28	1225.71	1189.71	1179.71	39.25			1186.46	
MW-12	8/12/2012	1223.28	1225.71	1189.71	1179.71	39.38			1186.33	
MW-12	8/29/2012	1223.28	1225.71	1189.71	1179.71	39.52			1186.19	
MW-12	9/12/2012	1223.28	1225.71	1189.71	1179.71	39.55			1186.16	
MW-12	9/25/2012	1223.28	1225.71	1189.71	1179.71	39.52			1186.19	
MW-12	10/16/2012	1223.28	1225.71	1189.71	1179.71	39.30			1186.41	
MW-12	10/30/2012	1223.28	1225.71	1189.71	1179.71	39.22			1186.49	
MW-12	11/12/2012	1223.28	1225.71	1189.71	1179.71	39.25			1186.46	
MW-12	12/4/2012	1223.28	1225.71	1189.71	1179.71	39.30			1186.41	
MW-12	12/17/2012	1223.28	1225.71	1189.71	1179.71	39.28			1186.43	
MW-12	1/2/2013	1223.28	1225.71	1189.71	1179.71	39.40			1186.31	
MW-13	7/25/2007	1222.71	1224.67	1189.17	1179.17	38.62			1186.05	
MW-13	8/2/2007	1222.71	1224.67	1189.17	1179.17	38.62			1186.05	
MW-13	8/9/2007	1222.71	1224.67	1189.17	1179.17	38.66			1186.01	
MW-13	10/17/2007	1222.71	1224.67	1189.17	1179.17	38.21			1186.46	
MW-13	11/9/2007	1222.71	1224.67	1189.17	1179.17	38.32			1186.35	
MW-13	12/3/2007	1222.71	1224.67	1189.17	1179.17	38.30			1186.37	
MW-13	1/14/2008	1222.71	1224.67	1189.17	1179.17	38.63			1186.04	
MW-13	2/19/2008	1222.71	1224.67	1189.17	1179.17	38.84			1185.83	
MW-13	03/11/2008	1222.71	1224.67	1189.17	1179.17	38.89			1185.78	
MW-13	03/19/2008	1222.71	1224.67	1189.17	1179.17	38.93			1185.74	
MW-13	03/24/2008	1222.71	1224.67	1189.17	1179.17	38.90			1185.77	
MW-13	04/01/2008	1222.71	1224.67	1189.17	1179.17	38.82			1185.85	
MW-13	06/10/2008	1222.71	1224.67	1189.17	1179.17	37.80			1186.87	
MW-13	08/28/2008	1222.71	1224.67	1189.17	1179.17	38.18			1186.49	
MW-13	12/03/2008	1222.71	1224.67	1189.17	1179.17	37.97			1186.70	
MW-13	03/25/2009	1222.71	1224.67	1189.17	1179.17	38.19			1186.48	
MW-13	06/24/2009	1222.71	1224.67	1189.17	1179.17	38.78			1185.89	
MW-13	9/15/2009	1222.71	1224.67	1189.17	1179.17	39.18			1185.49	
MW-13	12/7/2009	1222.71	1224.67	1189.17	1179.17	39.18			1185.49	
MW-13	3/29/2010	1222.71	1224.67	1189.17	1179.17	38.64			1186.03	
MW-13	6/24/2010	1222.71	1224.67	1189.17	1179.17	38.46			1186.21	
MW-13	9/27/2010	1222.71	1224.67	1189.17	1179.17	37.57			1187.10	
MW-13	12/28/2010	1222.71	1224.67	1189.17	1179.17	37.64			1187.03	
MW-13	3/24/2011	1222.71	1224.67	1189.17	1179.17	37.54			1187.13	
MW-13	6/23/2011	1222.71	1224.67	1189.17	1179.17	37.03			1187.64	
MW-13	10/11/2011	1222.71	1224.67	1189.17	1179.17	37.50			1187.17	
MW-13	12/19/2011	1222.71	1224.67	1189.17	1179.17	37.80			1186.87	
MW-13	3/26/2012	1222.71	1224.67	1189.17	1179.17	37.49			1187.18	
MW-13	6/19/2012	1222.71	1224.67	1189.17	1179.17	37.72			1186.95	
MW-13	9/25/2012	1222.71	1224.67	1189.17	1179.17	38.28			1186.39	
MW-13	12/17/2012	1222.71	1224.67	1189.17	1179.17	38.03			1186.64	
MW-14	7/25/2007	1222.93	1225.20	1189.70	1179.70	39.21			1185.99	
MW-14	8/2/2007	1222.93	1225.20	1189.70	1179.70	39.22			1185.98	
MW-14	8/9/2007	1222.93	1225.20	1189.70	1179.70	39.28			1185.92	
MW-14	10/17/2007	1222.93	1225.20	1189.70	1179.70	38.79			1186.41	
MW-14	11/9/2007	1222.93	1225.20	1189.70	1179.70	38.87			1186.33	
MW-14	12/3/2007	1222.93	1225.20	1189.70	1179.70	38.90			1186.30	
MW-14	1/14/2008	1222.93	1225.20	1189.70	1179.70	39.26			1185.94	
MW-14	2/19/2008	1222.93	1225.20	1189.70	1179.70	39.40			1185.80	
MW-14	03/11/2008	1222.93	1225.20	1189.70	1179.70	39.45			1185.75	
MW-14	03/19/2008	1222.93	1225.20	1189.70	1179.70	39.49			1185.71	
MW-14	03/24/2008	1222.93	1225.20	1189.70	1179.70	39.46			1185.74	
MW-14	04/01/2008	1222.93	1225.20	1189.70	1179.70	39.37			1185.83	
MW-14	06/10/2008	1222.93	1225.20	1189.70	1179.70	38.37			1186.83	
MW-14	08/28/2008	1222.93	1225.20	1189.70	1179.70	38.75			1186.45	
MW-14	12/03/2008	1222.93	1225.20	1189.70	1179.70	38.53			1186.67	
MW-14	03/25/2009	1222.93	1225.20	1189.70	1179.70	38.86			1186.34	
MW-14	06/24/2009	1222.93	1225.20	1189.70	1179.70	39.36			1185.84	
MW-14	9/15/2009	1222.93	1225.20	1189.70	1179.70	39.75			1185.45	
MW-14	12/7/2009	1222.93	1225.20	1189.70	1179.70	39.72			1185.48	
MW-14	3/29/2010	1222.93	1225.20	1189.70	1179.70	39.18			1186.02	
MW-14	6/24/2010	1222.93	1225.20	1189.70	1179.70	39.10			1186.10	
MW-14	9/27/2010	1222.93	1225.20	1189.70	1179.70	38.18			1187.02	
MW-14	12/28/2010	1222.93	1225.20	1189.70	1179.70	38.17			1187.03	
MW-14	3/24/2011	1222.93	1225.20	1189.70	1179.70	38.13			1187.07	
MW-14	6/23/2011	1222.93	1225.20	1189.70	1179.70	37.65			1187.55	
MW-14	10/11/2011	1222.93	1225.20	1189.70	1179.70	38.06			1187.14	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-14	12/19/2011	1222.93	1225.20	1189.70	1179.70	38.29			1186.91	
MW-14	3/26/2012	1222.93	1225.20	1189.70	1179.70	38.12			1187.08	
MW-14	6/19/2012	1222.93	1225.20	1189.70	1179.70	38.33			1186.87	
MW-14	9/25/2012	1222.93	1225.20	1189.70	1179.70	38.85			1186.35	
MW-14	12/17/2012	1222.93	1225.20	1189.70	1179.70	38.59			1186.61	
MW-15	10/17/2007	1220.34	1222.53	1188.03	1178.03	36.56			1185.97	
MW-15	11/9/2007	1220.34	1222.53	1188.03	1178.03	36.67			1185.86	
MW-15	12/3/2007	1220.34	1222.53	1188.03	1178.03	36.70			1185.83	
MW-15	1/14/2008	1220.34	1222.53	1188.03	1178.03	37.04			1185.49	
MW-15	2/19/2008	1220.34	1222.53	1188.03	1178.03	37.20			1185.33	
MW-15	03/11/2008	1220.34	1222.53	1188.03	1178.03	37.24			1185.29	
MW-15	03/19/2008	1220.34	1222.53	1188.03	1178.03	37.27			1185.26	
MW-15	03/24/2008	1220.34	1222.53	1188.03	1178.03	37.23			1185.30	
MW-15	04/01/2008	1220.34	1222.53	1188.03	1178.03	37.11			1185.42	
MW-15	05/03/2008	1220.34	1222.53	1188.03	1178.03	36.07			1186.46	
MW-15	06/10/2008	1220.34	1222.53	1188.03	1178.03	35.51			1187.02	
MW-15	08/28/2008	1220.34	1222.53	1188.03	1178.03	36.61			1185.92	
MW-15	12/03/2008	1220.34	1222.53	1188.03	1178.03	36.34			1186.19	
MW-15	03/25/2009	1220.34	1222.53	1188.03	1178.03	36.68			1185.85	
MW-15	03/31/2009	1220.34	1222.53	1188.03	1178.03	36.61			1185.92	
MW-15	04/08/2009	1220.34	1222.53	1188.03	1178.03	36.65			1185.88	
MW-15	04/13/2009	1220.34	1222.53	1188.03	1178.03	36.76			1185.77	
MW-15	05/12/2009	1220.34	1222.53	1188.03	1178.03	36.87			1185.66	
MW-15	05/19/2009	1220.34	1222.53	1188.03	1178.03	36.90			1185.63	
MW-15	6/3/2009	1220.34	1222.53	1188.03	1178.03	37.10			1185.43	
MW-15	6/10/2009	1220.34	1222.53	1188.03	1178.03	37.01			1185.52	
MW-15	6/16/2009	1220.34	1222.53	1188.03	1178.03	37.17			1185.36	
MW-15	6/24/2009	1220.34	1222.53	1188.03	1178.03	37.19			1185.34	
MW-15	6/30/2009	1220.34	1222.53	1188.03	1178.03	37.25			1185.28	
MW-15	7/8/2009	1220.34	1222.53	1188.03	1178.03	37.34			1185.19	
MW-15	7/20/2009	1220.34	1222.53	1188.03	1178.03	37.39			1185.14	
MW-15	8/4/2009	1220.34	1222.53	1188.03	1178.03	37.34			1185.19	
MW-15	8/18/2009	1220.34	1222.53	1188.03	1178.03	37.47			1185.06	
MW-15	9/1/2009	1220.34	1222.53	1188.03	1178.03	37.46			1185.07	
MW-15	9/15/2009	1220.34	1222.53	1188.03	1178.03	37.55			1184.98	
MW-15	9/29/2009	1220.34	1222.53	1188.03	1178.03	37.56			1184.97	
MW-15	10/28/2009	1220.34	1222.53	1188.03	1178.03	37.22			1185.31	
MW-15	11/11/2009	1220.34	1222.53	1188.03	1178.03	37.34			1185.19	
MW-15	12/1/2009	1220.34	1222.53	1188.03	1178.03	37.43			1185.10	
MW-15	12/7/2009	1220.34	1222.53	1188.03	1178.03	37.52			1185.01	
MW-15	12/22/2009	1220.34	1222.53	1188.03	1178.03	37.64			1184.89	
MW-15	1/5/2010	1220.34	1222.53	1188.03	1178.03	37.50			1185.03	
MW-15	1/19/2010	1220.34	1222.53	1188.03	1178.03	37.54			1184.99	
MW-15	2/3/2010	1220.34	1222.53	1188.03	1178.03	37.55			1184.98	
MW-15	2/16/2010	1220.34	1222.53	1188.03	1178.03	37.55			1184.98	
MW-15	3/3/2010	1220.34	1222.53	1188.03	1178.03	37.57			1184.96	
MW-15	3/16/2010	1220.34	1222.53	1188.03	1178.03	36.55			1185.98	
MW-15	3/29/2010	1220.34	1222.53	1188.03	1178.03	37.00			1185.53	
MW-15	4/13/2010	1220.34	1222.53	1188.03	1178.03	37.25			1185.28	
MW-15	4/27/2010	1220.34	1222.53	1188.03	1178.03	37.23			1185.30	
MW-15	5/12/2010	1220.34	1222.53	1188.03	1178.03	37.20			1185.33	
MW-15	5/26/2010	1220.34	1222.53	1188.03	1178.03	37.15			1185.38	
MW-15	6/8/2010	1220.34	1222.53	1188.03	1178.03	37.25			1185.28	
MW-15	6/24/2010	1220.34	1222.53	1188.03	1178.03	36.81			1185.72	
MW-15	7/7/2010	1220.34	1222.53	1188.03	1178.03	36.85			1185.68	
MW-15	7/20/2010	1220.34	1222.53	1188.03	1178.03	36.63			1185.90	
MW-15	8/3/2010	1220.34	1222.53	1188.03	1178.03	36.70			1185.83	
MW-15	8/16/2010	1220.34	1222.53	1188.03	1178.03	36.21			1186.32	
MW-15	8/31/2010	1220.34	1222.53	1188.03	1178.03	36.61			1185.92	
MW-15	9/14/2010	1220.34	1222.53	1188.03	1178.03	36.63			1185.90	
MW-15	9/27/2010	1220.34	1222.53	1188.03	1178.03	35.94			1186.59	
MW-15	10/12/2010	1220.34	1222.53	1188.03	1178.03	36.33			1186.20	
MW-15	10/25/2010	1220.34	1222.53	1188.03	1178.03	36.25			1186.28	
MW-15	11/19/2010	1220.34	1222.53	1188.03	1178.03	36.03			1186.50	
MW-15	11/30/2010	1220.34	1222.53	1188.03	1178.03	36.02			1186.51	
MW-15	12/16/2010	1220.34	1222.53	1188.03	1178.03	36.12			1186.41	
MW-15	12/28/2010	1220.34	1222.53	1188.03	1178.03	36.16			1186.37	
MW-15	1/25/2011	1220.34	1222.53	1188.03	1178.03	36.28			1186.25	
MW-15	2/8/2011	1220.34	1222.53	1188.03	1178.03	36.35			1186.18	
MW-15	2/21/2011	1220.34	1222.53	1188.03	1178.03	36.37			1186.16	
MW-15	3/8/2011	1220.34	1222.53	1188.03	1178.03	36.45			1186.08	
MW-15	3/24/2011	1220.34	1222.53	1188.03	1178.03	35.95			1186.58	
MW-15	4/4/2011	1220.34	1222.53	1188.03	1178.03	36.01			1186.52	
MW-15	4/26/2011	1220.34	1222.53	1188.03	1178.03	35.72			1186.81	
MW-15	5/10/2011	1220.34	1222.53	1188.03	1178.03	35.69			1186.84	
MW-15	5/23/2011	1220.34	1222.53	1188.03	1178.03	35.51			1187.02	
MW-15	6/7/2011	1220.34	1222.53	1188.03	1178.03	35.65			1186.88	
MW-15	6/23/2011	1220.34	1222.53	1188.03	1178.03	35.53			1187.00	
MW-15	7/7/2011	1220.34	1222.53	1188.03	1178.03	35.83			1186.70	
MW-15	7/28/2011	1220.34	1222.53	1188.03	1178.03	35.92			1186.61	
MW-15	8/15/2011	1220.34	1222.53	1188.03	1178.03	35.77			1186.76	
MW-15	9/1/2011	1220.34	1222.53	1188.03	1178.03	35.84			1186.69	
MW-15	9/13/2011	1220.34	1222.53	1188.03	1178.03	36.03			1186.50	
MW-15	9/27/2011	1220.34	1222.53	1188.03	1178.03	36.06			1186.47	
MW-15	10/11/2011	1220.34	1222.53	1188.03	1178.03	36.00			1186.53	
MW-15	12/19/2011	1220.34	1222.53	1188.03	1178.03	36.18			1186.35	
MW-15	1/10/2012	1220.34	1222.53	1188.03	1178.03	36.25			1186.28	
MW-15	1/24/2012	1220.34	1222.53	1188.03	1178.03	36.39			1186.14	
MW-15	2/6/2012	1220.34	1222.53	1188.03	1178.03	36.45			1186.08	
MW-15	2/20/2012	1220.34	1222.53	1188.03	1178.03	36.58			1185.95	
MW-15	3/6/2012	1220.34	1222.53	1188.03	1178.03	36.59			1185.94	
MW-15	3/26/2012	1220.34	1222.53	1188.03	1178.03	35.97			1186.56	
MW-15	4/10/2012	1220.34	1222.53	1188.03	1178.03	36.30			1186.23	
MW-15	4/23/2012	1220.34	1222.53	1188.03	1178.03	36.09			1186.44	
MW-15	5/7/2012	1220.34	1222.53	1188.03	1178.03	36.02			1186.51	
MW-15	5/22/2012	1220.34	1222.53	1188.03	1178.03	36.32			1186.21	
MW-15	6/5/2012	1220.34	1222.53	1188.03	1178.03	36.26			1186.27	
MW-15	6/19/2012	1220.34	1222.53	1188.03	1178.03	36.17			1186.36	
MW-15	7/18/2012	1220.34	1222.53	1188.03	1178.03	36.50			1186.03	
MW-15	7/30/2012	1220.34	1222.53	1188.03	1178.03	36.48			1186.05	
MW-15	8/12/2012	1220.34	1222.53	1188.03	1178.03	36.62			1185.91	
MW-15	8/29/2012	1220.34	1222.53	1188.03	1178.03	36.72			1185.81	
MW-15	9/12/2012	1220.34	1222.53	1188.03	1178.03	36.73			1185.80	
MW-15	9/25/2012	1220.34	1222.53	1188.03	1178.03	36.72			1185.81	
MW-15	10/16/2012	1220.34	1222.53	1188.03	1178.03	36.50			1186.03	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-15	10/30/2012	1220.34	1222.53	1188.03	1178.03	36.39			1186.14	
MW-15	11/12/2012	1220.34	1222.53	1188.03	1178.03	36.40			1186.13	
MW-15	12/4/2012	1220.34	1222.53	1188.03	1178.03	36.45			1186.08	
MW-15	12/17/2012	1220.34	1222.53	1188.03	1178.03	36.42			1186.11	
MW-15	1/2/2013	1220.34	1222.53	1188.03	1178.03	36.59			1185.94	
MW-15D	03/24/2008	1221.20	1223.46	1155.96	1150.96	39.00			1184.46	
MW-15D	04/01/2008	1221.20	1223.46	1155.96	1150.96	38.81			1184.65	
MW-15D	06/10/2008	1221.20	1223.46	1155.96	1150.96	37.39			1186.07	
MW-15D	08/28/2008	1221.20	1223.46	1155.96	1150.96	38.40			1185.06	
MW-15D	12/03/2008	1221.20	1223.46	1155.96	1150.96	38.00			1185.46	
MW-15D	03/25/2009	1221.20	1223.46	1155.96	1150.96	38.22			1185.24	
MW-15D	06/24/2009	1221.20	1223.46	1155.96	1150.96	38.91			1184.55	
MW-15D	9/15/2009	1221.20	1223.46	1155.96	1150.96	39.27			1184.19	
MW-15D	12/7/2009	1221.20	1223.46	1155.96	1150.96	39.20			1184.26	
MW-15D	3/29/2010	1221.20	1223.46	1155.96	1150.96	38.66			1184.80	
MW-15D	6/24/2010	1221.20	1223.46	1155.96	1150.96	38.40			1185.06	
MW-15D	9/27/2010	1221.20	1223.46	1155.96	1150.96	37.78			1185.68	
MW-15D	12/28/2010	1221.20	1223.46	1155.96	1150.96	38.06			1185.40	
MW-15D	3/24/2011	1221.20	1223.46	1155.96	1150.96	37.93			1185.53	
MW-15D	6/23/2011	1221.20	1223.46	1155.96	1150.96	37.44			1186.02	
MW-15D	10/11/2011	1221.20	1223.46	1155.96	1150.96	37.89			1185.57	
MW-15D	12/19/2011	1221.20	1223.46	1155.96	1150.96	38.02			1185.44	
MW-15D	3/26/2012	1221.20	1223.46	1155.96	1150.96	37.79			1185.67	
MW-15D	6/19/2012	1221.20	1223.46	1155.96	1150.96	37.97			1185.49	
MW-15D	9/25/2012	1221.20	1223.46	1155.96	1150.96	38.55			1184.91	
MW-15D	12/17/2012	1221.20	1223.46	1155.96	1150.96	38.19			1185.27	
MW-16	10/17/2007	1221.69	1223.42	1188.92	1178.92	37.21			1186.21	
MW-16	11/9/2007	1221.69	1223.42	1188.92	1178.92	37.30			1186.12	
MW-16	12/3/2007	1221.69	1223.42	1188.92	1178.92	37.33			1186.09	
MW-16	1/14/2008	1221.69	1223.42	1188.92	1178.92	37.69			1185.73	
MW-16	2/19/2008	1221.69	1223.42	1188.92	1178.92	37.84			1185.58	
MW-16	03/11/2008	1221.69	1223.42	1188.92	1178.92	37.90			1185.52	
MW-16	03/19/2008	1221.69	1223.42	1188.92	1178.92	37.92			1185.50	
MW-16	03/24/2008	1221.69	1223.42	1188.92	1178.92	37.84			1185.58	
MW-16	04/01/2008	1221.69	1223.42	1188.92	1178.92	37.78			1185.64	
MW-16	05/03/2008	1221.69	1223.42	1188.92	1178.92	36.74			1186.68	
MW-16	06/10/2008	1221.69	1223.42	1188.92	1178.92	36.90			1186.52	
MW-16	08/28/2008	1221.69	1223.42	1188.92	1178.92	37.20			1186.22	
MW-16	12/03/2008	1221.69	1223.42	1188.92	1178.92	37.00			1186.42	
MW-16	03/25/2009	1221.69	1223.42	1188.92	1178.92	37.11			1186.31	
MW-16	06/24/2009	1221.69	1223.42	1188.92	1178.92	37.81			1185.61	
MW-16	9/15/2009	1221.69	1223.42	1188.92	1178.92	38.18			1185.24	
MW-16	12/7/2009	1221.69	1223.42	1188.92	1178.92	38.15			1185.27	
MW-16	3/30/2010	1221.69	1223.42	1188.92	1178.92	37.62			1185.80	
MW-16	6/24/2010	1221.69	1223.42	1188.92	1178.92	37.47			1185.95	
MW-16	9/27/2010	1221.69	1223.42	1188.92	1178.92	36.59			1186.83	
MW-16	12/28/2010	1221.69	1223.42	1188.92	1178.92	36.69			1186.73	
MW-16	3/24/2011	1221.69	1223.42	1188.92	1178.92	36.58			1186.84	
MW-16	6/23/2011	1221.69	1223.42	1188.92	1178.92	36.09			1187.33	
MW-16	9/1/2011	1221.69	1223.42	1188.92	1178.92	36.41			1187.01	
MW-16	9/13/2011	1221.69	1223.42	1188.92	1178.92	36.58			1186.84	
MW-16	9/27/2011	1221.69	1223.42	1188.92	1178.92	36.60			1186.82	
MW-16	10/11/2011	1221.69	1223.42	1188.92	1178.92	36.56			1186.86	
MW-16	12/19/2011	1221.69	1223.42	1188.92	1178.92	36.79			1186.63	
MW-16	3/26/2012	1221.69	1223.42	1188.92	1178.92	36.59			1186.83	
MW-16	6/19/2012	1221.69	1223.42	1188.92	1178.92	36.80			1186.62	
MW-16	9/25/2012	1221.69	1223.42	1188.92	1178.92	37.32			1186.10	
MW-16	12/17/2012	1221.69	1223.42	1188.92	1178.92	37.04			1186.38	
MW-17	10/17/2007	1188.77	1190.88	1182.38	1172.38	5.66			1185.22	
MW-17	11/9/2007	1188.77	1190.88	1182.38	1172.38	5.99			1184.89	
MW-17	12/3/2007	1188.77	1190.88	1182.38	1172.38	6.20			1184.68	
MW-17	1/14/2008	1188.77	1190.88	1182.38	1172.38	6.48			1184.40	
MW-17	2/19/2008	1188.77	1190.88	1182.38	1172.38	6.45			1184.43	
MW-17	03/11/2008	1188.77	1190.88	1182.38	1172.38	6.46			1184.42	
MW-17	03/19/2008	1188.77	1190.88	1182.38	1172.38	6.38			1184.50	
MW-17	03/24/2008	1188.77	1190.88	1182.38	1172.38	6.33			1184.55	
MW-17	04/01/2008	1188.77	1190.88	1182.38	1172.38	5.56			1185.32	
MW-17	04/08/2008	1188.77	1190.88	1182.38	1172.38	1.40			1189.48	
MW-17	11/19/2008	1188.77	1190.88	1182.38	1172.38	6.45			1184.43	
MW-17	12/03/2008	1188.77	1190.88	1182.38	1172.38	6.26			1184.62	
MW-17	03/25/2009	1188.77	1190.88	1182.38	1172.38	5.23			1185.65	
MW-17	06/24/2009	1188.77	1190.88	1182.38	1172.38	6.41			1184.47	
MW-17	9/15/2009	1188.77	1190.88	1182.38	1172.38	6.65			1184.23	
MW-17	12/7/2009	1188.77	1190.88	1182.38	1172.38	6.58			1184.30	
MW-17	3/30/2010	1188.77	1190.88	1182.38	1172.38	6.11			1184.77	
MW-17	6/24/2010	1188.77	1190.88	1182.38	1172.38	5.57			1185.31	
MW-17	9/27/2010	1188.77	1190.88	1182.38	1172.38	4.98			1185.90	
MW-17	12/28/2010	1188.77	1190.88	1182.38	1172.38	5.69			1185.19	
MW-17	3/24/2011	1188.77	1190.88	1182.38	1172.38	4.40			1186.48	
MW-17	6/23/2011	1188.77	1190.88	1182.38	1172.38	4.69			1186.19	
MW-17	9/1/2011	1188.77	1190.88	1182.38	1172.38	5.60			1185.28	
MW-17	9/13/2011	1188.77	1190.88	1182.38	1172.38	5.81			1185.07	
MW-17	9/27/2011	1188.77	1190.88	1182.38	1172.38	5.78			1185.10	
MW-17	10/11/2011	1188.77	1190.88	1182.38	1172.38	5.73			1185.15	
MW-17	12/19/2011	1188.77	1190.88	1182.38	1172.38	5.73			1185.15	
MW-17	3/26/2012	1188.77	1190.88	1182.38	1172.38	4.78			1186.10	
MW-17	6/19/2012	1188.77	1190.88	1182.38	1172.38	5.78			1185.10	
MW-17	9/25/2012	1188.77	1190.88	1182.38	1172.38	6.22			1184.66	
MW-17	12/17/2012	1188.77	1190.88	1182.38	1172.38	5.88			1185.00	
MW-18	11/1/2007	1225.12	1227.18	1192.18	1182.18	40.66			1186.52	
MW-18	11/9/2007	1225.12	1227.18	1192.18	1182.18	40.71			1186.47	
MW-18	12/3/2007	1225.12	1227.18	1192.18	1182.18	40.74			1186.44	
MW-18	1/14/2008	1225.12	1227.18	1192.18	1182.18	41.08			1186.10	
MW-18	2/19/2008	1225.12	1227.18	1192.18	1182.18	41.25			1185.93	
MW-18	03/19/2008	1225.12	1227.18	1192.18	1182.18	41.33			1185.85	
MW-18	03/24/2008	1225.12	1227.18	1192.18	1182.18	41.29			1185.89	
MW-18	04/01/2008	1225.12	1227.18	1192.18	1182.18	41.20			1185.98	
MW-18	06/10/2008	1225.12	1227.18	1192.18	1182.18	40.19			1186.99	
MW-18	08/28/2008	1225.12	1227.18	1192.18	1182.18	40.55			1186.63	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-18	12/03/2008	1225.12	1227.18	1192.18	1182.18	40.45			1186.73	
MW-18	03/25/2009	1225.12	1227.18	1192.18	1182.18	40.62			1186.56	
MW-18	06/24/2009	1225.12	1227.18	1192.18	1182.18	41.17			1186.01	
MW-18	9/15/2009	1225.12	1227.18	1192.18	1182.18	41.55			1185.63	
MW-18	12/7/2009	1225.12	1227.18	1192.18	1182.18	41.58			1185.60	
MW-18	3/29/2010	1225.12	1227.18	1192.18	1182.18	41.00			1186.18	
MW-18	6/24/2010	1225.12	1227.18	1192.18	1182.18	40.84			1186.34	
MW-18	9/27/2010	1225.12	1227.18	1192.18	1182.18	39.90			1187.28	
MW-18	12/28/2010	1225.12	1227.18	1192.18	1182.18	40.00			1187.18	
MW-18	3/24/2011	1225.12	1227.18	1192.18	1182.18	39.72			1187.46	
MW-18	6/23/2011	1225.12	1227.18	1192.18	1182.18	39.15			1188.03	
MW-18	10/11/2011	1225.12	1227.18	1192.18	1182.18	39.86			1187.32	
MW-18	12/19/2011	1225.12	1227.18	1192.18	1182.18	40.34			1186.84	
MW-18	3/26/2012	1225.12	1227.18	1192.18	1182.18	39.06			1188.12	
MW-18	6/19/2012	1225.12	1227.18	1192.18	1182.18	39.72			1187.46	
MW-18	9/25/2012	1225.12	1227.18	1192.18	1182.18	40.57			1186.61	
MW-18	12/17/2012	1225.12	1227.18	1192.18	1182.18	40.42			1186.76	
RW-1	6/12/2007	1224.98	1227.25	1190.25	1180.25	40.32			1186.93	
RW-1	6/21/2007	1224.98	1227.25	1190.25	1180.25	40.41			1186.84	
RW-1	7/2/2007	1224.98	1227.25	1190.25	1180.25	40.55			1186.70	
RW-1	7/11/2007	1224.98	1227.25	1190.25	1180.25	40.54			1186.71	
RW-1	7/24/2007	1224.98	1227.25	1190.25	1180.25	40.62			1186.63	
RW-1	8/2/2007	1224.98	1227.25	1190.25	1180.25	40.64			1186.61	
RW-1	8/9/2007	1224.98	1227.25	1190.25	1180.25	40.65	40.64	0.01	1186.60	1186.61
RW-1	10/17/2007	1224.98	1227.25	1190.25	1180.25	40.16			1187.09	
RW-1	11/9/2007	1224.98	1227.25	1190.25	1180.25	40.27			1186.98	
RW-1	12/3/2007	1224.98	1227.25	1190.25	1180.25	40.30			1186.95	
RW-1	02/19/2008	1224.98	1227.25	1190.25	1180.25	41.03			1186.22	
RW-1	03/25/2009	1224.98	1227.25	1190.25	1180.25	40.05			1187.20	
RW-1	12/07/2009	1224.98	1227.25	1190.25	1180.25	41.32	41.30	0.02	1185.93	1185.95
RW-1	03/29/2010	1224.98	1227.25	1190.25	1180.25	41.50	40.85	0.65	1185.75	1186.40
RW-1	06/24/2010	1224.98	1227.25	1190.25	1180.25	40.95	40.65	0.30	1186.30	1186.60
RW-1	09/27/2010	1224.98	1227.25	1190.25	1180.25	39.82			1187.43	
RW-1	12/28/2010	1224.98	1227.25	1190.25	1180.25	39.70	39.65	0.05	1187.55	1187.60
RW-1	03/24/2011	1224.98	1227.25	1190.25	1180.25	38.90	38.60	0.30	1188.35	1188.65
RW-1	06/23/2011	1224.98	1227.25	1190.25	1180.25	39.15			1188.10	
RW-1	09/01/2011	1224.98	1227.25	1190.25	1180.25	39.39			1187.86	
RW-1	09/13/2011	1224.98	1227.25	1190.25	1180.25	39.52			1187.73	
RW-1	09/27/2011	1224.98	1227.25	1190.25	1180.25	39.58			1187.67	
RW-1	10/11/2011	1224.98	1227.25	1190.25	1180.25	39.57			1187.68	
RW-1	10/24/2011	1224.98	1227.25	1190.25	1180.25	39.58			1187.67	
RW-1	11/07/2011	1224.98	1227.25	1190.25	1180.25	39.63			1187.62	
RW-1	12/19/2011	1224.98	1227.25	1190.25	1180.25	39.72			1187.53	
RW-1	03/26/2012	1224.98	1227.25	1190.25	1180.25	39.58			1187.67	
RW-1	06/19/2012	1224.98	1227.25	1190.25	1180.25	39.86			1187.39	
RW-1	09/25/2012	1224.98	1227.25	1190.25	1180.25	40.38			1186.87	
RW-1	12/17/2012	1224.98	1227.25	1190.25	1180.25	40.20			1187.05	
RW-2	6/12/2007	1224.63	1226.66	1189.66	1179.66	40.09			1186.57	
RW-2	6/21/2007	1224.63	1226.66	1189.66	1179.66	40.17		0.00	1186.49	
RW-2	6/21/2007	1224.63	1226.66	1189.66	1179.66	40.15	40.14	0.01	1186.51	1186.52
RW-2	7/2/2007	1224.63	1226.66	1189.66	1179.66	40.35	40.28	0.07	1186.31	1186.38
RW-2	7/11/2007	1224.63	1226.66	1189.66	1179.66	40.34	40.29	0.05	1186.32	1186.37
RW-2	7/24/2007	1224.63	1226.66	1189.66	1179.66	40.35	40.33	0.02	1186.31	1186.33
RW-2	8/2/2007	1224.63	1226.66	1189.66	1179.66	40.37	40.36	0.01	1186.29	1186.30
RW-2	8/2/2007	1224.63	1226.66	1189.66	1179.66	40.39	40.35	0.04	1186.27	1186.31
RW-2	8/9/2007	1224.63	1226.66	1189.66	1179.66	40.45	40.38	0.07	1186.21	1186.28
RW-2	10/17/2007	1224.63	1226.66	1189.66	1179.66	39.91	39.89	0.02	1186.75	1186.77
RW-2	11/9/2007	1224.63	1226.66	1189.66	1179.66	40.01			1186.65	
RW-2	12/3/2007	1224.63	1226.66	1189.66	1179.66	40.06	40.03	0.03	1186.60	1186.63
RW-2	1/14/2008	1224.63	1226.66	1189.66	1179.66	40.42	40.36	0.06	1186.24	1186.30
RW-2	2/19/2008	1224.63	1226.66	1189.66	1179.66	40.57	40.51	0.06	1186.09	1186.15
RW-2	03/19/2008	1224.63	1226.66	1189.66	1179.66	40.68	40.65	0.03	1185.98	1186.01
RW-2	04/01/2008	1224.63	1226.66	1189.66	1179.66	40.55	40.49	0.06	1186.11	1186.17
RW-2	04/08/2008	1224.63	1226.66	1189.66	1179.66	40.03	40.03	0.00	1186.63	1186.63
RW-2	04/23/2008	1224.63	1226.66	1189.66	1179.66	39.60	39.58	0.02	1187.06	1187.08
RW-2	05/03/2008	1224.63	1226.66	1189.66	1179.66	39.47	39.47	0.00	1187.19	1187.19
RW-2	06/10/2008	1224.63	1226.66	1189.66	1179.66	39.49			1187.17	
RW-2	07/22/2008	1224.63	1226.66	1189.66	1179.66	39.66	39.66	0.00	1187.00	1187.00
RW-2	07/30/2008	1224.63	1226.66	1189.66	1179.66	39.59	39.59	0.00	1187.07	1187.07
RW-2	08/05/2008	1224.63	1226.66	1189.66	1179.66	39.69	39.69	0.00	1186.97	1186.97
RW-2	08/12/2008	1224.63	1226.66	1189.66	1179.66	39.65	39.65	0.00	1187.01	1187.01
RW-2	08/19/2008	1224.63	1226.66	1189.66	1179.66	39.71	39.71	0.00	1186.95	1186.95
RW-2	08/27/2008	1224.63	1226.66	1189.66	1179.66	39.71	39.71	0.00	1186.95	1186.95
RW-2	08/28/2008	1224.63	1226.66	1189.66	1179.66	39.93	39.92	0.01	1186.73	1186.74
RW-2	09/09/2008	1224.63	1226.66	1189.66	1179.66	39.83	39.82	0.01	1186.83	1186.84
RW-2	09/16/2008	1224.63	1226.66	1189.66	1179.66	39.80	39.80	0.00	1186.86	1186.86
RW-2	09/24/2008	1224.63	1226.66	1189.66	1179.66	39.85	39.85	0.00	1186.81	1186.81
RW-2	09/30/2008	1224.63	1226.66	1189.66	1179.66	39.76	39.76	0.00	1186.90	1186.90
RW-2	10/06/2008	1224.63	1226.66	1189.66	1179.66	39.70	39.70	0.00	1186.96	1186.96
RW-2	10/14/2008	1224.63	1226.66	1189.66	1179.66	39.68	39.68	0.00	1186.98	1186.98
RW-2	10/21/2008	1224.63	1226.66	1189.66	1179.66	39.61	39.61	0.00	1187.05	1187.05
RW-2	11/04/2008	1224.63	1226.66	1189.66	1179.66	39.49	39.49	0.00	1187.17	1187.17
RW-2	11/11/2008	1224.63	1226.66	1189.66	1179.66	39.47	39.47	0.00	1187.19	1187.19
RW-2	11/19/2008	1224.63	1226.66	1189.66	1179.66	39.52	39.52	0.00	1187.14	1187.14
RW-2	12/03/2008	1224.63	1226.66	1189.66	1179.66	39.55	39.55	0.00	1187.11	1187.11
RW-2	01/02/2009	1224.63	1226.66	1189.66	1179.66	39.88	39.88	0.00	1186.78	1186.78
RW-2	02/04/2009	1224.63	1226.66	1189.66	1179.66	39.92			1186.74	
RW-2	02/10/2009	1224.63	1226.66	1189.66	1179.66	39.98			1186.68	
RW-2	02/17/2009	1224.63	1226.66	1189.66	1179.66	39.96	39.95	0.01	1186.70	1186.71
RW-2	02/27/2009	1224.63	1226.66	1189.66	1179.66	39.95	39.93	0.02	1186.71	1186.73
RW-2	03/04/2009	1224.63	1226.66	1189.66	1179.66	40.04	40.03	0.01	1186.62	1186.63
RW-2	03/11/2009	1224.63	1226.66	1189.66	1179.66	40.07			1186.59	
RW-2	03/17/2009	1224.63	1226.66	1189.66	1179.66	39.94			1186.72	
RW-2	03/25/2009	1224.63	1226.66	1189.66	1179.66	39.81			1186.85	
RW-2	03/31/2009	1224.63	1226.66	1189.66	1179.66	39.91			1186.75	
RW-2	04/08/2009	1224.63	1226.66	1189.66	1179.66	39.96			1186.70	
RW-2	04/13/2009	1224.63	1226.66	1189.66	1179.66	40.04			1186.62	
RW-2	05/12/2009	1224.63	1226.66	1189.66	1179.66	39.98			1186.68	
RW-2	05/19/2009	1224.63	1226.66	1189.66	1179.66	40.12			1186.54	
RW-2	6/3/2009	1224.63	1226.66	1189.66	1179.66	40.37	40.37	0.00	1186.29	1186.29
RW-2	6/10/2009	1224.63	1226.66	1189.66	1179.66	40.39	40.38	0.01	1186.27	1186.28
RW-2	6/16/2009	1224.63	1226.66	1189.66	1179.66	40.45	40.45	0.00	1186.21	1186.21
RW-2	6/24/2009	1224.63	1226.66	1189.66	1179.66	40.47			1186.19	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
RW-2	6/30/2009	1224.63	1226.66	1189.66	1179.66	40.50			1186.16	
RW-2	7/8/2009	1224.63	1226.66	1189.66	1179.66	40.54	40.52	0.02	1186.12	1186.14
RW-2	7/20/2009	1224.63	1226.66	1189.66	1179.66	40.70	40.68	0.02	1185.96	1185.98
RW-2	8/4/2009	1224.63	1226.66	1189.66	1179.66	40.65	40.63	0.02	1186.01	1186.03
RW-2	8/18/2009	1224.63	1226.66	1189.66	1179.66	40.72	40.71	0.01	1185.94	1185.95
RW-2	9/15/2009	1224.63	1226.66	1189.66	1179.66	41.13	41.09	0.04	1185.53	1185.57
RW-2	9/29/2009	1224.63	1226.66	1189.66	1179.66	41.11	41.03	0.08	1185.55	1185.63
RW-2	10/15/2009	1224.63	1226.66	1189.66	1179.66	40.92	40.88	0.04	1185.74	1185.78
RW-2	10/28/2009	1224.63	1226.66	1189.66	1179.66	40.62			1186.04	
RW-2	11/11/2009	1224.63	1226.66	1189.66	1179.66	40.59			1186.07	
RW-2	12/1/2009	1224.63	1226.66	1189.66	1179.66	40.85	40.78	0.07	1185.81	1185.88
RW-2	12/7/2009	1224.63	1226.66	1189.66	1179.66	40.85	40.84	0.01	1185.81	1185.82
RW-2	12/22/2009	1224.63	1226.66	1189.66	1179.66	40.85			1185.81	
RW-2	1/5/2010	1224.63	1226.66	1189.66	1179.66	40.80			1185.86	
RW-2	1/19/2010	1224.63	1226.66	1189.66	1179.66	40.80			1185.86	
RW-2	2/3/2010	1224.63	1226.66	1189.66	1179.66	40.81	40.8	0.01	1185.85	1185.86
RW-2	2/16/2010	1224.63	1226.66	1189.66	1179.66	40.82			1185.84	
RW-2	3/3/2010	1224.63	1226.66	1189.66	1179.66	40.83	40.8	0.03	1185.83	1185.86
RW-2	3/16/2010	1224.63	1226.66	1189.66	1179.66	40.10			1186.56	
RW-2	3/29/2010	1224.63	1226.66	1189.66	1179.66	40.30	40.295	0.00	1186.36	1186.37
RW-2	4/13/2010	1224.63	1226.66	1189.66	1179.66	40.55	40.55	0.00	1186.11	1186.11
RW-2	4/27/2010	1224.63	1226.66	1189.66	1179.66	40.25			1186.41	
RW-2	5/12/2010	1224.63	1226.66	1189.66	1179.66	40.45			1186.21	
RW-2	5/26/2010	1224.63	1226.66	1189.66	1179.66	40.41			1186.25	
RW-2	6/8/2010	1224.63	1226.66	1189.66	1179.66	40.50			1186.16	
RW-2	6/24/2010	1224.63	1226.66	1189.66	1179.66	40.11			1186.55	
RW-2	7/7/2010	1224.63	1226.66	1189.66	1179.66	40.16			1186.50	
RW-2	7/20/2010	1224.63	1226.66	1189.66	1179.66	39.84			1186.82	
RW-2	8/3/2010	1224.63	1226.66	1189.66	1179.66	39.89			1186.77	
RW-2	8/16/2010	1224.63	1226.66	1189.66	1179.66	39.58			1187.08	
RW-2	8/31/2010	1224.63	1226.66	1189.66	1179.66	39.80			1186.86	
RW-2	9/14/2010	1224.63	1226.66	1189.66	1179.66	39.83			1186.83	
RW-2	9/27/2010	1224.63	1226.66	1189.66	1179.66	39.25			1187.41	
RW-2	10/12/2010	1224.63	1226.66	1189.66	1179.66	39.48			1187.18	
RW-2	10/25/2010	1224.63	1226.66	1189.66	1179.66	39.42			1187.24	
RW-2	11/9/2010	1224.63	1226.66	1189.66	1179.66	39.12			1187.54	
RW-2	11/30/2010	1224.63	1226.66	1189.66	1179.66	39.10			1187.56	
RW-2	12/16/2010	1224.63	1226.66	1189.66	1179.66	39.62			1187.04	
RW-2	12/28/2010	1224.63	1226.66	1189.66	1179.66	39.23			1187.43	
RW-2	1/25/2011	1224.63	1226.66	1189.66	1179.66	39.25			1187.41	
RW-2	2/8/2011	1224.63	1226.66	1189.66	1179.66	39.42			1187.24	
RW-2	2/21/2011	1224.63	1226.66	1189.66	1179.66	39.44			1187.22	
RW-2	3/8/2011	1224.63	1226.66	1189.66	1179.66	39.55			1187.11	
RW-2	3/24/2011	1224.63	1226.66	1189.66	1179.66	39.20			1187.46	
RW-2	4/4/2011	1224.63	1226.66	1189.66	1179.66	39.14			1187.52	
RW-2	4/26/2011	1224.63	1226.66	1189.66	1179.66	38.85			1187.81	
RW-2	5/10/2011	1224.63	1226.66	1189.66	1179.66	38.65			1188.01	
RW-2	5/23/2011	1224.63	1226.66	1189.66	1179.66	38.65			1188.01	
RW-2	6/7/2011	1224.63	1226.66	1189.66	1179.66	38.68			1187.98	
RW-2	6/23/2011	1224.63	1226.66	1189.66	1179.66	38.70			1187.96	
RW-2	7/7/2011	1224.63	1226.66	1189.66	1179.66	38.95			1187.71	
RW-2	7/28/2011	1224.63	1226.66	1189.66	1179.66	38.95			1187.71	
RW-2	8/15/2011	1224.63	1226.66	1189.66	1179.66	38.82			1187.84	
RW-2	9/1/2011	1224.63	1226.66	1189.66	1179.66	38.91			1187.75	
RW-2	9/13/2011	1224.63	1226.66	1189.66	1179.66	39.05			1187.61	
RW-2	9/27/2011	1224.63	1226.66	1189.66	1179.66	39.12			1187.54	
RW-2	10/11/2011	1224.63	1226.66	1189.66	1179.66	39.09			1187.57	
RW-2	10/24/2011	1224.63	1226.66	1189.66	1179.66	39.10			1187.56	
RW-2	11/7/2011	1224.63	1226.66	1189.66	1179.66	39.15			1187.51	
RW-2	12/19/2011	1224.63	1226.66	1189.66	1179.66	39.30			1187.36	
RW-2	1/10/2012	1224.63	1226.66	1189.66	1179.66	39.35			1187.31	
RW-2	1/24/2012	1224.63	1226.66	1189.66	1179.66	39.55			1187.11	
RW-2	2/6/2012	1224.63	1226.66	1189.66	1179.66	39.61			1187.05	
RW-2	2/20/2012	1224.63	1226.66	1189.66	1179.66	39.72			1186.94	
RW-2	3/6/2012	1224.63	1226.66	1189.66	1179.66	39.80			1186.86	
RW-2	3/26/2012	1224.63	1226.66	1189.66	1179.66	39.12			1187.54	
RW-2	4/10/2012	1224.63	1226.66	1189.66	1179.66	39.48			1187.18	
RW-2	4/23/2012	1224.63	1226.66	1189.66	1179.66	39.30			1187.36	
RW-2	5/7/2012	1224.63	1226.66	1189.66	1179.66	39.23			1187.43	
RW-2	5/22/2012	1224.63	1226.66	1189.66	1179.66	39.45			1187.21	
RW-2	6/5/2012	1224.63	1226.66	1189.66	1179.66	39.40			1187.26	
RW-2	6/19/2012	1224.63	1226.66	1189.66	1179.66	39.33			1187.33	
RW-2	7/18/2012	1224.63	1226.66	1189.66	1179.66	39.58			1187.08	
RW-2	7/30/2012	1224.63	1226.66	1189.66	1179.66	39.57			1187.09	
RW-2	8/12/2012	1224.63	1226.66	1189.66	1179.66	39.70			1186.96	
RW-2	8/29/2012	1224.63	1226.66	1189.66	1179.66	39.85			1186.81	
RW-2	9/12/2012	1224.63	1226.66	1189.66	1179.66	39.88			1186.78	
RW-2	9/25/2012	1224.63	1226.66	1189.66	1179.66	39.86			1186.80	
RW-2	10/16/2012	1224.63	1226.66	1189.66	1179.66	39.74			1186.92	
RW-2	10/30/2012	1224.63	1226.66	1189.66	1179.66	39.59			1187.07	
RW-2	11/12/2012	1224.63	1226.66	1189.66	1179.66	39.61			1187.05	
RW-2	12/4/2012	1224.63	1226.66	1189.66	1179.66	39.72			1186.94	
RW-2	12/17/2012	1224.63	1226.66	1189.66	1179.66	39.69			1186.97	
RW-2	1/2/2013	1224.63	1226.66	1189.66	1179.66	39.80			1186.86	
RW-3	8/2/2007	1223.83	1226.55	1195.05	1185.05	39.99			1186.56	
RW-3	8/2/2007	1223.83	1226.55	1195.05	1185.05	40.00		film	1186.55	
RW-3	8/9/2007	1223.83	1226.55	1195.05	1185.05	40.08	39.98	0.10	1186.47	1186.57
RW-3	10/17/2007	1223.83	1226.55	1195.05	1185.05	39.77	39.43	0.34	1186.78	1187.12
RW-3	11/9/2007	1223.83	1226.55	1195.05	1185.05	40.39	39.55	0.84	1186.16	1187.00
RW-3	12/3/2007	1223.83	1226.55	1195.05	1185.05	40.05	39.58	0.47	1186.50	1186.97
RW-3	03/19/2008	1223.83	1226.55	1195.05	1185.05	39.40	39.17	0.23	1187.15	1187.38
RW-3	03/25/2009	1223.83	1226.55	1195.05	1185.05	38.25			1188.30	
RW-3	06/24/2009	1223.83	1226.55	1195.05	1185.05	38.59	38.55	0.04	1187.96	1188.00
RW-3	9/15/2009	1223.83	1226.55	1195.05	1185.05	38.98			1187.57	
RW-3	12/7/2009	1223.83	1226.55	1195.05	1185.05	39.30			1187.25	
RW-3	3/29/2010	1223.83	1226.55	1195.05	1185.05	38.55			1188.00	
RW-3	6/24/2010	1223.83	1226.55	1195.05	1185.05	38.49			1188.06	
RW-3	9/27/2010	1223.83	1226.55	1195.05	1185.05	38.62			1187.93	
RW-3	12/28/2010	1223.83	1226.55	1195.05	1185.05	38.74			1187.81	
RW-3	3/24/2011	1223.83	1226.55	1195.05	1185.05	38.30	38.26	0.04	1188.25	1188.29
RW-3	6/23/2011	1223.83	1226.55	1195.05	1185.05	37.98			1188.57	
RW-3	9/1/2011	1223.83	1226.55	1195.05	1185.05	38.78			1187.77	
RW-3	9/13/2011	1223.83	1226.55	1195.05	1185.05	38.91			1187.64	
RW-3	9/27/2011	1223.83	1226.55	1195.05	1185.05	38.97			1187.58	
RW-3	10/11/2011	1223.83	1226.55	1195.05	1185.05	38.96			1187.59	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
RW-3	10/24/2011	1223.83	1226.55	1195.05	1185.05	38.95			1187.60	
RW-3	11/7/2011	1223.83	1226.55	1195.05	1185.05	39.02			1187.53	
RW-3	12/19/2011	1223.83	1226.55	1195.05	1185.05	39.73			1186.82	
RW-3	3/26/2012	1223.83	1226.55	1195.05	1185.05	38.20	38.199	0.00	1188.35	1188.35
RW-3	6/19/2012	1223.83	1226.55	1195.05	1185.05	38.61	38.6	0.01	1187.94	1187.95
RW-3	9/25/2012	1223.83	1226.55	1195.05	1185.05	38.85			1187.70	
RW-3	12/17/2012	1223.83	1226.55	1195.05	1185.05	38.42			1188.13	
MW-19	02/26/2008	1187.43	1189.75	1183.75	1173.75	5.63			1184.12	
MW-19	03/11/2008	1187.43	1189.75	1183.75	1173.75	8.61			1181.14	
MW-19	03/19/2008	1187.43	1189.75	1183.75	1173.75	5.60			1184.15	
MW-19	03/24/2008	1187.43	1189.75	1183.75	1173.75	5.60			1184.15	
MW-19	04/01/2008	1187.43	1189.75	1183.75	1173.75	5.33			1184.42	
MW-19	04/08/2008	1187.43	1189.75	1183.75	1173.75	4.47			1185.28	
MW-19	04/09/2008	1187.43	1189.75	1183.75	1173.75	3.50			1186.25	
MW-19	04/23/2008	1187.43	1189.75	1183.75	1173.75	4.40			1185.35	
MW-19	05/03/2008	1187.43	1189.75	1183.75	1173.75	4.27			1185.48	
MW-19	06/10/2008	1187.43	1189.75	1183.75	1173.75	4.58			1185.17	
MW-19	08/28/2008	1187.43	1189.75	1183.75	1173.75	5.02			1184.73	
MW-19	12/03/2008	1187.43	1189.75	1183.75	1173.75	5.14			1184.61	
MW-19	03/25/2009	1187.43	1189.75	1183.75	1173.75	4.82			1184.93	
MW-19	06/24/2009	1187.43	1189.75	1183.75	1173.75	5.48			1184.27	
MW-19	9/15/2009	1187.43	1189.75	1183.75	1173.75	5.77			1183.98	
MW-19	12/7/2009	1187.43	1189.75	1183.75	1173.75	5.71			1184.04	
MW-19	3/29/2010	1187.43	1189.75	1183.75	1173.75	5.27			1184.48	
MW-19	6/24/2010	1187.43	1189.75	1183.75	1173.75	4.92			1184.83	
MW-19	9/27/2010	1187.43	1189.75	1183.75	1173.75	4.52			1185.23	
MW-19	12/28/2010	1187.43	1189.75	1183.75	1173.75	4.67			1185.08	
MW-19	3/24/2011	1187.43	1189.75	1183.75	1173.75	4.32			1185.43	
MW-19	6/23/2011	1187.43	1189.75	1183.75	1173.75	4.12			1185.63	
MW-19	10/11/2011	1187.43	1189.75	1183.75	1173.75	4.61			1185.14	
MW-19	12/19/2011	1187.43	1189.75	1183.75	1173.75	4.64			1185.11	
MW-19	3/26/2012	1187.43	1189.75	1183.75	1173.75	4.42			1185.33	
MW-19	6/19/2012	1187.43	1189.75	1183.75	1173.75	4.64			1185.11	
MW-19	9/25/2012	1187.43	1189.75	1183.75	1173.75	5.11			1184.64	
MW-19	12/17/2012	1187.43	1189.75	1183.75	1173.75	4.70			1185.05	
MW-20	2/26/2008	1188.54	1190.76	1184.76	1174.76	7.11			1183.65	
MW-20	03/11/2008	1188.54	1190.76	1184.76	1174.76	7.12			1183.64	
MW-20	03/19/2008	1188.54	1190.76	1184.76	1174.76	7.17			1183.59	
MW-20	03/24/2008	1188.54	1190.76	1184.76	1174.76	7.07			1183.69	
MW-20	04/01/2008	1188.54	1190.76	1184.76	1174.76	6.77			1183.99	
MW-20	04/08/2008	1188.54	1190.76	1184.76	1174.76	5.76			1185.00	
MW-20	04/23/2008	1188.54	1190.76	1184.76	1174.76	5.80			1184.96	
MW-20	06/10/2008	1188.54	1190.76	1184.76	1174.76	6.20			1184.56	
MW-20	08/28/2008	1188.54	1190.76	1184.76	1174.76	6.62			1184.14	
MW-20	12/03/2008	1188.54	1190.76	1184.76	1174.76	9.12			1181.64	
MW-20	03/25/2009	1188.54	1190.76	1184.76	1174.76	6.16			1184.60	
MW-20	06/24/2009	1188.54	1190.76	1184.76	1174.76	7.00			1183.76	
MW-20	9/15/2009	1188.54	1190.76	1184.76	1174.76	7.31			1183.45	
MW-20	12/7/2009	1188.54	1190.76	1184.76	1174.76	7.23			1183.53	
MW-20	3/29/2010	1188.54	1190.76	1184.76	1174.76	6.78			1183.98	
MW-20	6/24/2010	1188.54	1190.76	1184.76	1174.76	6.50			1184.26	
MW-20	9/27/2010	1188.54	1190.76	1184.76	1174.76	6.02			1184.74	
MW-20	12/28/2010	1188.54	1190.76	1184.76	1174.76	6.28			1184.48	
MW-20	3/24/2011	1188.54	1190.76	1184.76	1174.76	5.89			1184.87	
MW-20	6/23/2011	1188.54	1190.76	1184.76	1174.76	5.78			1184.98	
MW-20	10/11/2011	1188.54	1190.76	1184.76	1174.76	6.23			1184.53	
MW-20	12/19/2011	1188.54	1190.76	1184.76	1174.76	6.18			1184.58	
MW-20	3/26/2012	1188.54	1190.76	1184.76	1174.76	5.98			1184.78	
MW-20	6/19/2012	1188.54	1190.76	1184.76	1174.76	6.20			1184.56	
MW-20	9/25/2012	1188.54	1190.76	1184.76	1174.76	6.68			1184.08	
MW-20	12/17/2012	1188.54	1190.76	1184.76	1174.76	6.24			1184.52	
MW-21	02/27/2008	1189.48	1191.76	1186.26	1176.26	7.17			1184.59	
MW-21	03/11/2008	1189.48	1191.76	1186.26	1176.26	7.14			1184.62	
MW-21	03/19/2008	1189.48	1191.76	1186.26	1176.26	7.14			1184.62	
MW-21	03/24/2008	1189.48	1191.76	1186.26	1176.26	7.07			1184.69	
MW-21	04/01/2008	1189.48	1191.76	1186.26	1176.26	6.88			1184.88	
MW-21	04/08/2008	1189.48	1191.76	1186.26	1176.26	3.17			1188.59	
MW-21	11/19/2008	1189.48	1191.76	1186.26	1176.26	8.42			1183.34	
MW-21	12/03/2008	1189.48	1191.76	1186.26	1176.26	6.58			1185.18	
MW-21	06/24/2009	1189.48	1191.76	1186.26	1176.26	7.34			1184.42	
MW-21	9/15/2009	1189.48	1191.76	1186.26	1176.26	7.61			1184.15	
MW-21	12/7/2009	1189.48	1191.76	1186.26	1176.26	7.58			1184.18	
MW-21	3/29/2010	1189.48	1191.76	1186.26	1176.26	6.97			1184.79	
MW-21	6/24/2010	1189.48	1191.76	1186.26	1176.26	6.73			1185.03	
MW-21	9/27/2010	1189.48	1191.76	1186.26	1176.26	5.75			1186.01	
MW-21	12/28/2010	1189.48	1191.76	1186.26	1176.26	6.60			1185.16	
MW-21	3/24/2011	1189.48	1191.76	1186.26	1176.26	5.75			1186.01	
MW-21	6/23/2011	1189.48	1191.76	1186.26	1176.26	5.93			1185.83	
MW-21	9/1/2011	1189.48	1191.76	1186.26	1176.26	6.28			1185.48	
MW-21	9/13/2011	1189.48	1191.76	1186.26	1176.26	6.49			1185.27	
MW-21	9/27/2011	1189.48	1191.76	1186.26	1176.26	6.44			1185.32	
MW-21	10/11/2011	1189.48	1191.76	1186.26	1176.26	6.37			1185.39	
MW-21	12/19/2011	1189.48	1191.76	1186.26	1176.26	6.39			1185.37	
MW-21	3/26/2012	1189.48	1191.76	1186.26	1176.26	6.07			1185.69	
MW-21	6/19/2012	1189.48	1191.76	1186.26	1176.26	6.39			1185.37	
MW-21	9/25/2012	1189.48	1191.76	1186.26	1176.26	6.93			1184.83	
MW-21	12/17/2012	1189.48	1191.76	1186.26	1176.26	6.53			1185.23	
MW-22	02/28/2008	1188.14	1190.56	1185.56	1175.06	7.05			1183.51	
MW-22	03/11/2008	1188.14	1190.56	1185.56	1175.06	7.19			1183.37	
MW-22	03/19/2008	1188.14	1190.56	1185.56	1175.06	7.03			1183.53	
MW-22	03/24/2008	1188.14	1190.56	1185.56	1175.06	7.06			1183.50	
MW-22	04/01/2008	1188.14	1190.56	1185.56	1175.06	6.76			1183.80	
MW-22	04/23/2008	1188.14	1190.56	1185.56	1175.06	5.85			1184.71	
MW-22	06/10/2008	1188.14	1190.56	1185.56	1175.06	6.17			1184.39	
MW-22	08/28/2008	1188.14	1190.56	1185.56	1175.06	6.78			1183.78	
MW-22	12/03/2008	1188.14	1190.56	1185.56	1175.06	6.19			1184.37	
MW-22	03/25/2009	1188.14	1190.56	1185.56	1175.06	6.02			1184.54	
MW-22	06/24/2009	1188.14	1190.56	1185.56	1175.06	7.14			1183.42	
MW-22	9/15/2009	1188.14	1190.56	1185.56	1175.06	7.47			1183.09	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-22	12/7/2009	1188.14	1190.56	1185.56	1175.06	7.35			1183.21	
MW-22	3/29/2010	1188.14	1190.56	1185.56	1175.06	6.94			1183.62	
MW-22	6/24/2010	1188.14	1190.56	1185.56	1175.06	6.60			1183.96	
MW-22	9/27/2010	1188.14	1190.56	1185.56	1175.06	5.45			1185.11	
MW-22	12/28/2010	1188.14	1190.56	1185.56	1175.06	6.51			1184.05	
MW-22	3/24/2011	1188.14	1190.56	1185.56	1175.06	6.11			1184.45	
MW-22	6/23/2011	1188.14	1190.56	1185.56	1175.06	6.10			1184.46	
MW-22	10/11/2011	1188.14	1190.56	1185.56	1175.06	6.51			1184.05	
MW-22	12/19/2011	1188.14	1190.56	1185.56	1175.06	6.41			1184.15	
MW-22	3/26/2012	1188.14	1190.56	1185.56	1175.06	6.23			1184.33	
MW-22	6/19/2012	1188.14	1190.56	1185.56	1175.06	6.47			1184.09	
MW-22	9/25/2012	1188.14	1190.56	1185.56	1175.06	6.96			1183.60	
MW-22	12/17/2012	1188.14	1190.56	1185.56	1175.06	6.45			1184.11	
MW-23	03/24/2008	1187.00	1189.43	1183.93	1173.93	6.30			1183.13	
MW-23	04/01/2008	1187.00	1189.43	1183.93	1173.93	6.11			1183.32	
MW-23	04/08/2008	1187.00	1189.43	1183.93	1173.93	5.00			1184.43	
MW-23	04/09/2008	1187.00	1189.43	1183.93	1173.93	3.09			1186.34	
MW-23	04/23/2008	1187.00	1189.43	1183.93	1173.93	5.14			1184.29	
MW-23	05/03/2008	1187.00	1189.43	1183.93	1173.93	4.95			1184.48	
MW-23	06/10/2008	1187.00	1189.43	1183.93	1173.93	5.42			1184.01	
MW-23	08/28/2008	1187.00	1189.43	1183.93	1173.93	6.04			1183.39	
MW-23	12/03/2008	1187.00	1189.43	1183.93	1173.93	5.49			1183.94	
MW-23	03/25/2009	1187.00	1189.43	1183.93	1173.93	5.32			1184.11	
MW-23	06/24/2009	1187.00	1189.43	1183.93	1173.93	6.50			1182.93	
MW-23	9/15/2009	1187.00	1189.43	1183.93	1173.93	6.81			1182.62	
MW-23	12/7/2009	1187.00	1189.43	1183.93	1173.93	6.70			1182.73	
MW-23	3/29/2010	1187.00	1189.43	1183.93	1173.93	6.25			1183.18	
MW-23	6/24/2010	1187.00	1189.43	1183.93	1173.93	6.60			1182.83	
MW-23	9/27/2010	1187.00	1189.43	1183.93	1173.93	5.44			1183.99	
MW-23	12/28/2010	1187.00	1189.43	1183.93	1173.93	5.89			1183.54	
MW-23	3/24/2011	1187.00	1189.43	1183.93	1173.93	5.27			1184.16	
MW-23	6/23/2011	1187.00	1189.43	1183.93	1173.93	5.22			1184.21	
MW-23	10/11/2011	1187.00	1189.43	1183.93	1173.93	5.73			1183.70	
MW-23	12/19/2011	1187.00	1189.43	1183.93	1173.93	5.64			1183.79	
MW-23	3/26/2012	1187.00	1189.43	1183.93	1173.93	5.37			1184.06	
MW-23	6/19/2012	1187.00	1189.43	1183.93	1173.93	5.53			1183.90	
MW-23	9/25/2012	1187.00	1189.43	1183.93	1173.93	6.15			1183.28	
MW-23	12/17/2012	1187.00	1189.43	1183.93	1173.93	5.61			1183.82	
MW-24	02/26/2008	1185.60	1187.73	1183.73	1173.73	5.11			1182.62	
MW-24	03/11/2008	1185.60	1187.73	1183.73	1173.73	5.22			1182.51	
MW-24	03/19/2008	1185.60	1187.73	1183.73	1173.73	5.17			1182.56	
MW-24	03/24/2008	1185.60	1187.73	1183.73	1173.73	5.17			1182.56	
MW-24	04/01/2008	1185.60	1187.73	1183.73	1173.73	4.98			1182.75	
MW-24	04/08/2008	1185.60	1187.73	1183.73	1173.73	3.67			1184.06	
MW-24	04/09/2008	1185.60	1187.73	1183.73	1173.73	4.14			1183.59	
MW-24	04/23/2008	1185.60	1187.73	1183.73	1173.73	4.26			1183.47	
MW-24	05/03/2008	1185.60	1187.73	1183.73	1173.73	3.98			1183.75	
MW-24	06/10/2008	1185.60	1187.73	1183.73	1173.73	4.74			1182.99	
MW-24	08/28/2008	1185.60	1187.73	1183.73	1173.73	5.22			1182.51	
MW-24	12/03/2008	1185.60	1187.73	1183.73	1173.73	4.43			1183.30	
MW-24	03/25/2009	1185.60	1187.73	1183.73	1173.73	4.16			1183.57	
MW-24	06/24/2009	1185.60	1187.73	1183.73	1173.73	5.61			1182.12	
MW-24	9/15/2009	1185.60	1187.73	1183.73	1173.73	5.83			1181.90	
MW-24	12/7/2009	1185.60	1187.73	1183.73	1173.73	5.72			1182.01	
MW-24	3/29/2010	1185.60	1187.73	1183.73	1173.73	3.45			1184.28	
MW-24	6/24/2010	1185.60	1187.73	1183.73	1173.73	4.32			1183.41	
MW-24	9/27/2010	1185.60	1187.73	1183.73	1173.73	4.60			1183.13	
MW-24	12/28/2010	1185.60	1187.73	1183.73	1173.73	5.27			1182.46	
MW-24	3/24/2011	1185.60	1187.73	1183.73	1173.73	4.33			1183.40	
MW-24	6/23/2011	1185.60	1187.73	1183.73	1173.73	4.46			1183.27	
MW-24	10/11/2011	1185.60	1187.73	1183.73	1173.73	4.95			1182.78	
MW-24	12/19/2011	1185.60	1187.73	1183.73	1173.73	4.77			1182.96	
MW-24	3/26/2012	1185.60	1187.73	1183.73	1173.73	4.54			1183.19	
MW-24	6/19/2012	1185.60	1187.73	1183.73	1173.73	4.67			1183.06	
MW-24	9/25/2012	1185.60	1187.73	1183.73	1173.73	5.30			1182.43	
MW-24	12/17/2012	1185.60	1187.73	1183.73	1173.73	4.65			1183.08	
MW-24D	03/19/2008	1185.50	1187.76	1125.76	1120.76	3.72			1184.04	
MW-24D	03/24/2008	1185.50	1187.76	1125.76	1120.76	3.72			1184.04	
MW-24D	04/01/2008	1185.50	1187.76	1125.76	1120.76	3.55			1184.21	
MW-24D	04/08/2008	1185.50	1187.76	1125.76	1120.76	2.78			1184.98	
MW-24D	04/09/2008	1185.50	1187.76	1125.76	1120.76	2.74			1185.02	
MW-24D	04/23/2008	1185.50	1187.76	1125.76	1120.76	2.60			1185.16	
MW-24D	05/03/2008	1185.50	1187.76	1125.76	1120.76	2.44			1185.32	
MW-24D	06/10/2008	1185.50	1187.76	1125.76	1120.76	2.64			1185.12	
MW-24D	08/28/2008	1185.50	1187.76	1125.76	1120.76	3.17			1184.59	
MW-24D	12/03/2008	1185.50	1187.76	1125.76	1120.76	2.60			1185.16	
MW-24D	03/25/2009	1185.50	1187.76	1125.76	1120.76	3.25			1184.51	
MW-24D	06/24/2009	1185.50	1187.76	1125.76	1120.76	3.74			1184.02	
MW-24D	9/15/2009	1185.50	1187.76	1125.76	1120.76	4.06			1183.70	
MW-24D	12/7/2009	1185.50	1187.76	1125.76	1120.76	3.80			1183.96	
MW-24D	3/29/2010	1185.50	1187.76	1125.76	1120.76	3.48			1184.28	
MW-24D	6/24/2010	1185.50	1187.76	1125.76	1120.76	3.12			1184.64	
MW-24D	9/27/2010	1185.50	1187.76	1125.76	1120.76	2.64			1185.12	
MW-24D	12/28/2010	1185.50	1187.76	1125.76	1120.76	2.57			1185.19	
MW-24D	3/24/2011	1185.50	1187.76	1125.76	1120.76	2.42			1185.34	
MW-24D	6/23/2011	1185.50	1187.76	1125.76	1120.76	2.23			1185.53	
MW-24D	10/11/2011	1185.50	1187.76	1125.76	1120.76	2.74			1185.02	
MW-24D	3/26/2012	1185.50	1187.76	1125.76	1120.76	2.65			1185.11	
MW-24D	6/19/2012	1185.50	1187.76	1125.76	1120.76	2.80			1184.96	
MW-24D	9/25/2012	1185.50	1187.76	1125.76	1120.76	3.32			1184.44	
MW-24D	12/17/2012	1185.50	1187.76	1125.76	1120.76	2.99			1184.77	
MW-25	02/26/2008	1188.38	1190.44	1184.94	1174.94	6.79			1183.65	
MW-25	03/11/2008	1188.38	1190.44	1184.94	1174.94	6.85			1183.59	
MW-25	03/19/2008	1188.38	1190.44	1184.94	1174.94	6.70			1183.74	
MW-25	03/24/2008	1188.38	1190.44	1184.94	1174.94	6.71			1183.73	
MW-25	04/01/2008	1188.38	1190.44	1184.94	1174.94	6.52			1183.92	
MW-25	04/08/2008	1188.38	1190.44	1184.94	1174.94	5.14			1185.30	
MW-25	04/09/2008	1188.38	1190.44	1184.94	1174.94	4.85			1185.59	
MW-25	04/23/2008	1188.38	1190.44	1184.94	1174.94	5.21			1185.23	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-25	05/03/2008	1188.38	1190.44	1184.94	1174.94	4.99			1185.45	
MW-25	06/10/2008	1188.38	1190.44	1184.94	1174.94	5.30			1185.14	
MW-25	08/28/2008	1188.38	1190.44	1184.94	1174.94	6.19			1184.25	
MW-25	12/03/2008	1188.38	1190.44	1184.94	1174.94	5.92			1184.52	
MW-25	03/25/2009	1188.38	1190.44	1184.94	1174.94	5.69			1184.75	
MW-25	06/24/2009	1188.38	1190.44	1184.94	1174.94	6.82			1183.62	
MW-25	9/15/2009	1188.38	1190.44	1184.94	1174.94	7.13			1183.31	
MW-25	12/7/2009	1188.38	1190.44	1184.94	1174.94	7.00			1183.44	
MW-25	3/29/2010	1188.38	1190.44	1184.94	1174.94	6.48			1183.96	
MW-25	6/24/2010	1188.38	1190.44	1184.94	1174.94	6.15			1184.29	
MW-25	9/27/2010	1188.38	1190.44	1184.94	1174.94	6.24			1184.20	
MW-25	12/28/2010	1188.38	1190.44	1184.94	1174.94	6.11			1184.33	
MW-25	3/24/2011	1188.38	1190.44	1184.94	1174.94	5.51			1184.93	
MW-25	6/23/2011	1188.38	1190.44	1184.94	1174.94	5.52			1184.92	
MW-25	10/11/2011	1188.38	1190.44	1184.94	1174.94	6.11			1184.33	
MW-25	12/19/2011	1188.38	1190.44	1184.94	1174.94	6.05			1184.39	
MW-25	3/26/2012	1188.38	1190.44	1184.94	1174.94	5.56			1184.88	
MW-25	6/19/2012	1188.38	1190.44	1184.94	1174.94	6.00			1184.44	
MW-25	9/25/2012	1188.38	1190.44	1184.94	1174.94	6.53			1183.91	
MW-25	12/17/2012	1188.38	1190.44	1184.94	1174.94	6.03			1184.41	
MW-26	02/28/2008	1189.22	1191.31	1186.81	1176.81	7.94			1183.37	
MW-26	03/11/2008	1189.22	1191.31	1186.81	1176.81	8.04			1183.27	
MW-26	03/19/2008	1189.22	1191.31	1186.81	1176.81	7.91			1183.40	
MW-26	03/24/2008	1189.22	1191.31	1186.81	1176.81	7.91			1183.40	
MW-26	04/01/2008	1189.22	1191.31	1186.81	1176.81	7.78			1183.53	
MW-26	04/08/2008	1189.22	1191.31	1186.81	1176.81	5.57			1185.74	
MW-26	04/09/2008	1189.22	1191.31	1186.81	1176.81	6.14			1185.17	
MW-26	04/23/2008	1189.22	1191.31	1186.81	1176.81	6.52			1184.79	
MW-26	05/03/2008	1189.22	1191.31	1186.81	1176.81	6.41			1184.90	
MW-26	06/10/2008	1189.22	1191.31	1186.81	1176.81	6.95			1184.36	
MW-26	08/28/2008	1189.22	1191.31	1186.81	1176.81	7.80			1183.51	
MW-26	12/03/2008	1189.22	1191.31	1186.81	1176.81	7.26			1184.05	
MW-26	03/25/2009	1189.22	1191.31	1186.81	1176.81	6.89			1184.42	
MW-26	06/24/2009	1189.22	1191.31	1186.81	1176.81	8.21			1183.10	
MW-26	9/15/2009	1189.22	1191.31	1186.81	1176.81	8.49			1182.82	
MW-26	12/7/2009	1189.22	1191.31	1186.81	1176.81	8.33			1182.98	
MW-26	12/22/2009	1189.22	1191.31	1186.81	1176.81	8.30			1183.01	
MW-26	2/3/2010	1189.22	1191.31	1186.81	1176.81	8.35			1182.96	
MW-26	3/29/2010	1189.22	1191.31	1186.81	1176.81	7.86			1183.45	
MW-26	6/24/2010	1189.22	1191.31	1186.81	1176.81	7.38			1183.93	
MW-26	7/20/2010	1189.22	1191.31	1186.81	1176.81	7.33			1183.98	
MW-26	9/27/2010	1189.22	1191.31	1186.81	1176.81	6.91			1184.40	
MW-26	12/28/2010	1189.22	1191.31	1186.81	1176.81	7.62			1183.69	
MW-26	3/24/2011	1189.22	1191.31	1186.81	1176.81	6.73			1184.58	
MW-26	6/23/2011	1189.22	1191.31	1186.81	1176.81	6.88			1184.43	
MW-26	10/11/2011	1189.22	1191.31	1186.81	1176.81	7.49			1183.82	
MW-26	12/19/2011	1189.22	1191.31	1186.81	1176.81	7.30			1184.01	
MW-26	3/26/2012	1189.22	1191.31	1186.81	1176.81	6.95			1184.36	
MW-26	6/19/2012	1189.22	1191.31	1186.81	1176.81	7.28			1184.03	
MW-26	9/25/2012	1189.22	1191.31	1186.81	1176.81	7.89			1183.42	
MW-26	12/17/2012	1189.22	1191.31	1186.81	1176.81	7.33			1183.98	
MW-26	1/2/2013	1189.22	1191.31	1186.81	1176.81	NC			#VALUE!	
MW-27	02/27/2008	1189.48	1191.76	1185.76	1175.76	8.07			1183.69	
MW-27	03/11/2008	1189.48	1191.76	1185.76	1175.76	7.90			1183.86	
MW-27	03/19/2008	1189.48	1191.76	1185.76	1175.76	8.00			1183.76	
MW-27	03/24/2008	1189.48	1191.76	1185.76	1175.76	7.99			1183.77	
MW-27	04/01/2008	1189.48	1191.76	1185.76	1175.76	7.96			1183.80	
MW-27	04/08/2008	1189.48	1191.76	1185.76	1175.76	4.91			1186.85	
MW-27	04/09/2008	1189.48	1191.76	1185.76	1175.76	6.36			1185.40	
MW-27	04/23/2008	1189.48	1191.76	1185.76	1175.76	6.56			1185.20	
MW-27	05/03/2008	1189.48	1191.76	1185.76	1175.76	6.42			1185.34	
MW-27	06/10/2008	1189.48	1191.76	1185.76	1175.76	7.10			1184.66	
MW-27	08/28/2008	1189.48	1191.76	1185.76	1175.76	7.81			1183.95	
MW-27	12/03/2008	1189.48	1191.76	1185.76	1175.76	7.36			1184.40	
MW-27	03/25/2009	1189.48	1191.76	1185.76	1175.76	7.12			1184.64	
MW-27	06/24/2009	1189.48	1191.76	1185.76	1175.76	8.24			1183.52	
MW-27	9/15/2009	1189.48	1191.76	1185.76	1175.76	8.51			1183.25	
MW-27	12/7/2009	1189.48	1191.76	1185.76	1175.76	8.43			1183.33	
MW-27	12/22/2009	1189.48	1191.76	1185.76	1175.76	8.40			1183.36	
MW-27	1/5/2010	1189.48	1191.76	1185.76	1175.76	8.38			1183.38	
MW-27	2/3/2010	1189.48	1191.76	1185.76	1175.76	8.42			1183.34	
MW-27	3/29/2010	1189.48	1191.76	1185.76	1175.76	7.98			1183.78	
MW-27	6/24/2010	1189.48	1191.76	1185.76	1175.76	7.51			1184.25	
MW-27	7/20/2010	1189.48	1191.76	1185.76	1175.76	7.45			1184.31	
MW-27	9/27/2010	1189.48	1191.76	1185.76	1175.76	6.87			1184.89	
MW-27	12/28/2010	1189.48	1191.76	1185.76	1175.76	7.67			1184.09	
MW-27	3/24/2011	1189.48	1191.76	1185.76	1175.76	6.83			1184.93	
MW-27	6/23/2011	1189.48	1191.76	1185.76	1175.76	6.99			1184.77	
MW-27	10/11/2011	1189.48	1191.76	1185.76	1175.76	7.56			1184.20	
MW-27	12/19/2011	1189.48	1191.76	1185.76	1175.76	7.43			1184.33	
MW-27	3/26/2012	1189.48	1191.76	1185.76	1175.76	7.15			1184.61	
MW-27	6/19/2012	1189.48	1191.76	1185.76	1175.76	7.41			1184.35	
MW-27	7/18/2012	1189.48	1191.76	1185.76	1175.76	7.95			1183.81	
MW-27	9/25/2012	1189.48	1191.76	1185.76	1175.76	7.93			1183.83	
MW-27	12/17/2012	1189.48	1191.76	1185.76	1175.76	7.49			1184.27	
MW-27	1/2/2013	1189.48	1191.76	1185.76	1175.76	NC			#VALUE!	
MW-28	3/24/2008	1193.7	1195.89	1189.39	1179.39	11.17			1184.72	
MW-28	4/1/2008	1193.7	1195.89	1189.39	1179.39	10.87			1185.02	
MW-28	4/8/2008	1193.7	1195.89	1189.39	1179.39	8.00			1187.89	
MW-28	4/9/2008	1193.7	1195.89	1189.39	1179.39	8.57			1187.32	
MW-28	4/23/2008	1193.7	1195.89	1189.39	1179.39	9.71			1186.18	
MW-28	5/3/2008	1193.7	1195.89	1189.39	1179.39	9.49			1186.40	
MW-28	6/10/2008	1193.7	1195.89	1189.39	1179.39	11.32			1184.57	
MW-28	8/28/2008	1193.7	1195.89	1189.39	1179.39	10.53			1185.36	
MW-28	12/3/2008	1193.7	1195.89	1189.39	1179.39	10.35			1185.54	
MW-28	3/25/2009	1193.7	1195.89	1189.39	1179.39	10.18			1185.71	
MW-28	6/24/2009	1193.7	1195.89	1189.39	1179.39	11.16			1184.73	
MW-28	9/15/2009	1193.7	1195.89	1189.39	1179.39	11.50			1184.39	
MW-28	12/7/2009	1193.7	1195.89	1189.39	1179.39	11.42			1184.47	
MW-28	3/29/2010	1193.7	1195.89	1189.39	1179.39	10.82			1185.07	
MW-28	6/24/2010	1193.7	1195.89	1189.39	1179.39	10.59			1185.30	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-28	9/27/2010	1193.7	1195.89	1189.39	1179.39	9.46			1186.43	
MW-28	12/28/2010	1193.7	1195.89	1189.39	1179.39	10.29			1185.60	
MW-28	3/24/2011	1193.7	1195.89	1189.39	1179.39	9.58			1186.31	
MW-28	6/23/2011	1193.7	1195.89	1189.39	1179.39	9.69			1186.20	
MW-28	10/11/2011	1193.7	1195.89	1189.39	1179.39	10.16			1185.73	
MW-28	12/19/2011	1193.7	1195.89	1189.39	1179.39	10.32			1185.57	
MW-28	3/26/2012	1193.7	1195.89	1189.39	1179.39	9.85			1186.04	
MW-28	6/19/2012	1193.7	1195.89	1189.39	1179.39	10.23			1185.66	
MW-28	9/25/2012	1193.7	1195.89	1189.39	1179.39	10.79			1185.10	
MW-28	12/17/2012	1193.7	1195.89	1189.39	1179.39	10.44			1185.45	
MW-29	2/27/2008	1188.17	1189.86	1184.86	1174.86	7.00			1182.86	
MW-29	3/11/2008	1188.17	1189.86	1184.86	1174.86	7.02			1182.84	
MW-29	3/19/2008	1188.17	1189.86	1184.86	1174.86	6.68			1183.18	
MW-29	3/24/2008	1188.17	1189.86	1184.86	1174.86	6.98			1182.88	
MW-29	4/1/2008	1188.17	1189.86	1184.86	1174.86	7.74			1182.12	
MW-29	4/8/2008	1188.17	1189.86	1184.86	1174.86	2.29			1187.57	
MW-29	4/9/2008	1188.17	1189.86	1184.86	1174.86	5.85			1184.01	
MW-29	4/23/2008	1188.17	1189.86	1184.86	1174.86	5.99			1183.87	
MW-29	5/3/2008	1188.17	1189.86	1184.86	1174.86	5.63			1184.23	
MW-29	6/10/2008	1188.17	1189.86	1184.86	1174.86	6.51			1183.35	
MW-29	8/28/2008	1188.17	1189.86	1184.86	1174.86	6.94			1182.92	
MW-29	12/3/2008	1188.17	1189.86	1184.86	1174.86	6.33			1183.53	
MW-29	3/25/2009	1188.17	1189.86	1184.86	1174.86	5.99			1183.87	
MW-29	6/24/2009	1188.17	1189.86	1184.86	1174.86	7.33			1182.53	
MW-29	9/15/2009	1188.17	1189.86	1184.86	1174.86	7.57			1182.29	
MW-29	12/7/2009	1188.17	1189.86	1184.86	1174.86	7.45			1182.41	
MW-29	3/29/2010	1188.17	1189.86	1184.86	1174.86	7.11			1182.75	
MW-29	6/24/2010	1188.17	1189.86	1184.86	1174.86	6.22			1183.64	
MW-29	9/27/2010	1188.17	1189.86	1184.86	1174.86	6.25			1183.61	
MW-29	12/28/2010	1188.17	1189.86	1184.86	1174.86	6.90			1182.96	
MW-29	3/24/2011	1188.17	1189.86	1184.86	1174.86	5.94			1183.92	
MW-29	6/23/2011	1188.17	1189.86	1184.86	1174.86	6.18			1183.68	
MW-29	10/11/2011	1188.17	1189.86	1184.86	1174.86	6.69			1183.17	
MW-29	12/19/2011	1188.17	1189.86	1184.86	1174.86	6.51			1183.35	
MW-29	3/26/2012	1188.17	1189.86	1184.86	1174.86	6.26			1183.60	
MW-29	6/19/2012	1188.17	1189.86	1184.86	1174.86	6.42			1183.44	
MW-29	9/25/2012	1188.17	1189.86	1184.86	1174.86	7.03			1182.83	
MW-29	12/17/2012	1188.17	1189.86	1184.86	1174.86	6.48			1183.38	
MW-30	3/24/2008	1187.7	1190.84	1185.84	1175.84	7.82			1183.02	
MW-30	4/1/2008	1187.7	1190.84	1185.84	1175.84	7.62			1183.22	
MW-30	4/8/2008	1187.7	1190.84	1185.84	1175.84	6.18			1184.66	
MW-30	4/9/2008	1187.7	1190.84	1185.84	1175.84	6.45			1184.39	
MW-30	4/23/2008	1187.7	1190.84	1185.84	1175.84	6.66			1184.18	
MW-30	5/3/2008	1187.7	1190.84	1185.84	1175.84	6.40			1184.44	
MW-30	6/10/2008	1187.7	1190.84	1185.84	1175.84	7.25			1183.59	
MW-30	8/28/2008	1187.7	1190.84	1185.84	1175.84	7.87			1182.97	
MW-30	12/3/2008	1187.7	1190.84	1185.84	1175.84	7.22			1183.62	
MW-30	3/25/2009	1187.7	1190.84	1185.84	1175.84	10.81			1180.03	
MW-30	6/24/2009	1187.7	1190.84	1185.84	1175.84	8.22			1182.62	
MW-30	9/15/2009	1187.7	1190.84	1185.84	1175.84	8.45			1182.39	
MW-30	12/7/2009	1187.7	1190.84	1185.84	1175.84	8.32			1182.52	
MW-30	3/29/2010	1187.7	1190.84	1185.84	1175.84	8.00			1182.84	
MW-30	6/24/2010	1187.7	1190.84	1185.84	1175.84	7.11			1183.73	
MW-30	9/27/2010	1187.7	1190.84	1185.84	1175.84	6.98			1183.86	
MW-30	12/28/2010	1187.7	1190.84	1185.84	1175.84	6.81			1184.03	
MW-30	3/24/2011	1187.7	1190.84	1185.84	1175.84	6.64			1184.20	
MW-30	6/23/2011	1187.7	1190.84	1185.84	1175.84	7.02			1183.82	
MW-30	10/11/2011	1187.7	1190.84	1185.84	1175.84	7.61			1183.23	
MW-30	12/19/2011	1187.7	1190.84	1185.84	1175.84	7.43			1183.41	
MW-30	3/26/2012	1187.7	1190.84	1185.84	1175.84	7.12			1183.72	
MW-30	6/19/2012	1187.7	1190.84	1185.84	1175.84	7.34			1183.50	
MW-30	9/25/2012	1187.7	1190.84	1185.84	1175.84	7.97			1182.87	
MW-30	12/17/2012	1187.7	1190.84	1185.84	1175.84	7.36			1183.48	
MW-31	3/24/2008	1222.3	1223.99	1188.49	1178.49	38.67			1185.32	
MW-31	4/1/2008	1222.3	1223.99	1188.49	1178.49	38.50			1185.49	
MW-31	6/10/2008	1222.3	1223.99	1188.49	1178.49	37.51			1186.48	
MW-31	8/28/2008	1222.3	1223.99	1188.49	1178.49	37.94			1186.05	
MW-31	12/3/2008	1222.3	1223.99	1188.49	1178.49	37.70			1186.29	
MW-31	3/25/2009	1222.3	1223.99	1188.49	1178.49	37.88			1186.11	
MW-31	6/24/2009	1222.3	1223.99	1188.49	1178.49	38.51			1185.48	
MW-31	9/15/2009	1222.3	1223.99	1188.49	1178.49	38.90			1185.09	
MW-31	12/7/2009	1222.3	1223.99	1188.49	1178.49	38.88			1185.11	
MW-31	3/29/2010	1222.3	1223.99	1188.49	1178.49	38.37			1185.62	
MW-31	6/24/2010	1222.3	1223.99	1188.49	1178.49	38.19			1185.80	
MW-31	9/27/2010	1222.3	1223.99	1188.49	1178.49	37.34			1186.65	
MW-31	12/28/2010	1222.3	1223.99	1188.49	1178.49	37.44			1186.55	
MW-31	3/24/2011	1222.3	1223.99	1188.49	1178.49	37.35			1186.64	
MW-31	6/23/2011	1222.3	1223.99	1188.49	1178.49	36.87			1187.12	
MW-31	10/11/2011	1222.3	1223.99	1188.49	1178.49	37.32			1186.67	
MW-31	12/19/2011	1222.3	1223.99	1188.49	1178.49	37.54			1186.45	
MW-31	3/26/2012	1222.3	1223.99	1188.49	1178.49	37.32			1186.67	
MW-31	6/19/2012	1222.3	1223.99	1188.49	1178.49	37.11			1186.88	
MW-31	9/25/2012	1222.3	1223.99	1188.49	1178.49	38.03			1185.96	
MW-31	12/17/2012	1222.3	1223.99	1188.49	1178.49	37.76			1186.23	
MW-32	3/24/2008	1220.5	1222.67	1188.17	1178.17	37.28			1185.39	
MW-32	4/1/2008	1220.5	1222.67	1188.17	1178.17	37.23			1185.44	
MW-32	6/10/2008	1220.5	1222.67	1188.17	1178.17	36.19			1186.48	
MW-32	8/28/2008	1220.5	1222.67	1188.17	1178.17	36.66			1186.01	
MW-32	12/3/2008	1220.5	1222.67	1188.17	1178.17	36.45			1186.22	
MW-32	3/25/2009	1220.5	1222.67	1188.17	1178.17	36.68			1185.99	
MW-32	6/24/2009	1220.5	1222.67	1188.17	1178.17	37.27			1185.40	
MW-32	9/15/2009	1220.5	1222.67	1188.17	1178.17	37.65			1185.02	
MW-32	12/7/2009	1220.5	1222.67	1188.17	1178.17	37.62			1185.05	
MW-32	3/29/2010	1220.5	1222.67	1188.17	1178.17	37.14			1185.53	
MW-32	6/24/2010	1220.5	1222.67	1188.17	1178.17	36.93			1185.74	
MW-32	9/27/2010	1220.5	1222.67	1188.17	1178.17	35.98			1186.69	
MW-32	12/24/2010	1220.5	1222.67	1188.17	1178.17	36.21			1186.46	
MW-32	3/24/2011	1220.5	1222.67	1188.17	1178.17	35.96			1186.71	
MW-32	6/23/2011	1220.5	1222.67	1188.17	1178.17	35.62			1187.05	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-32	7/7/2011	1220.5	1222.67	1188.17	1178.17	37.79			1184.88	
MW-32	7/28/2011	1220.5	1222.67	1188.17	1178.17	37.80			1184.87	
MW-32	8/15/2011	1220.5	1222.67	1188.17	1178.17	37.80			1184.87	
MW-32	10/11/2011	1220.5	1222.67	1188.17	1178.17	36.08			1186.59	
MW-32	12/19/2011	1220.5	1222.67	1188.17	1178.17	36.28			1186.39	
MW-32	3/26/2012	1220.5	1222.67	1188.17	1178.17	36.06			1186.61	
MW-32	6/19/2012	1220.5	1222.67	1188.17	1178.17	36.26			1186.41	
MW-32	9/25/2012	1220.5	1222.67	1188.17	1178.17	36.82			1185.85	
MW-32	12/17/2012	1220.5	1222.67	1188.17	1178.17	36.52			1186.15	
MW-33	11/19/2008	1222.94	1224.97	1194.72	1174.72	38.59			1186.38	
MW-33	1/2/2009	1222.94	1224.97	1194.72	1174.72	38.57			1186.40	
MW-33	2/4/2009	1222.94	1224.97	1194.72	1174.72	38.69			1186.28	
MW-33	2/10/2009	1222.94	1224.97	1194.72	1174.72	38.71			1186.26	
MW-33	2/17/2009	1222.94	1224.97	1194.72	1174.72	38.69			1186.28	
MW-33	3/4/2009	1222.94	1224.97	1194.72	1174.72	38.80			1186.17	
MW-33	3/11/2009	1222.94	1224.97	1194.72	1174.72	38.82			1186.15	
MW-33	3/17/2009	1222.94	1224.97	1194.72	1174.72	38.66			1186.31	
MW-33	3/25/2009	1222.94	1224.97	1194.72	1174.72	38.57			1186.40	
MW-33	3/31/2009	1222.94	1224.97	1194.72	1174.72	41.00			1183.97	
MW-33	4/8/2009	1222.94	1224.97	1194.72	1174.72	38.68			1186.29	
MW-33	4/13/2009	1222.94	1224.97	1194.72	1174.72	38.74			1186.23	
MW-33	4/22/2009	1222.94	1224.97	1194.72	1174.72	38.85			1186.12	
MW-33	4/29/2009	1222.94	1224.97	1194.72	1174.72	38.77			1186.20	
MW-33	5/12/2009	1222.94	1224.97	1194.72	1174.72	38.72			1186.25	
MW-33	5/19/2009	1222.94	1224.97	1194.72	1174.72	38.89			1186.08	
MW-33	6/3/2009	1222.94	1224.97	1194.72	1174.72	39.10			1185.87	
MW-33	6/10/2009	1222.94	1224.97	1194.72	1174.72	39.04			1185.93	
MW-33	6/16/2009	1222.94	1224.97	1194.72	1174.72	39.16			1185.81	
MW-33	6/24/2009	1222.94	1224.97	1194.72	1174.72	39.21			1185.76	
MW-33	6/30/2009	1222.94	1224.97	1194.72	1174.72	39.30			1185.67	
MW-33	7/8/2009	1222.94	1224.97	1194.72	1174.72	39.55			1185.42	
MW-33	7/20/2009	1222.94	1224.97	1194.72	1174.72	39.44			1185.53	
MW-33	8/4/2009	1222.94	1224.97	1194.72	1174.72	39.38			1185.59	
MW-33	8/18/2009	1222.94	1224.97	1194.72	1174.72	39.50			1185.47	
MW-33	9/1/2009	1222.94	1224.97	1194.72	1174.72	39.51			1185.46	
MW-33	9/15/2009	1222.94	1224.97	1194.72	1174.72	39.59			1185.38	
MW-33	9/29/2009	1222.94	1224.97	1194.72	1174.72	39.58			1185.39	
MW-33	10/15/2009	1222.94	1224.97	1194.72	1174.72	39.45			1185.52	
MW-33	10/28/2009	1222.94	1224.97	1194.72	1174.72	39.30			1185.67	
MW-33	11/11/2009	1222.94	1224.97	1194.72	1174.72	39.35			1185.62	
MW-33	12/1/2009	1222.94	1224.97	1194.72	1174.72	38.47			1186.50	
MW-33	12/7/2009	1222.94	1224.97	1194.72	1174.72	39.55			1185.42	
MW-33	12/22/2009	1222.94	1224.97	1194.72	1174.72	39.54			1185.43	
MW-33	1/5/2010	1222.94	1224.97	1194.72	1174.72	39.48			1185.49	
MW-33	1/19/2010	1222.94	1224.97	1194.72	1174.72	39.52			1185.45	
MW-33	2/3/2010	1222.94	1224.97	1194.72	1174.72	39.49			1185.48	
MW-33	2/16/2010	1222.94	1224.97	1194.72	1174.72	39.50			1185.47	
MW-33	3/3/2010	1222.94	1224.97	1194.72	1174.72	39.50			1185.47	
MW-33	3/16/2010	1222.94	1224.97	1194.72	1174.72	38.70			1186.27	
MW-33	3/30/2010	1222.94	1224.97	1194.72	1174.72	38.98			1185.99	
MW-33	4/13/2010	1222.94	1224.97	1194.72	1174.72	39.21			1185.76	
MW-33	4/27/2010	1222.94	1224.97	1194.72	1174.72	39.18			1185.79	
MW-33	5/12/2010	1222.94	1224.97	1194.72	1174.72	39.23			1185.74	
MW-33	5/26/2010	1222.94	1224.97	1194.72	1174.72	39.19			1185.78	
MW-33	6/8/2010	1222.94	1224.97	1194.72	1174.72	39.14			1185.83	
MW-33	6/24/2010	1222.94	1224.97	1194.72	1174.72	38.73			1186.24	
MW-33	7/7/2010	1222.94	1224.97	1194.72	1174.72	38.78			1186.19	
MW-33	7/20/2010	1222.94	1224.97	1194.72	1174.72	38.67			1186.30	
MW-33	8/3/2010	1222.94	1224.97	1194.72	1174.72	38.73			1186.24	
MW-33	8/16/2010	1222.94	1224.97	1194.72	1174.72	38.32			1186.65	
MW-33	8/31/2010	1222.94	1224.97	1194.72	1174.72	38.50			1186.47	
MW-33	9/14/2010	1222.94	1224.97	1194.72	1174.72	38.50			1186.47	
MW-33	9/27/2010	1222.94	1224.97	1194.72	1174.72	37.99			1186.98	
MW-33	10/12/2010	1222.94	1224.97	1194.72	1174.72	38.20			1186.77	
MW-33	10/25/2010	1222.94	1224.97	1194.72	1174.72	38.10			1186.87	
MW-33	11/9/2010	1222.94	1224.97	1194.72	1174.72	37.92			1187.05	
MW-33	11/30/2010	1222.94	1224.97	1194.72	1174.72	37.92			1187.05	
MW-33	12/16/103	1222.94	1224.97	1194.72	1174.72	37.90			1187.07	
MW-33	12/28/2010	1222.94	1224.97	1194.72	1174.72	37.97			1187.00	
MW-33	1/25/2011	1222.94	1224.97	1194.72	1174.72	38.22			1186.75	
MW-33	2/8/2011	1222.94	1224.97	1194.72	1174.72	38.25			1186.72	
MW-33	2/21/2011	1222.94	1224.97	1194.72	1174.72	38.26			1186.71	
MW-33	3/8/2011	1222.94	1224.97	1194.72	1174.72	38.39			1186.58	
MW-33	3/24/2011	1222.94	1224.97	1194.72	1174.72	37.98			1186.99	
MW-33	4/4/2011	1222.94	1224.97	1194.72	1174.72	37.93			1187.04	
MW-33	4/26/2011	1222.94	1224.97	1194.72	1174.72	37.65			1187.32	
MW-33	5/10/2011	1222.94	1224.97	1194.72	1174.72	37.60			1187.37	
MW-33	5/23/2011	1222.94	1224.97	1194.72	1174.72	37.56			1187.41	
MW-33	6/7/2011	1222.94	1224.97	1194.72	1174.72	37.58			1187.39	
MW-33	6/23/2011	1222.94	1224.97	1194.72	1174.72	37.51			1187.46	
MW-33	7/7/2011	1222.94	1224.97	1194.72	1174.72	37.79			1187.18	
MW-33	7/28/2011	1222.94	1224.97	1194.72	1174.72	37.80			1187.17	
MW-33	8/15/2011	1222.94	1224.97	1194.72	1174.72	37.80			1187.17	
MW-33	10/11/2011	1222.94	1224.97	1194.72	1174.72	37.93			1187.04	
MW-33	12/19/2011	1222.94	1224.97	1194.72	1174.72	38.09			1186.88	
MW-33	1/10/2012	1222.94	1224.97	1194.72	1174.72	38.15			1186.82	
MW-33	1/24/2012	1222.94	1224.97	1194.72	1174.72	38.38			1186.59	
MW-33	2/6/2012	1222.94	1224.97	1194.72	1174.72	38.42			1186.55	
MW-33	2/20/2012	1222.94	1224.97	1194.72	1174.72	38.55			1186.42	
MW-33	3/6/2012	1222.94	1224.97	1194.72	1174.72	38.55			1186.42	
MW-33	3/26/2012	1222.94	1224.97	1194.72	1174.72	37.91			1187.06	
MW-33	4/10/2012	1222.94	1224.97	1194.72	1174.72	38.20			1186.77	
MW-33	4/23/2012	1222.94	1224.97	1194.72	1174.72	38.08			1186.89	
MW-33	5/7/2012	1222.94	1224.97	1194.72	1174.72	38.02			1186.95	
MW-33	5/22/2012	1222.94	1224.97	1194.72	1174.72	38.28			1186.69	
MW-33	6/5/2012	1222.94	1224.97	1194.72	1174.72	38.22			1186.75	
MW-33	6/20/2012	1222.94	1224.97	1194.72	1174.72	38.17			1186.80	
MW-33	7/18/2012	1222.94	1224.97	1194.72	1174.72	38.48			1186.49	
MW-33	7/30/2012	1222.94	1224.97	1194.72	1174.72	38.44			1186.53	
MW-33	8/12/2012	1222.94	1224.97	1194.72	1174.72	38.58			1186.39	
MW-33	8/29/2012	1222.94	1224.97	1194.72	1174.72	38.69			1186.28	
MW-33	9/12/2012	1222.94	1224.97	1194.72	1174.72	38.71			1186.26	
MW-33	9/25/2012	1222.94	1224.97	1194.72	1174.72	38.66			1186.31	
MW-33	10/16/2012	1222.94	1224.97	1194.72	1174.72	38.50			1186.47	
MW-33	10/30/2012	1222.94	1224.97	1194.72	1174.72	38.40			1186.57	

Table 2
Ground Water Elevations/Product Thickness
Enbridge Energy MP85
Reichel Road, Town of Murry, Rusk County, Wisconsin
WDNR BRRTS# 02-55-548746

Location	Date	Ground Surface Elevation	Top of Riser Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (TOR)	Depth to Product	Product Thickness	Ground Water Elevation	Product Elevation
MW-33	11/12/2012	1222.94	1224.97	1194.72	1174.72	38.42			1186.55	
MW-33	12/4/2012	1222.94	1224.97	1194.72	1174.72	38.48			1186.49	
MW-33	12/17/2012	1222.94	1224.97	1194.72	1174.72	38.46			1186.51	
MW-33	1/2/2013	1222.94	1224.97	1194.72	1174.72	38.60			1186.37	
MW-34	11/19/2008	1223.1	1225.14	1197.29	1177.29	38.31			1186.83	
MW-34	12/3/2008	1223.1	1225.14	1197.29	1177.29	38.59			1186.55	
MW-34	1/2/2009	1223.1	1225.14	1197.29	1177.29	38.83			1186.31	
MW-34	2/4/2009	1223.1	1225.14	1197.29	1177.29	38.91			1186.23	
MW-34	2/10/2009	1223.1	1225.14	1197.29	1177.29	38.94			1186.20	
MW-34	2/17/2009	1223.1	1225.14	1197.29	1177.29	38.93			1186.21	
MW-34	3/4/2009	1223.1	1225.14	1197.29	1177.29	39.01			1186.13	
MW-34	3/11/2009	1223.1	1225.14	1197.29	1177.29	39.04			1186.10	
MW-34	3/17/2009	1223.1	1225.14	1197.29	1177.29	38.91			1186.23	
MW-34	3/25/2009	1223.1	1225.14	1197.29	1177.29	38.82			1186.32	
MW-34	3/31/2009	1223.1	1225.14	1197.29	1177.29	38.80			1186.34	
MW-34	4/8/2009	1223.1	1225.14	1197.29	1177.29	38.95			1186.19	
MW-34	4/13/2009	1223.1	1225.14	1197.29	1177.29	39.05			1186.09	
MW-34	4/22/2009	1223.1	1225.14	1197.29	1177.29	36.11			1189.03	
MW-34	4/29/2009	1223.1	1225.14	1197.29	1177.29	39.03			1186.11	
MW-34	5/12/2009	1223.1	1225.14	1197.29	1177.29	38.98			1186.16	
MW-34	5/19/2009	1223.1	1225.14	1197.29	1177.29	39.19			1185.95	
MW-34	6/3/2009	1223.1	1225.14	1197.29	1177.29	39.35			1185.79	
MW-34	6/10/2009	1223.1	1225.14	1197.29	1177.29	39.34			1185.80	
MW-34	6/16/2009	1223.1	1225.14	1197.29	1177.29	39.47			1185.67	
MW-34	6/24/2009	1223.1	1225.14	1197.29	1177.29	39.45			1185.69	
MW-34	6/30/2009	1223.1	1225.14	1197.29	1177.29	39.25			1185.89	
MW-34	7/8/2009	1223.1	1225.14	1197.29	1177.29	39.62			1185.52	
MW-34	7/20/2009	1223.1	1225.14	1197.29	1177.29	39.70			1185.44	

Table 3
Air Sparging Injection Air Pressure and Flow Rates
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

	AS-1		AS-2		AS-3		AS-4		AS-5		AS-6		AS-7		Sparge Blower #1		Sparge Blower #2		Comments
Date	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	
04/08/08	8.5	2.5	8.5	2.5	8.5	2.5	8.5	2.5	8.5	2.5	8.5	2.5	8.5	2.5					
04/15/08	9		9		9		9		9		9		9						
04/21/08	8.5		8.5		8.5		8.5		8.5		8.5		8.5						
04/28/08	8	3	8	3	8	3	8	3	8	3	8	3	8	3					
05/06/08	6.5		6.5		6.5		6.5		6.5		6.5		6.5						
05/22/08	7.5	3	7.5	3	7.5	3	7.5	3	7.5	3	7.5	3	7.5	3					
06/04/08	7	3	7	3	7	3	7	3	7	3	7	3	7	3					
06/27/08	3	2.8	3	2.8	3	2.8	3	2.8	3	2.8	3	2.8	3	2.8					
07/22/08	0	0	0	0	3	5	6	5	8	4	7	2	6	2	--	20	--	23	
07/23/08	0	0	0	0	3	--	4	--	5	--	10	--	8	--	123	12	123	14	
07/30/08	0	0	0	0	3	4	4	4	6	4	9	1	8	1	120	12.5	120	15	
08/05/08	0	0	0	0	3	5	5	5	5	4	9	2	8	3	147	18	136	18	
08/12/08	0	0	0	0	3	4.5	4	4	6	4	10	0.5	8	0.5	145	18	136	18	
08/19/08	0	0	0	0	2	4.5	4	4	6	4	8	1	10	1	150	19	150	18	
08/27/08	0	0	0	0	2	4.5	4	4.5	6	4	10	1	8	2	145	19	128	18	
09/09/08	0	0	0	0	1	4	5	4.2	7	4	10	1	8.5	1.2	154	18	132	17	
09/16/08	0	0	0	0	1	5	3	5	6.5	4	1	1	8.5	1	154	18	132	17	
09/24/08	0	0	0	0	1	4.5	4.5	4.2	7	4	10	1	8.5	2	154	18	141	17	
09/30/08	0	0	0	0	1	4.5	4	4.5	7	4	10	1.5	8.5	1.4	132	19	0	0	
10/06/08	8.5	7	0	0	4	6	0	0	0	0	11	3	0	0	0	0	154	19	
10/14/08	7	3.5	1	3.5	1	5	1	5	6	4	10	1	8	1.5	0	0	158	19	
10/21/08	7	3.5	1	3.5	1	4.75	1	5	6	4	9.5	1.5	8	2	0	0	154	19	
11/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	18	
11/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	145	20	0	0	
11/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	145	20	
12/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150	22	0	0	
12/10/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NR	21	0	0	
12/26/08	13.5	5	1	5.5	2	4.5	2	7	1	5	5.5	0	1	5.5	NR	20	0	0	
01/02/09	14	4	1	6	2	4	1	7	1	5	5	0	1.5	5.5	0	0	92	21	
01/09/09	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
01/20/09	1	2.5	1	2.5	1	2	1	3	5.5	3.5	11.5	0	7	0	0	0	132	20	
01/27/09	1	1	1	1	1	1	1	2	4	2.5	12	0.5	10	1	NR	22	0	5	
02/04/09	1	1	1	1	1	1	1	1	7.5	2.5	15	1	11	1	0	0	110	28	
02/11/09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	FROZEN	19.5	0	0	
02/17/09	1	1	2	1	2	1	2	2.5	4.5	1	11.5	2.5	10	1	0	0	132	20	
02/27/09	1.5	0	1	0	1	0	0.5	1	4.5	0	11.5	2	10.5	0	123	21	0	0	
03/04/09	3.5	2.5	1	2.5	1	2	1	3	5	0	12.5	3.5	16	2	0	0	136	20	
03/11/09	0	0	0	0	2	3	1	4	5.5	0	13	3.5	16	2.5	123	20	0	0	
03/17/09	5	3	1	3	2	3	1	4	0	0	13.5	3.5	16	2.25	0	0	136	20.5	
03/24/09	5.5	2.5	1.5	2.75	1.5	2.5	1	3.5	1.5	2	13.5	3.5	15.5	2.5	0	0	123	20	
03/31/09	1.2	3	1	3	1	3	1	4	5.5	2.75	12.5	3.5	14.5	3.75	0	0	0	0	
04/08/09	2	3	1	3	1	2.75	1	4.75	5.5	2.5	11.5	3.5	15	2.5	0	0	0	0	
04/13/09	2	3	2	2.25	2	2	2	3	5.5	2	10.5	3.5	16	2.25					
04/22/09	1.5	2	1.5	2	1.5	1	1.5	2.5	5	1.5	11	3	18	1.5	0	0	0	0	
04/29/09	1	2.75	2	2.5	2	2.5	1	3.25	5	2.25	11	3.25	17.25	2	0	0	0	0	
05/12/09	1	2.25	1	2	1.5	1.75	1	2.5	5	1.75	11	3.25	17	1.75	0	0	0	0	
05/19/09	1	2.5	1	2	1	2.25	1.5	3	4.5	2	11	3.25	17.5	2	0	0	0	0	
06/03/09	1	3	1	3	1	2.75	1	3.5	5	2.5	11	3	19	2	0	0	0	0	
06/10/09	2.5	3	2	2.25	1.5	2	1.5	3	6	2	12.5	3.25	11.5	1.75	0	0	0	0	
06/16/09	3	2	1.5	2	1	1.75	1	2.5	5.5	1.75	13	3.5	12.5	1	0	0	0	0	
06/24/09	3	2	1.5	2	1	1.75	1	2.5	5.5	1.75	13	3.5	12.5	1	0	0	0	0	
06/30/09	2	2.5	2	2	1.5	2	1	3	5.5	2	13	3	12.5	2	0	0	0	0	
07/08/09	1	3	2	2.5	1	2	2	3	5.5	2	12.5	3	13	2					
07/20/09	2	1	2	1	1	1	1	2.25	5.5	1.5	13	3	13.5	1					
08/04/09	2	1.5	2	1	1	1	1	2	5.5	1	13	2.5	13.5	1					
08/18/09	2	1.5	1.5	1	2	1	1	2	5	2	13	2	14	1					
09/11/09	11	3	7	3	5	3	1	3	6	2.5	0	0	0	0					
09/15/09	12	2	6	2.5	4	2	1.5	2	6.5	2.5	0	0	0	0					
09/29/09	System down for repair																		
09/30/09	System restarted																		
09/30/09	0	0	3	3.1	9	3.5	8.5	4.5	10	4	3	0.5	3	0.5					
10/15/09	6	4	6	4	5	4	5.5	5	6	4	4.5	0.5	6	0.5					
10/28/09	0	0	0	3	9	5	9	5	9	5	3	1	0	0					
11/11/09	0	0	0	4	9	4	9	5	10	4.5	3	1	0	0					
12/01/09	5	3.5	5	4	5	4	5	4.5	5	3.5	5	1	5	0.5					

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Table 3
Air Sparging Injection Air Pressure and Flow Rates
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

	AS-1		AS-2		AS-3		AS-4		AS-5		AS-6		AS-7		Sparge Blower #1		Sparge Blower #2		Comments
Date	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	
12/07/09	5	3	5	3.5	5.5	3.5	5	4.5	5	2	5	1	5.5	0.5					
12/22/09	0	1	3	4.5	9	5	9	6	9	4.5	0	0	3	0					
01/05/10	0	0	3	3.5	9	3.5	9	4.5	9	4	0	0	2	0					
01/19/10	0	0	2	4	9	4.5	9	5	9	4.5	0	0	3	0					
02/03/10	0	0	0	0	9	4.5	8.5	5	9	4.5	0	0	0	0					
02/16/10	0	0	0	3	9	5	9	5	9	5	0	0	0	0					
03/03/10	0	0	0	3	9	4	9	4.8	9	4	0	0	0	0					
03/16/10	0	0	5	4.5	5	4.5	4.5	5	5	3	5	1	0	0					
03/29/10	0	0	5	4	5	5	3	5	5	3	0	0	5	1					
04/13/10	0	0	5	4	5	4.5	3	5	5	2.5	0	0	5	0.5					
04/27/10	0	0	5	4	5	4	3	4.5	5	2	0	0	5	0.5					
05/10/10	0		5		5		3		5		0		5						
05/10/10	0		0		0		0		0		0		0						blower off
05/12/10	0		0		0		0		0		0		0						Sparge off at arrival
05/26/10	0		0		0		0		0		0		0						sparge blower still off
06/08/10	0		0		0		0		0		0		0						
06/08/10	0	0	7	4	7	4.5	7	5	7	4.5	0	0	7.5	1					AS restarted 6/3/10
06/24/10	0	0	7	4	7	4	7	4.5	7	4.5	0	0	7	2					
07/07/10	0	0	7	3	7	3	7	3	7	3	0	0	7	0					
07/20/10	0	0	7	4	7	3.5	7	4.5	7	4	0	0	7	0.5					
08/03/10	0	0	7	4	7	3.5	7	4	7	4	0	0	7	0					
08/12/10	0		7		7		7		7		0		7						
08/12/10	0		0		0		0		0		0		0						down 8/12 to 8/16
08/16/10	0		0		0		0		0		0		0						
08/16/10	0	0	7	5	7	5	7	6	7	5.5	0	0	7	2					AS Restarted
08/31/10	0	0	7	4	7	4	7	4.5	7	4	0	0	7	0					
09/14/10	0	0	6.5	5	6	5	6	5	6.5	5	0	0	6.5	1					
09/27/10	0	0	6	5	6	5	6	5	6	5	0	0	6	1					
10/12/10	5.5	4	5.5	4	5.5	4	5	4.5	5.5	4.5	0	0	0	0					
10/25/10	6	4.5	6	5	6	5	3	5.5	6	5	0	0	0	0					
11/09/10	6	4	6	5	6	5	4	6	6	5	0	0	0	0					
11/30/10	5	5	5	5	5	5.25	5	5.5	5	5	0	0	0	0					
12/16/10	5	5	5	5	5	5.28	5	6	5	5	0	0	0	0					
12/18/10	5		5		5		5		5		0		0						
12/18/10	0		0		0		0		0		0		0						blower off
12/28/10	0		0		0		0		0		0		0						blower down for repair
01/12/11	0		0		0		0		0		0		0						blower repaired
01/12/11	5.5	5	5.5	6	5.5	6	5.5	7	5.5	6	0	0	0	0					AS Restarted
01/25/11	7	4	7	4.5	7	4.5	6.5	5	7	5	0	0	0	0					
02/08/11	6.5	4.5	6	5	6	5.5	4.5	6	6	5.5	0	0	0	0					At arrival
02/08/11	0	0	0	0	6	4.5	6	5.5	6	5	6	2	6	2					Adjusted after restart
02/21/11	0	0	0	0	5.25	5	6.5	5.5	5	5	6	2	6	2					At arrival
02/21/11	0	0	0	0	6	5.5	6	6	6	5.5	6	2	6	2.5					Adjusted after restart
03/08/11	0	0	0	0	5.5	5	5.5	5	5.5	5	6	2	6	1					At arrival
03/08/11	0	0	0	0	6	5.5	6	6.5	6	5.25	6	2	6	2					adjusted upon departure
03/24/11	0	0	0	0	5.5	6	6.5	6.5	5	5.25	5	2.25	5	2.5					At arrival
03/24/11	0	0	0	0	5	6	5	7	5	6	5	8	5	3.5					adjusted upon departure
04/04/11	0	0	0	0	8	5	5	5.5	5	5	4	2	4.5	2					At arrival
04/04/11	0	0	0	0	5	6	5	7	5	6	5	2.5	5	3					adjusted upon departure
04/26/11	0	0	0	0	4	5	6	6	5	5.5	6	2	6	2					At arrival
04/26/11	0	0	0	0	5	6	5	6.5	5	6	5	2	5	2.5					adjusted upon departure
05/10/11	0	0	0	0	5.5	5	5.5	5.5	5	5	5	2	6	1.5					At arrival
05/10/11	0	0	0	0	5	5	5	6	5	5.25	5	2	5	2.5					adjusted upon departure
05/23/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0					OFF at arrival
05/23/11	0	0	0	0	5	6	5	7	65	6	5	2	5	2.5					adjusted upon departure
06/07/11	0	0	0	0	6	4	5	4	5	5	4	1.5	5	0					At arrival
06/07/11	0	0	0	0	5	4.5	5	5.25	5	5	5	1.5	5	1					adjusted upon departure
06/23/11	0	0	0	0	4	6	3	6	5	6	5	2	5	2					At arrival
06/23/11	0	0	0	0	5	6	5	6.25	5	6	5	2	5	2					adjusted upon departure
07/07/11	0	0	0	0	5	5	4	5.25	5	5.25	5	1	5	1					At arrival
07/07/11	0	0	0	0	5	5	5	5.5	5	5.28	5	1.5	8	10					adjusted upon departure
07/28/11	0	0	0	0	5	4.5	5	5	5	5	5	1	5	0					At arrival

Table 3
Air Sparging Injection Air Pressure and Flow Rates
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

	AS-1		AS-2		AS-3		AS-4		AS-5		AS-6		AS-7		Sparge Blower #1		Sparge Blower #2		Comments
Date	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	Flow Rate (scfm)	Pressure (psi)	
07/28/11	0	0	0	0	7	5	7	6	7	6	7	2	7	2					adjusted upon departure
08/15/11	0	0	0	0	6	4	5	5	5	5	7.5	2	8	1					At arrival
08/15/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0					Shut down for TEST.
01/10/12	5	4	5	4	5	3	5	3	5	3	5	2.5	5	0.5					System restarted
01/10/12	5	4	5	4	5	4	5	4	5	4	5	4	5	4					adjusted upon departure
01/24/12	5	3	4	3	4	3	6	3	5	3	5	2	5	0					At arrival
01/24/12	5	3	5	4	5	3	5	3	5	3	5	2	5	0					adjusted upon departure
02/06/12	5	3.5	5	4	5	3	4	3	5	3	5	2	5	0					At arrival
02/06/12	5	4.5	4	5.0	5	4.0	5	4.0	5	4.0	5	2.0	5	1.0					adjusted upon departure
02/20/12	4	4	5	4	5	3.5	4	3.5	5	3	5	1.5	5	1					At arrival
02/20/12	5	5	4	5	5	5	4.5	5	5.5	4	5	1	5	1					adjusted upon departure
03/06/12	5	3	4.5	3.5	5.0	3.0	4.0	3.0	5.0	3.0	4.0	1.0	5.0	0.5					At arrival
03/06/12	5	5	5	5	5	4.75	4	4.5	5	4.0	5	1.0	5	1.0					adjusted upon departure
03/26/12	5.0	3	5.0	3.5	5.0	3.0	4.0	3.0	4.5	3.0	4.0	1.0	5.0	0.5					At arrival
03/26/12	5.0	4.5	5.0	4.75	5.0	4.5	4.0	4.0	5.0	4.0	5.0	2.0	5.0	2.0					adjusted upon departure
04/10/12	5	4	4	4	5.5	4	3	4	5	3	5	2	5.25	1					At arrival
04/10/12	5	5.0	5	5.5	5	5.0	4	5.0	5	4.0	5	2.0	5	3.0					adjusted upon departure
04/23/12	4	4	4	4	5	3	3.5	3	4.5	3	5	2	5	1.5					At arrival
04/23/12	5	5	5	5	4	5	5	5	5	4	5	2	5	3					adjusted upon departure
05/07/12	5.5	4	5	4	4	3	2	3.5	4.5	3	4.5	2	5	2					At arrival
05/07/12	4	4.5	4	5	4	4.5	3	4	4	4	5	2.5	5	3					adjusted upon departure
05/22/12	4	4	4	4	3	4	2	4	5	4.0	6	1.5	6	1.0					At arrival
05/22/12	0	0	0	0	5	4.5	5	5	5	5.0	5	2.0	5	2.0					adjusted upon departure
06/05/12	0	0	0	0	8.5	6	12	6	2	0.0	2	0	2	1.0					At arrival
06/05/12	5	5	5	5	4	5	4	4	0	0.0	5	2.0	0	0					adjusted upon departure
06/19/12	6	4	4	4.5	4	3	3	3	5	4.5	0	0	6	2					At arrival
06/19/12	5	4	5	4.5	5	3	5	3	5	4.5	0	0	5	2					adjusted upon departure
07/03/12	5	5	5	4	4	4	5	4	4	6	0	0	6	0					At arrival
07/03/12	5	4	5	4	5	3	3	4	3	5	0	0	5	0					adjusted upon departure
07/12/12	System malfunction - time system was off based on hour meter reading																		
07/18/12																			AS down at arrival
07/30/12	System repaired and restarted.																		At arrival
07/30/12	6	5	6	5	6	5	6	5	6	5	0	0	6	2					adjusted upon departure
08/12/12	10	4	0	4	13	3	0	0	0	0	7	1	0	0					At arrival
08/12/12	5	5	5	5	5	4	5	5	0	0	5	5	0	0					adjusted upon departure
08/29/12	6	4	6	4	5	2	5	3	0	0	6	1	0	0					At arrival
08/29/12	6	4	6	4	5	2	5	3	0	0	6	1	0	0					adjusted upon departure
09/12/12	6.5	4	6.5	4	5.5	3	5.0	4	0	0	5.5	5	0	0					At arrival
09/12/12	6.5	4	6.5	4	5.5	3	5.0	4	0	0	5.5	5	0	0					adjusted upon departure
09/25/12	6	4	6	4	5	3.5	5	4	0	0	5.5	5.5	0	0					At arrival
09/25/12	6	4	6	4	5	3.5	5	4	0	0	5.5	5.5	0	0					adjusted upon departure
10/16/12	6	4.5	6	4.5	6	4.0	6	5.0	0	0	6	0.5	0	0					At arrival
10/16/12	5	5.0	5	5.0	5	5.0	5	5.25	0	0	6	1.0	0	0					adjusted upon departure
10/30/12	5	5	5	4	6	4	6	5	0	0	6	0	0	0					At arrival
10/30/12	5	5	5	4	6	4	6	5	0	0	6	0	0	0					adjusted upon departure
11/12/12	5	5	5	4.5	5.5	4	6	5	0	0	6	1	0	0					At arrival
11/12/12	5	5	5	4.5	5.5	4	6	5	0	0	6	1	0	0					adjusted upon departure
12/04/12	5.5	6	5.0	6	5.5	6	6.0	7	0	0.5	6.0	0	0	1.5					At arrival
12/04/12	5.5	6	5.0	6	5.5	6	6.0	7	0	0	6.0	0	0	1.0					adjusted upon departure
12/17/12	0	0	6	6	0	0	7	6	7	5	0	0	7	2					At arrival
12/17/12	5.0	6	5.5	6	6	5.5	6	5.5	5	5.0	0	0	5	2					adjusted upon departure
01/02/13	5	5	4	5	6	4	4	5	4.5	4	0	0	5	1					At arrival
01/02/13	6	5	6	5	6	4	6	5.25	6	4.5	0	0	6	1					adjusted upon departure

Notes:
Air sparge points AS-1 to AS-7 are part of the source area AS/SVE system.
Air Sparge Blowers #1 and #2 service the supplemental air sparge lines 1, 2 and 3.
Pressure and flow rates denoted as "--" indicates no data recorded.
Pressure and flow rates denoted as "0" indicate the sparge well is off-line
NR Not readable/No reading.

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Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
SVE #1	2/6/2008	100	0	14	150				
	3/12/2008	38	16.6	3.7	274		11	1.27%	
	3/19/2008	3	19.6	2	22		10	356	
	4/21/2008	0	20.1	0.5	67.1			197	
	5/6/2008	0	20.2	0.6	42.5		0	212	
	5/22/2008	0	19.6	0.8	76		27	310	
	6/27/2008	0	14.8	0.7	43.1			88	
	7/22/2008	0	18.8	1.1	70.4		26	NM	
	7/23/2008						26		
	7/30/2008	0	18	2	14.3		26	45	
	8/5/2008	0	17.9	2.2	17.5		28	95	
	8/12/2008	0	18.2	2.3	29		28	126	
	8/19/2008	0	18.2	2.3	25		28	170	
	8/27/2008	0	18.1	2.4	12		28	58	
	9/9/2008	0	18.1	2	1		26.5		
	9/16/2008	0	18.2	2	143		9.5		
	9/24/2008	0	19.2	0	14		10		
	9/30/2008	0	19.3	0	181		10		
	10/6/2008	0	19.8	1.16	52		15		
	10/14/2008	0	18.9	2.05	57.8		10		
	10/21/2008	0	18.6	2.2	193		10		
	11/4/2008	0	18.8	1.76	105		13		
	11/11/2008	0	18.5	2.2	13		12.5		
	11/19/2008	0	18.7	1.9	0		13		
	12/4/2008	0	17.4	2.3	10		12		
	12/10/2008	0	17.1	2.3	0		10		
	1/2/2009	0.07	13.8	4.6	5		23		
	1/20/2009						24		
	1/27/2009	0	18.5	2	0		26		
	2/4/2009								CLOSED
	2/17/2009								CLOSED
	2/27/2009								CLOSED
	3/4/2009								CLOSED
	3/11/2009								CLOSED
	3/17/2009								CLOSED
	3/24/2009								CLOSED
	3/31/2009	0	19.9	0.9	1		15		
	4/8/2009								CLOSED
	4/13/2009								CLOSED
	4/22/2009								CLOSED
	4/29/2009								CLOSED
	5/12/2009	0	19.6	0.95	0		15		
	5/19/2009	0	19.4	1.22	0.7		14		
	6/3/2009	0	16.6	2.25	16.7		13		
	6/10/2009	0	18.6	1.7	11		13		
	6/16/2009	0	18.3	20.5	22		12		
	6/24/2009	0	18.1	2.25	15		13		
	6/30/2009	0	18.2	2.2	7		8		
	7/8/2009	0	17.5	2.65	27		8		
	7/20/2009	0	17.9	2.7	23		8		
	8/4/2009	0	18.4	2.65	26		8		
	8/18/2009	0	18	2.8	46		7		
	9/11/2009	0	17	3.25	84		10		
	9/15/2009	0	17.7	3.05	80		9		
	9/29/2009	0	18.1	2.85	17		10		
	10/15/2009	0	18.5	2.5	11		11		
	10/28/2009	0	18	2.4	9.9		12		
	11/11/2009	0	18.4	2.2	3.6		12		
	12/1/2009	0	18	1.81	270		9		
	12/7/2009	0	19.2	1.54	4		17		
	12/22/2009	0	18.3	2.35	8		18		
	1/5/2010	0	18.2	2.25	8		22		
	1/19/2010	0	18.3	2.2	6		22		
	2/3/2010	0	18.1	2.3	6		23		
	2/16/2010	0	18.3	2.2	16		20		
	3/3/2010	0	18.1	2.28	10		23		
	3/16/2010	0	19.1	1.26	3		23		
	3/29/2010	0	19	1.26	1.6		20		
	4/13/2010	0	19	1.24	3.9		18		
	4/27/2010	0	18.9	1.24	2		0		closed
	5/12/2010	0	20	0.64	0		0-12		Opened for readings only
	5/26/2010	0	19.5	1.12	21		0-13		Opened for readings only
	6/8/2010	0	19.5	1.1	31		0-13		Opened for readings only
	6/24/2010	0	19.2	1.28	18		0-15		Opened for readings only
	7/7/2010	0	19.2	1.32	21		14-0		Opened for readings only
	7/20/2010	0	19.2	1.26	13		13-0		Opened for readings only
	8/3/2010	0	19.1	1.36	24		0-12-17		Opened for readings only
	8/16/2010	0	18.8	1.92	10		15		
	8/31/2010	0	18.9	1.46	0		16		
	9/14/2010	0	19	1.48	0		17		
	9/27/2010	0	18.5	1.14	0		17		
	10/12/2010	0	18.6	1.48	0		18		
	10/25/2010	0	18.8	1.48	0		19		
	11/9/2010	0	19	1.32	0		20		
	11/30/2010	0	19	1.22	0		24		
	12/16/2010	0	18.9	1.18	0		26		
	12/28/2010	0	19.2	1.14	0		25		
	1/12/2011	0	17.3	1.4	0		21		
	1/25/2011	0	19.1	1.16	0		23		
	2/8/2011	0	17.8	1.22	0		23		
	2/21/2011	0	19.1	1.3	0		22		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	3/8/2011	0	19.4	1.22	0		22		
	3/24/2011	0	19.5	1.18	0		23		
	4/4/2011	0	19.1	1.18	0		22		
	4/26/2011	0	19.7	0.79	0		15		
	5/10/2011	0	19.1	1.12	0		20		
	5/23/2011	0	19.5	1.04	0		16		
	6/7/2011	0	19.3	1.16	0		15		
	6/23/2011	0	18.9	1.34	0		15		
	7/7/2011	0	18.9	1.44	0		13		
	7/28/2011	0	18.4	2.05	0		14		
	8/15/2011	0	18.7	1.98	0		0		
	1/10/2012	0	8.4	6.20	1.6		6.5		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	7.8	6.80	3.8		7		Collected 2 hrs after system start up
	1/10/2012	0	8.4	6.20	6.1		10		Collected after 1 hr of full operation
	1/24/2012	0	18.3	2.45	4.9		25		
	2/6/2012	0	18.7	2.15	0		25		
	2/20/2012	0	19.2	1.66	0		25		
	3/6/2012	0	1.91	1.36	0		23		
	3/26/2012	0	19.3	1.24	0		18		
	4/10/2012	0	19.2	1.16	0		18		
	4/23/2012	0	19.4	1.06	0		17		
	5/7/2012	0	19.2	1.10	0.3		15		
	5/22/2012	0	19.3	1.06	0		14		
	6/5/2012	0	19	1.06	0		12.5		
	6/19/2012	0	18.9	1.32	0		13		
	7/3/2012	0	18.9	1.38	0		10		
	7/18/2012	0	18.9	1.46	0		13		
	7/30/2012	0	18.7	1.62	0		13		
	8/12/2012	0	18.6	1.68	0		13		
	8/29/2012	0	18.6	1.82	0		12		
	9/11/2012	0	18.8	1.78	0		12		
	9/25/2012	0	19.0	1.50	0.4		13		
	10/16/2012	0	19.0	1.48	0.1		12		
	10/30/2012	0	19.2	1.38	0		12		
	11/12/2012	0	19.2	1.34	0		12.5		System shutdown upon departure.
	12/4/2012	0	19.6	0.93	0		12		
	12/17/2012	0	19.4	1.24	0		18		
	1/2/2013	0	19.6	1.12	0		26		
	2/6/2008	100	4.1	12.1	128.6				
	3/12/2008	80	14.9	4.6	168		12	4.50%	
	3/19/2008	64	19	1.9	247		11	17500	
	4/21/2008	0	18.8	1.2	61.2			188	
	5/6/2008	0	18.7	1.6	83.7		0	431	
	5/22/2008	0	18.9	1.7	70		27	310	
	6/27/2008	0	17.2	1.1	53.9			119	
	7/22/2008	0	19.3	1.3	56		10	NM	
	7/23/2008						10		
	7/30/2008	0	18.6	1.2	160		9	445	
	8/5/2008	0	18.5	2	174		10	614	
	8/12/2008	0	18.5	2	118		10	552	
	8/19/2008	0	18.4	2	165		10	516	
	8/27/2008	0	18.5	1.9	102		10	440	
	9/9/2008	0	20.2	1	2		10		
	9/16/2008	0	18.1	2	120		9.5		
	9/24/2008	0	19.2	0	13.5		10		
	9/30/2008	0	19.1	0	131		10		
	10/6/2008	0	19.2	1.68	43.6		15		
	10/14/2008	0	19	1.88	44		10		
	10/21/2008	0	18.9	1.9	77		10		
	11/4/2008	0	18.3	2.1	166		11		
	11/11/2008	0	18.3	2.35	14		11.5		
	11/19/2008	0	18.2	2.2	0.9		11		
	12/4/2008	0	17.4	2.2	0		11		
	12/10/2008	0	17.8	1.82	0		10		
	1/2/2009	0	14.8	4	14		20		
	1/20/2009						24		
	1/27/2009	0	17.5	2.6	1		25		
	2/4/2009								CLOSED
	2/17/2009								CLOSED
	2/27/2009								CLOSED
	3/4/2009								CLOSED
	3/11/2009								CLOSED
	3/17/2009								CLOSED
	3/24/2009								CLOSED
	3/31/2009	0	20	1.04	1.9		11		
	4/8/2009								CLOSED
	4/13/2009								CLOSED
	4/22/2009								CLOSED
	4/29/2009								CLOSED
	5/12/2009	0	19.8	1	8.3		10.5		
	5/19/2009	0	18	1.88	1.7		12		
	6/3/2009	0	16.2	2.25	27.7		10		
	6/10/2009	0	17.2	2.55	21		10		
	6/16/2009	0	17.2	2.55	33		10		
	6/24/2009	0	16.9	2.9	32		10		
	6/30/2009	0	17.5	2.65	23		7.5		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
SVE #2	7/8/2009	0.06	17.8	2.32	41		7		
	7/20/2009	0.06	16.8	3.15	57		7.5		
	8/4/2009	0.07	15.8	3.75	63		8		
	8/18/2009	0.07	16.5	3.45	82		8		
	9/11/2009	0	16.7	3.05	84		10		
	9/15/2009	0.07	16.8	3.4	120		10		
	9/29/2009	0	17.6	2.7	58		10		
	10/15/2009	0	17.4	2.8	30		10		
	10/28/2009	0.06	17.4	2.75	23.1		11		
	11/11/2009	0	17.6	2.5	23.9		11		
	12/1/2009	0	17.9	2.15	24		9		
	12/7/2009	0	18	2.5	29		16		
	12/22/2009	0	18.6	1.96	18		19		
	1/5/2010	0	18.9	1.68	18		23		
	1/19/2010	0	18.9	1.7	10		23		
	2/3/2010	0	18.5	1.88	15		23		
	2/16/2010	0	18.6	1.81	25		20		
	3/3/2010	0	18.4	1.84	19		22		
	3/16/2010	0	19.4	1.04	9.9		23		
	3/29/2010	0	19.4	1.04	7.2		19		
	4/13/2040	0	19.4	1.04	8.6		18		
	4/27/2010	0	18.8	1.34	3		0		closed
	5/12/2010	0	19.9	0.55	0		0-11		Opened for readings only
	5/26/2010	0	19	1.26	16		0-11		Opened for readings only
	6/8/2010	0	18.8	1.28	20		0-11		Opened for readings only
	6/24/2010	0	19	1.28	15		0-12		Opened for readings only
	7/7/2010	0	19	1.3	18		10-0		Opened for readings only
	7/20/2010	0	19.3	1.14	11		11-0		Opened for readings only
	8/3/2010	0	19.1	1.2	17		0-12		Opened for readings only
	8/16/2010	0	19.2	1.08	24		10-0		Opened for readings only
	8/31/2010	0	19.6	0.93	23		10-0		Opened for readings only
	9/14/2010	0	19.6	0.89	20		10-0		Opened for readings only
	9/27/2010	0	19.3	0.87	13		10-0		
	10/12/2010	0	19.7	0.8	9		0-10-0		Opened for measurement
	10/25/2010	0	19.6	0.85	6		0-10-0		Opened for measurement
	11/9/2010	0	19.9	0.81	6		11-0		Opened for measurement
	11/30/2010	0	19.6	0.76	3.9		14-0		Opened for measurement
	12/16/2010	0	19.8	0.66	4		14-0		Opened for measurement
	12/28/2010	0	19.9	0.6	2.3		15-0		
	1/12/2011	0	19.1	0.55	0		22		Open upon arrival
	1/25/2011	0	19.6	0.91	1.5		20		
	2/8/2011	0	18.3	0.87	0.7		18		
	2/21/2011	0	19.7	0.96	0		19		
	3/8/2011	0	19.8	0.87	0		19		
	3/24/2011	0	20.2	0.72	0		20		
	4/4/2011	0	20	0.71	0		20		
	4/26/2011	0	20	0.7	0		15		
	5/10/2011	0	20	0.65	0		18		
	5/23/2011	0	19.8	0.84	0		13		
	6/7/2011	0	19.7	0.86	0		12		
	6/23/2011	0	19.6	0.87	0.1		13		
	7/7/2011	0	19.5	0.99	0		11		
	7/28/2011	0	19.5	1.04	0		11		
	8/15/2011	0	19.4	1.2	0		0		
	1/10/2012	0	11.9	4.00	1.8		7		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	12.4	4.30	3.6		7		Collected 2 hrs after system start up
	1/10/2012	0	12.6	3.55	5.0		9		Collected after 1 hr of full operation
	1/24/2012	0	19.0	1.44	4.6		22		
	2/6/2012	0	19.1	1.30	0		23		
	2/20/2012	0	19.4	1.18	0		22		
	3/6/2012	0	19.3	1.10	0.1		20		
	3/26/2012	0	20.0	0.78	0		16		
	4/10/2012	0	20.0	0.78	0		16		
	4/23/2012	0	20	0.78	0		15		
	5/7/2012	0	19.8	0.86	0.3		12		
	5/22/2012	0	19.7	0.86	0		11		
	6/5/2012	0	19.7	0.83	0		10		
	6/19/2012	0	20.0	0.90	0		11		
	7/3/2012	0	19.6	1.08	0		11		
	7/18/2012	0	19.7	1.02	0		11		
	7/30/2012	0	19.5	1.12	0		10		
	8/12/2012	0	19.5	1.10	0		10		
	8/29/2012	0	19.4	1.22	0		10		
	9/11/2012	0	19.5	1.26	0		10		
	9/25/2012	0	19.5	1.18	0.6		10		
	10/16/2012	0	19.6	1.12	0		10		
	10/30/2012	0	19.9	1.14	0		10		
	11/12/2012	0	20.0	1.06	0		10		System shutdown upon departure.
	12/4/2012	0	20.1	0.74	0		10		
	12/17/2012	0	20.1	0.99	0		19		
	1/2/2013	0	20.3	0.76	0		25		
	2/6/2008	100	2.4	11.9	133				
	3/12/2008	100	13.6	5.9	67		11	6%	
	3/19/2008	100	19	1.8	134		11	30900	
	3/26/2008	33	19	1.7	160		27	12600	
	4/1/2008	23	19	1.4			29	9050	
	4/8/2008	21	19.6	1.2	642		30	11300	
	4/21/2008	9	19.5	1.1	546			5789	
	5/6/2008	0	19.5	1.2	137		0	1101	
	5/22/2008	0	19.6	1.4	64		10	197	
	6/27/2008	0	17.6	0.9	87.7			300	
	7/22/2008	0	20.2	1	43		10	NM	
	7/23/2008						10		
	7/30/2008	2	19.8	1.1	210		9	1038	

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
SVE #3	8/5/2008	5	19.7	1.4	230		10	1392	
	8/12/2008	2	19.8	1.4	124		10	907	
	8/19/2008	0	19.8	1.2	170		10	880	
	8/27/2008	0	19.7	1.3	224		10	1472	
	9/9/2008	0	20.2	1	2		10		
	9/16/2008	0	18.3	1	109		10		
	9/24/2008	0	18.9	1	43		10		
	9/30/2008	0	20.1	0	138		10		
	10/6/2008	0	20	1.1	43.6		15		
	10/14/2008	0	20.2	0.94	47		10		
	10/21/2008	0	20.1	0.93	79		10		
	11/4/2008	0	19.8	0.98	118		11		
	11/11/2008	0	19.9	1.2	18		12		
	11/19/2008	0	19.9	1.12	3.2		11		
	12/4/2008	0	19.5	1.02	6		10		
	12/10/2008	0	19.1	0.91	0		10		
	1/2/2009	0.14	18.7	1.42	50		20		
	1/20/2009						24		
	1/27/2009	0	20.2	0.84	7		25		
	2/4/2009								CLOSED
	2/17/2009								CLOSED
	2/27/2009								CLOSED
	3/4/2009								CLOSED
	3/11/2009								CLOSED
	3/17/2009								CLOSED
	3/24/2009								CLOSED
	3/31/2009	0	20.5	0.38	10		11		
	4/8/2009								CLOSED
	4/13/2009								CLOSED
	4/22/2009								CLOSED
	4/29/2009								CLOSED
	5/12/2009	0	20.4	0.42	8.3		12		
	5/19/2009	0	20.2	0.66	4.4		13		
	6/3/2009	0.05	19.6	0.65	68.3		11		
	6/10/2009	0	19.3	1.38	55		11		
	6/16/2009	0	19.2	1.42	78		11		
	6/24/2009	0	18.4	2.19	9		10		
	6/30/2009	0	19	1.54	58		8		
	7/8/2009	0.19	18.3	1.72	61		8		
	7/20/2009	0.12	18.7	1.82	122		8		
	8/4/2009	0.12	18.4	1.92	121		7.5		
	8/18/2009	0.17	18.1	2.5	180		8		
	9/11/2009	0.2	17.6	2.45	293		10		
	9/15/2009	0.15	19.1	1.92	262		10		
	9/29/2009	0.08	18.9	1.72	118		10		
	10/15/2009	0.06	19.5	1.38	64		10		
	10/28/2009	0.06	19.1	1.34	53.7		11		
	11/11/2009	0.06	19.4	1.14	59.1		12		
	12/1/2009	0.07	18.2	1.68	94		10		
	12/7/2009	0	19.2	1.68	72		16		
	12/22/2009	0	19.8	0.94	47		20		
	1/5/2010	0	20.2	0.5	41		22		
	1/19/2010	0	20.3	0.55	26		20		
	2/3/2010	0	20.1	0.57	34		23		
	2/16/2010	0	20.3	0.62	70		21		
	3/3/2010	0	20.1	0.6	59		23		
	3/16/2010	0	20.4	0.5	37		23		
	3/29/2010	0	20.5	0.43	24.6		20		
	4/13/2010	0	20.1	0.6	9.3		17		
	4/27/2010	0	20.4	0.65	33		0		closed
	5/12/2010	0	20.5	0.19	1		0-12		Opened for readings only
	5/26/2010	0	19.9	0.68	24		0-11		Opened for readings only
	6/8/2010	0	19.8	0.64	21		0-13		Opened for readings only
	6/24/2010	0	19.9	0.68	16		0-12		Opened for readings only
	7/7/2010	0	19.8	0.73	14		12-0		Opened for readings only
	7/20/2010	0	20.1	0.58	11		12-0		Opened for readings only
	8/3/2010	0	20	0.62	16		0-12		Opened for readings only
	8/16/2010	0	19.8	0.71	21		10-0		Opened for readings only
	8/31/2010	0	20.3	0.4	14		12-0		Opened for readings only
	9/14/2010	0	20.4	0.22	15		12-0		Opened for readings only
	9/27/2010	0	19.9	0.39	9		12-0		
	10/12/2010	0	20.6	0.14	7		0-12-0		Opened for measurement
	10/25/2010	0	20.2	0.44	5		0-12-0		opened for measurement
	11/9/2010	0	20.5	0.19	8		12-0		opened for measurement
	11/30/2010	0	20.2	0.26	5.5		15-0		opened for measurement
	12/16/2010	0	20.1	0.29	3.9		15-0		Opened for measurement
	12/28/2010	0	20.4	0.09	24		16-0		
	1/12/2011	0	19.9	0.4	1.5		20		Open upon arrival
	1/25/2011	0	20.4	0.22	5.7		22		
	2/8/2011	0	19.1	0.19	3.4		21		Before system changes
	2/8/2011	0	19.1	0.18	6.4				After system changes
	2/21/2011	0	20.4	0.2	2.1		24		
	3/8/2011	0	20.5	0.2	5.3		22		
	3/24/2011	0	20.6	0.24	1.8		22		
	4/4/2011	0	20.6	0.2	0.8		21		
	4/26/2011	0	20.6	0.26	0		15		
	5/10/2011	0	20.5	0.21	0		18		
	5/23/2011	0	20.5	0.28	0		13		
	6/7/2011	0	20.4	0.41	0		12		
	6/23/2011	0	20	0.46	0.2		12		
	7/7/2011	0	20	0.56	0		11		
	7/28/2011	0	19.8	0.74	0		11		
	8/15/2011	0	19.8	0.94	0		0		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	1/10/2012	0	17.2	1.44	1.5		6		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	16.5	1.68	3.9		8		Collected 2 hrs after system start up
	1/10/2012	0	16.7	1.88	4.0		9		Collected after 1 hr of full operation
	1/24/2012	0	20.1	0.59	0.5		21		
	2/6/2012	0	20.3	0.46	0		23		
	2/20/2012	0	20.4	0.49	0		22		
	3/6/2012	0	20.3	0.53	0.6		20		
	3/26/2012	0	20.5	0.37	0		17		
	4/10/2012	0	20.5	0.41	0		17		
	4/23/2012	0	20.5	0.41	0		15		
	5/7/2012	0	20.5	0.42	0.6		13		
	5/22/2012	0	20.3	0.48	0		13		
	6/5/2012	0	20	0.56	0		8		
	6/19/2012	0	20.4	0	0		10		
	7/3/2012	0	20.1	0.66	0		11		
	7/18/2012	0	20.0	0.72	0		11		
	7/30/2012	0	20.0	0.77	0		11		
	8/12/2012	0	20.3	0.55	0		10		
	8/29/2012	0	20.2	0.65	0		10		
	9/11/2012	0	20.2	0.66	0		10		
	9/25/2012	0	20.2	0.60	0.6		10		
	10/16/2012	0	20.0	0.57	0.1		10		
	10/30/2012	0	20.4	0.55	0		10		
	11/12/2012	0	20.4	0.52	0		10.5		System shutdown upon departure.
	12/4/2012	0	20.2	0.47	0		10		
	12/17/2012	0	20.3	0.58	0		19		
	1/2/2013	0	20.6	0.38	0		19		
	2/6/2008	100	13	2.1	182				
	2/27/2008	100	15.5	1.7	56		30		
	2/28/2008	100	15	2.2	53		30		
	2/29/2008	100	15.9	1.9	54		30		
	3/6/2008	100	16.2	3	5		34	43100	
	3/12/2008	63	17.6	1.7	79		12	3.74%	
	3/19/2008	95	19.6	1.4	144		11	23600	
	3/26/2008	25	19.3	1.5	163		29	7790	
	4/1/2008	22	19.2	1.3			30	8613	
	4/8/2008	23	19.7	1.3	557		32	11100	
	4/15/2008						39		
	4/21/2008	3	19.9	0.8	391		40	2219	
	5/6/2008	0	20.5	0.5	47.2		0	232	
	5/22/2008	0	20.5	0.5	61		11	168	
	6/27/2008	0	18	0.3	79.3			208	
	7/22/2008	0	20.6	0.6	48		10	NM	
	7/23/2008						9		
	7/30/2008	0	20.2	0.8	15.8		9	36	
	8/5/2008	0	20.1	0.9	26		10	76	
	8/12/2008	0	20	1	29		10	53	
	8/19/2008	0	20.2	1	28		10	81	
	8/27/2008	0	20	1	54		10	172	
	9/9/2008	0	20.7	1	2		10		
	9/16/2008	0	18.5	2	101		10		
	9/24/2008	0	20.3	1	57		10		
	9/30/2008	0	20.3	0	136		10		
	10/14/2008	0	20.3	0.76	49.3				
	10/21/2008	0	20.2	0.86	77		10		
	11/4/2008	0	20.3	0.65	133		12		
	11/11/2008	0	20.5	0.78	21		11.5		
	11/19/2008	0	20.4	0.7	8.2		12		
	12/4/2008	0	20	0.76	20		11		
	12/10/2008	0	20.3	0.71	11		10		
	1/2/2009	0.08	20.3	0.78	56		20		
	1/20/2009						24		
	1/27/2008	0	20.3	0.72	15		26		
	2/4/2009	0.05	20.2	0.74	90		32		
	2/17/2009	0	20.4	0.71	9		24		
	2/27/2009	0.03	20.2	0.73	8		28		
	3/4/2009	0	20.5	0.58	6.4		28		
	3/11/2009	0	20.7	0.27	2.6		26		
	3/17/2009								CLOSED
	3/24/2009								CLOSED
	3/31/2009	0	20.4	0.49	11.6		15		
	4/8/2009								CLOSED
	4/13/2009								CLOSED
	4/22/2009								CLOSED
	4/29/2009								CLOSED
	5/12/2009	0	20.4	0.6	20.5		15		
	5/19/2009	0	20.3	0.64	7.4		15		
	6/3/2009	0.09	20.2	0.62	90.2		10		
	6/10/2009	0.09	20.3	0.6	84		10		
	6/16/2009	0.1	20.4	0.62	106		10		
	6/24/2009	0.09	20.3	0.61	100		10		
	6/30/2009	0	20.1	0.61	102		7.5		
	7/8/2009	0.76	19.9	0.62	300		7		
	7/20/2009	0.32	20.3	0.59	237		7		
	8/4/2009	0.26	20.3	0.72	231		8		
	8/18/2009	0.25	20.3	0.75	272		8		
	9/11/2009	0.43	19.6	0.98	518		10		
	9/15/2009	0.34	20	0.87	502		10		
	9/29/2009	0.13	20.1	0.93	249		10		
	10/15/2009	0.1	20.4	0.8	130		10		
	10/28/2009	0.07	19.8	0.6	211		11		
	11/11/2009	0.09	20	0.78	106		11		
	12/1/2009	0.23	19.6	0.98	280		10		
	12/7/2009	0.08	20.3	0.8	141		15		
	12/22/2009	0.07	20.3	0.67	146		19		
SVE #4	1/5/2010	0.06	20.3	0.72	119		21		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	1/19/2010	0	20.5	0.67	77		21		
	2/3/2010	0	20.4	0.6	97		22		
	2/16/2010	0	20.6	0.55	110		20		
	3/3/2010	0	20.3	0.58	95		22		
	3/16/2010	0	20.6	0.48	74		21		
	3/29/2010	0	20.6	0.38	90		19		
	4/13/2010	0	20.6	0.34	68		17		
	4/27/2010	0	20.5	0.31	73		28		
	5/12/2010	0.05	20.4	0.41	79		23		
	5/26/2010	0	20.5	0.44	78		21		
	6/8/2010	0	20.2	0.52	44		22		
	1/0/1900	0	20.2	0.52	16		23		
	7/7/2010	0	20.3	0.53	15		22		
	7/20/2010	0	20.2	0.47	16		21		
	8/3/2010	0	20.2	0.5	18		16		
	8/16/2010	0	19.9	0.5	24		15		
	8/31/2010	0	20.1	0.57	17		15		
	9/14/2010	0	20	0.6	27		16		
	9/27/2010	0	19.7	0.65	7		17		
	10/12/2010	0	19.9	0.77	1		18		
	10/25/2010	0	20.1	0.72	19		19		
	11/9/2010	0	20.2	0.65	14		20		
	11/30/2010	0	20.2	0.6	0.3		24		
	12/16/2010	0	20.2	0.54	0.8		26		
	12/28/2010	0	20.2	0.6	0.1		26		
	1/12/2011	0	19.9	0.52	1.1		21		
	1/25/2011	0	20.4	0.41	17		21		
	2/8/2011	0	19	0.35	10.2		20		Before system changes
	2/8/2011	0	19	0.36	12.7				After system changes
	2/21/2011	0	20.4	0.34	4.5		22		
	3/8/2011	0	20.4	0.37	5.5		21		
	3/24/2011	0	20.4	0.4	2.2		22		
	4/4/2011	0	20.5	0.35	0.7		21		
	4/26/2011	0	20.5	0.35	0		15		
	5/10/2011	0	20.4	0.34	0		18		
	5/23/2011	0	20.5	0.34	0		14		
	6/7/2011	0	20.4	0.43	0		13		
	6/23/2011	0	20	0.48	0.3		13		
	7/7/2011	0	20.2	0.46	0		12		
	7/28/2011	0	19.5	0.76	0		12		
	8/15/2011	0	19.5	1.14	0		0		
	1/10/2012	0	18.8	1.40	1.8		7		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	18.8	1.42	3.6		7		Collected 2 hrs after system start up
	1/10/2012	0	19.0	1.36	5.3		9		Collected after 1 hr of full operation
	1/24/2012	0	19.8	0.92	1.0		21		
	2/6/2012	0	20.0	0.78	0.3		21		
	2/20/2012	0	20.2	0.68	0		20		
	3/6/2012	0	20.3	0.61	2.4		18		
	3/26/2012	0	20.5	0.46	0.8		16		
	4/10/2012	0	20.5	0.38	0.5		16		
	4/23/2012	0	20.6	0.33	0		14		
	5/7/2012	0	20.6	0.30	1.1		13		
	5/22/2012	0	20.5	0.29	0.1		12		
	6/5/2012	0	20.3	0.39	0		11		
	6/19/2012	0	20.5	0.34	0		12		
	7/3/2012	0	20.4	0.34	0		11		
	7/18/2012	0	20.2	0.47	0		11		
	7/30/2012	0	20.0	0.61	0		11		
	8/12/2012	0	19.8	0.73	0.6		11 (upon arrival) / 10 (after adjustments)		
	8/29/2012	0	20.3	0.60	0.5		10		
	9/11/2012	0	20.3	0.63	0.2		10		
	9/25/2012	0	20.3	0.62	0.8		10		
	10/16/2012	0	20.1	0.58	0.2		10		
	10/30/2012	0	20.4	0.57	0.1		10		
	11/12/2012	0	20.5	0.54	0		10.5		System shutdown upon departure.
	12/4/2012	0	20.4	0.50	0		10		
	12/17/2012	0	20.4	0.58	0		18		
	1/2/2013	0	20.4	0.56	0		22		
	1/17/2008	75	17.8	1.4	460		31		
	1/17/2008	63	17.1	1.4	139		nm		
	1/18/2008	69	18	1.4	325		29		
	1/19/2008	68	17.2	1.6	430	82.2	29		
	1/19/2008	69	17.6	1.6	344	80.8	29		
	1/20/2008	61	18	1.6	365	80.4	31		
	1/20/2008	66	17.9	1.6	337	80.4	30		
	1/23/2008	72	17.7	1.7	252	80.6	35		
	1/24/2008	78	17.5	1.7	305		46		
	1/31/2008	86	16.3	1.8	1636		45		
	2/6/2008	100	16.9	2	108		34		
	2/27/2008	92	16.8	2.1	54		30		
	2/28/2008	100	17.5	2	124		30		
	2/29/2008	100	17.2	1.9	96		30		
	3/6/2008	24	18.3	1.7	49		32	11200	
	3/12/2008	16	18.1	1.9	121		12	6661	
	3/19/2008	12	19.7	1.1	260		11	2360	
	4/21/2008	0	20.4	0.7	184			1085	
	5/6/2008	0	20.6	0.5	74.5		0	695	
	5/22/2008	0	20.7	0.5	167		10	950	
	6/27/2008	0	18.2	0.3	81			282	
	7/22/2008	0	20.7	0.3	95		10	NM	
	7/23/2008						9		
	7/30/2008	0	20.4	0.5	224		9	1040	
	8/5/2008	3	20.4	0.5	206		10	1128	

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
SVE #5	8/12/2008	0	20.3	0.6	105		10	664	
	8/19/2008	0	20.5	0.5	126		10	615	
	8/27/2008	0	20.4	0.5	189		9.5	1106	
	9/9/2008	0	20.2	0	1.3		10		
	9/16/2008	0	18.5	1	97		9.5		
	9/24/2008	0	20.4	0	31		10		
	9/30/2008	0	20.4	0	125		10		
	10/14/2008	0	20.4	0.61	41		10		
	10/21/2008	0	20.3	0.78	72		10		
	11/4/2008	0	20.4	0.61	138		11		
	11/11/2008	0	20.4	0.78	18		11		
	11/19/2008	0	20.4	0.71	4		12		
	12/4/2008	0.05	19.9	0.76	11		10		
	12/10/2008	0	20.2	0.72	9		10		
	1/2/2009	0.08	20.3	0.78	54		20		
	1/20/2009						24		
	1/27/2009	0	20.3	0.84	15		25		
	2/4/2009	0.05	20.2	0.85	75		32		
	2/17/2009	0	20.4	0.75	15		22		
	2/27/2009	0.05	20.2	0.75	14		26		
	3/4/2009	0	20.5	0.54	10.1		26		
	3/11/2009	0	20.7	0.18	8		24		
	3/17/2009								CLOSED
	3/24/2009								CLOSED
	3/31/2009	0	20.5	0.33	5.8		12		
	4/8/2009								CLOSED
	4/13/2009								CLOSED
	4/22/2009								CLOSED
	4/29/2009								CLOSED
	5/12/2009	0	20.5	0.31	15.3		12		
	5/19/2009	0	20.6	0.38	7.2		13		
	6/3/2009	0.06	20.5	0.27	65		11		
	6/10/2009	0.07	20.4	0.46	66		11		
	6/16/2009	0.06	20.4	0.51	86		11		
	6/24/2009	0	20.3	0.57	69		11		
	6/30/2009	0.13	20.4	0.47	102		7.5		
	7/8/2009	0.76	19.9	0.62	300		7		
	7/20/2009	0.32	20.3	0.59	237		7		
	8/4/2009	0.17	20.3	0.59	168		8		
	8/18/2009	0.18	20.7	0.71	232		8		
	9/11/2009	0.34	19.9	0.84	447		10		
	9/15/2009	0.27	20.1	0.84	467		10		
	9/29/2009	0.11	20.2	0.78	249		10		
	10/15/2009	0.1	20.5	0.67	144		11		
	10/28/2009	0.13	20.1	0.69	182		12		
	11/11/2009	0.09	20.1	0.85	117		10		
	12/1/2009	0.2	19.9	0.72	249		10		
	12/7/2009	0.09	20.4	0.74	177		15		
	12/22/2009	0.07	20.5	0.62	153		18		
	1/5/2010	0.06	20.6	0.56	93		20		
	1/19/2010	0	20.7	0.46	92		22		
	2/3/2010	0	20.7	0.3	76		23		
	2/16/2010	0	20.8	0.2	90		19		
	3/3/2010	0	20.4	0.26	75		21		
	3/16/2010	0	20.7	0.34	70.1		22		
	3/29/2010	0	20.6	0.29	78.6		20		
	4/13/2010	0	20.6	0.28	66		18		
	4/27/2010	0	20.6	0.26	54		29		
	5/12/2010	0	20.4	0.28	60		23		
	5/26/2010	0	20.7	0.26	47		21		
	6/8/2010	0	20.4	0.31	54		22		
	6/24/2010	0	20.4	0.32	32		23		
	7/7/2010	0	20.3	0.46	17		23		
	7/20/2010	0	19.9	0.58	12		21		
	8/3/2010	0	19.6	0.62	26		16		
	8/16/2010	0	19.5	0.84	28		15		
	8/31/2010	0	19.9	0.79	20		15		
	9/14/2010	0	19.9	0.83	25		16		
	9/27/2010	0	19.7	0.81	7		18		
	10/12/2010	0	20.1	0.83	2.5		18		
	10/25/2010	0	20.4	0.71	12		19		
	11/9/2010	0	20.4	0.66	11		20		
	11/30/2010	0	20.3	0.57	0.8		24		
	12/16/2010	0	20.3	0.51	0.5		26		
	12/28/2010	0	20.3	0.49	0		27		
	1/12/2011	0	19.9	0.42	0.7		21		
	1/25/2011	0	20.3	0.41	11		21		
	2/8/2011	0	19	0.42	8.6		22		Before system changes
	2/8/2011	0	19	0.4	11.6				After system changes
	2/21/2011	0	20.4	0.36	2.8		20		
	3/8/2011	0	20.4	0.37	5.5		21		
	3/24/2011	0	20.5	0.32	1.8		23		
	4/4/2011	0	20.6	0.28	0.5		21		
	4/26/2011	0	20.6	0.31	0		16		
	5/10/2011	0	20.5	0.22	0		18		
	5/23/2011	0	20.5	0.28	0		15		
	6/7/2011	0	20.3	0.3	0		12		
	6/23/2011	0	19.9	0.44	0		14		
	7/7/2011	0	19.9	0.57	0		12		
	7/28/2011	0	20	0.63	0		12		
	8/15/2011	0	19.6	1.06	0		0		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	1/10/2012	0	19.1	1.14	1.8		7		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	19.1	1.14	3.9		7		Collected 2 hrs after system start up
	1/10/2012	0	19.3	1.10	4.7		9		Collected after 1 hr of full operation
	1/24/2012	0	19.5	1.06	1.2		22		
	2/6/2012	0	19.9	0.89	0.8		22		
	2/20/2012	0	20.3	0.75	0.2		21		
	3/6/2012	0	20.4	0.66	3.0		20		
	3/26/2012	0	20.3	0.75	1.0		16		
	4/10/2012	0	20.3	0.65	1.0		18		
	4/23/2012	0	20.4	0.60	0.2		15		
	5/7/2012	0	20.4	0.53	1.3		13		
	5/22/2012	0	20.3	0.47	0.3		12		
	6/5/2012	0	20	0.56	0.0		11		
	6/19/2012	0	20.4	0.54	0.3		11		
	7/3/2012	0	20.1	0.52	0.1		10		
	7/18/2012	0	20.0	0.63	0		11		
	7/30/2012	0	19.8	0.79	0		11		
	8/12/2012	0	19.7	0.85	0.8		11 (upon arrival) / 10 (after adjustments)		
	8/29/2012	0	19.9	0.89	1.3		10		
	9/11/2012	0	19.8	0.92	0.5		10		
	9/25/2012	0	19.9	0.92	0.4		10		
	10/16/2012	0	19.8	0.88	0.5		10		
	10/30/2012	0	20.1	0.90	0.3		10		
	11/12/2012	0	20.2	0.84	0		11		System shutdown upon departure.
	12/4/2012	0	20.0	0.75	0		10		
	12/17/2012	0	20.3	0.74	0		17		
	1/2/2013	0	20.4	0.62	0.1		19		
	2/6/2008	100	9.7	4.9	118.5				
	2/27/2008	100	10.7	6.8	53		30		
	2/28/2008	100	9.8	7.6	89		30		
	2/29/2008	100	9.1	8.1	57		30		
	3/6/2008	100	11.9	6.7	35		32	12200	
	3/12/2008	100	16.2	3.4	134		12	11%	
	3/19/2008	26	20.3	0.5	111		11	4275	
	4/21/2008	20	20.3	0.6	484			10200	
	4/28/2008	9	20.4	0.8	535		37	5069	
	5/6/2008	13	20.1	0.6	754		34	8483	
	5/22/2008	10	20.4	0.6	354		32	4725	
	6/4/2008	11	20.2					4136	
	6/27/2008	8	18	0.6	357			1744	
	7/22/2008	13	20.1	0.8	477		10	NM	
	7/23/2008						10		
	7/30/2008	10	20	0.9	504		10	3830	
	8/5/2008	17	20	0.9	466		10	4039	
	8/12/2008	8	19.9	1	197		10	2930	
	8/19/2008	8	20	0.9	358		10	2385	
	8/27/2008	10	19.7	0.9	403		10	4075	
	9/9/2008	0	20.6	1	1.3		10		
	9/16/2008	0	18.4	3	96		10		
	9/24/2008	0	20.2	1	53		10		
	9/30/2008	0	20.1	0	208		10		
	10/14/2008	0	19.9	1.22	80		10		
	10/21/2008	0	20	1.16	76		10		
	11/4/2008	0	20.1	0.89	168		12.5		
	11/11/2008	0	20.2	0.98	32		12		
	11/19/2008	0	20.2	0.85	16		12		
	12/4/2008	0.1	19.7	0.94	20		11.5		
	12/10/2008	0.14	19.9	0.94	25		10		
	1/2/2009	0.11	18.6	1.52	64		20		
	1/20/2009						25		
	1/27/2009	0.08	20.2	0.9	28		26		
	2/4/2009	0.09	20.1	0.8	100		32		
	2/17/2009	0.12	19.9	0.91	45		23		
	2/27/2009	0.08	20.1	0.92	17		26		
	3/4/2009	0.09	20.1	0.88	48.5		27		
	3/11/2009	0.06	20.2	0.89	78		30		
	3/17/2009	0.22	19.9	0.93	338		29		
	3/24/2009	0.14	20.1	0.66	258		31		
	3/31/2009	0	20.5	0.33	85		13		
	4/8/2009	0.08	20.3	0.35	154		28		
	4/13/2009	0	20.7	0.3	53		27		
	4/22/2009	0.06	20.4	0.36	86		23		
	4/29/2009	0	20.4	0.28	84		26		
	5/12/2009	0	20.5	0.35	46.7		12		
	5/19/2009	0	20.7	0.29	9.9		14		
	6/3/2009	0	20.4	0.29	60		12		
	6/10/2009	0.06	20.1	0.61	85		12		
	6/16/2009	0.06	20.2	0.63	107		12		
	6/24/2009	0.07	20.1	0.71	106		12		
	6/30/2009	0.06	20.2	0.68	99		8		
	7/8/2009	0.2	20.1	0.64	198		8		
	7/20/2009	0.22	20.2	0.79	175		8		
	8/4/2009	0.22	19.9	0.89	217		8		
	8/18/2009	0.24	19.6	1.2	246		7		
	9/11/2009	0.38	19.1	1.46	427		10		
	9/15/2009	0.35	19.7	11.42	446		9		
	9/29/2009	0.19	20.1	0.88	293		11		
	10/15/2009	0.13	20.6	0.52	170		10		
	10/28/2009	0.19	20.1	0.52	194		10		
	11/11/2009	0.11	20.4	0.35	151		11		
	12/1/2009	0.26	19.1	0.82	305		9		
	12/7/2009	0.13	20.3	0.71	219		14		
	12/22/2009	0.12	20.5	0.4	209		18		
	1/5/2010	0.08	20.6	0.2	154		20		
SVE #6	1/19/2010	0.05	20.7	0.2	128		21		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	2/3/2010	0.08	20.5	0.24	114		23		
	2/16/2010	0.07	20.6	0.26	177		20		
	3/3/2010	0.08	20.5	0.24	158		22		
	3/16/2010	0	20.6	0.29	107		22		
	3/29/2010	0	20.4	0.29	133		20		
	4/13/2010	0.05	20.5	0.29	94		16		
	4/27/2010	0	20.5	0.3	98		27		
	5/12/2010	0.08	20	0.54	140		22		
	5/26/2010	0.06	20.2	0.58	102		20		
	6/8/2010	0.06	19.8	0.66	75		21		
	6/24/2010	0.05	20	0.65	58		21		
	7/7/2010	0	20	0.71	51		21		
	7/20/2010	0	20	0.67	26		70		
	8/3/2010	0.02	20	0.66	55		15		
	8/16/2010	0	19.8	0.74	84		14		
	8/31/2010	0	20.1	0.74	58		15		
	9/14/2010	0	20.1	0.69	60		15		
	9/27/2010	0	19.9	0.6	36		17		
	10/12/2010	0	20.2	0.63	18		17		
	10/25/2010	0	20.5	0.54	29		18		
	11/9/2010	0	20.6	0.37	10		20		
	11/30/2010	0	20.4	0.27	2.9		24		
	12/16/2010	0	20.3	0.25	2.2		25		
	12/28/2010	0	20.3	0.27	2.4		27		
	1/12/2011	0	20	0.36	5		20		
	1/25/2011	0	20.4	0.26	15.6		21		
	2/8/2011	0	19	0.27	13.5		20		
	2/21/2011	0	20.5	0.18	6.4		20		
	3/8/2011	0	20.5	0.2	13.6		20		
	3/24/2011	0	20.6	0.15	5.2		22		
	4/4/2011	0	20.6	0.11	5		22		
	4/26/2011	0	20.5	0.21	4.1		15		
	5/10/2011	0	20.5	0.18	0		18		
	5/23/2011	0	20.5	0.24	0.6		14		
	6/7/2011	0	20.3	0.4	0		13		
	6/23/2011	0	20.1	0.46	0.8		13		
	7/7/2011	0	20.1	0.69	1		12		
	7/28/2011	0	20	0.65	1		11		
	8/15/2011	0	19.9	0.9	0.9		0		
	1/10/2012	0	17.2	1.72	1.8		5		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	16.5	2.15	4.1		5		Collected 2 hrs after system start up
	1/10/2012	0	16.6	2.15	4.9		8		Collected after 1 hr of full operation
	1/24/2012	0	20.2	0.58	1.5		20		
	2/6/2012	0	20.2	0.45	0.8		19		
	2/20/2012	0	20.4	0.32	0.5		20		
	3/6/2012	0	20.4	0.42	6.3		18		
	3/26/2012	0	20.5	0.31	2.0		15		
	4/10/2012	0	20.4	0.38	1.2		15		
	4/23/2012	0	20.5	0.38	1.2		14		
	5/7/2012	0	20.3	0.45	2.7		13/12		
	5/22/2012	0	20.3	0.46	1.3		12		
	6/5/2012	0	19.6	0.61	0		10		
	6/19/2012	0.10	20.2	0.59	0.1		10		
	7/3/2012	0	20.0	0.66	0.3		12		
	7/18/2012	0	19.8	0.85	0.2		10		
	7/30/2012	0	19.7	0.97	0		10		
	8/12/2012	0	19.7	0.91	1.0		10 (upon arrival) / 9 (after adjustments)		
	8/29/2012	0	20.2	0.69	2.5		9		
	9/11/2012	0	20.2	0.61	1.2		10		
	9/25/2012	0	20.1	0.57	0.8		10		
	10/16/2012	0	20.1	0.47	1.5		9		
	10/30/2012	0	20.3	0.43	1.2		10		
	11/12/2012	0	20.4	0.41	0.3		10		System shutdown upon departure.
	12/4/2012	0	18.7	0.99	0		9		
	12/17/2012	0	20.4	0.45	0		13 (upon arrival) / 14 (after adjustments)		
	1/2/2013	0	20.4	0.38	0.3		18		
	1/24/2008	100	15.9	2.3	332		15		
	1/31/2008	100	15.5	2.5	1473		5		
	2/6/2008	100	15.5	2.5	149.8				
	2/27/2008	100	15.9	2.9	74		30		
	2/28/2008	100	16.7	3.1	130		29		
	2/29/2008	100	16.3	3.1	94		30		
	3/6/2008	16	17.6	2.8	102		32	5620	
	3/12/2008	2	16.9	2.9	123		11	2298	
	3/19/2008	3	18.1	2.4	26		10	299	
	4/21/2008	0	20.2	1.5	94.1			415	
	5/6/2008	0	20.7	0.3	53.7		0	287	
	5/22/2008	0	20.9	0.2	63		10	199	
	6/27/2008	0	18.1	0.2	50			114	
	7/22/2008	0	20.7	0.2	38.6		9	NM	
	7/23/2008						9		
	7/30/2008	2	19.4	0.6	95		9	704	
	8/5/2008	2	19	0.9	96		9	775	
	8/12/2008	0	19.7	1.4	62		10	522	
	8/19/2008	0	20.1	1.5	83		10	560	
	8/27/2008	0	19.8	1.4	32		9	300	
	9/9/2008	0	20.2	1	1.7		9.5		
	9/16/2008	0	18.1	2	96		9		
	9/24/2008	0	20.1	1	137		9.5		
	9/30/2008	0	20.1	0	238		9.5		
	10/14/2008	0.07	19.9	1	110		10		
	10/21/2008	0.07	19.7	1.04	90		10		
	11/4/2008	0	19.9	0.92	187		11		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	11/11/2008	0.06	20	1.18	72		11.5		
	11/19/2008	0	20.2	1.06	24		12		
	12/4/2008	0.09	20.4	0.08	45		11		
	12/10/2008	0.08	20.7	0.08	54		10		
	1/2/2009	0.1	18	2.1	61		20		
	1/20/2009						22		
	1/27/2009	0.02	20.8	0.1	41		25		
	2/4/2009	0.06	20.6	0.1	100		30		
	2/17/2009	0.05	20.9	0.08	66		20		
	2/27/2009	0.06	20.8	0.08	20		23		
	3/4/2009	0	20.8	0.06	65.4		24		
	3/11/2009	0.05	20.9	0.06	60		26		
	3/17/2009	0.06	20.7	0.05	95.5		25		
	3/24/2009	0.11	20.3	0.44	235		29		
	3/31/2009	0.06	20.5	0.33	117		12		
	4/8/2009	0.08	20.3	0.35	115		26		
	4/13/2009	0.07	20.6	0.38	87		24		
	4/22/2009	0	20.4	0.35	75		23		
	4/29/2009	0	20.1	0.39	53		25		
	5/12/2009	0	20.2	0.35	46.7		12		
	5/19/2009	0	20.3	0.42	12.7		12		
	6/3/2009	0	19.9	0.58	44		11		
	6/10/2009	0.05	19.6	0.83	70		11		
	6/16/2009	0	19.5	0.98	99		11		
	6/24/2009	0	19.3	1.16	80		11		
	6/30/2009	0.05	19.3	1.2	84		7		
	7/8/2009	0.1	19.2	1.24	307		7.5		
	7/20/2009	0.15	19.2	1.59	130		8		
	8/4/2009	0.1	18.4	2	150		8		
	8/18/2009	0.12	17.8	2.55	185		8		
	9/11/2009	0.15	18	2.65	268		10		
	9/15/2009	0.12	18.4	2.65	257		10		
	9/29/2009	0.1	19	2.2	177		10		
	10/15/2009	0.07	20.4	0.68	110		10		
	10/28/2009	0.12	19.5	1.64	157		11		
	11/11/2009	0.09	20	1.12	82.1		12		
	12/1/2009	0.19	19.9	1.08	248		10		
	12/7/2009	0.09	20.2	1.1	152		16		
	12/22/2009	0.07	20.4	0.68	139		18		
SVE #7	1/5/2010	0.06	20.6	0.2	107		20		
	1/19/2010	0.05	20.7	0.42	103		21		
	2/3/2010	0.06	20.6	0.34	100		22		
	2/16/2010	0.05	20.7	0.27	109		19		
	3/3/2010	0.06	20.6	0.31	98		23		
	3/16/2010	0	20.6	0.27	100		22		
	3/29/2010	0.05	20.5	0.27	110		19		
	4/13/2010	0	20.6	0.28	66		18		
	4/27/2010	0.06	20.4	0.31	96		27		
	5/12/2010	0	20.7	0.03	71		22		
	5/26/2010	0.05	20.5	0.42	67		20		
	6/8/2010	0.06	20	0.53	71		20		
	6/24/2010	0	19.9	0.69	51		23		
	7/7/2010	0	20.8	0.1	25		22		
	7/20/2010	0	20	0.1	18		22		
	8/3/2010	0	20.3	0.16	36		16		
	8/16/2010	0	20.7	0.03	27		15		
	8/31/2010	0	19.4	1.28	46		15		
	9/14/2010	0	19.6	1.24	43		15		
	9/27/2010	0	19.6	1.02	25		17		
	10/12/2010	0	20.2	0.03	12.2		18		
	10/25/2010	0	20.4	0.67	21		19		
	11/9/2010	0	20.5	0.49	11		20		
	11/30/2010	0	18.9	1.38	2.7		23		
	12/16/2010	0	20.3	0.27	4.3		25		
	12/28/2010	0	20.4	0.22	3.5		25		
	1/12/2011	0	20	0.19	5.5		21		
	1/25/2011	0	20.5	0.11	11.8		23		
	2/8/2011	0	19	0.22	15.4		20		
	2/21/2011	0	20.6	0.08	9.2		22		
	3/8/2011	0	20.6	0.03	10.3		22		
	3/24/2011	0	20.7	0.08	5.3		22		
	4/4/2011	0	20.6	0.13	2.9		22		
	4/26/2011	0	20.6	0.12	4.4		15		
	5/10/2011	0	20.7	0.15	0.2		19		
	5/23/2011	0	20.6	0.08	0.2		15		
	6/7/2011	0	20.9	0.14	0		12		
	6/23/2011	0	20.5	0.03	0.1		13		
	7/7/2011	0	19.9	0.62	1		12		
	7/28/2011	0	19.9	0.7	0.9		12		
	8/15/2011	0	20.1	0.74	0.1		0		
	1/10/2012	0	20.5	0.12	2.1		8		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	20.7	0.07	4.3		7		Collected 2 hrs after system start up
	1/10/2012	0	20.5	0.13	5.2		9		Collected after 1 hr of full operation
	1/24/2012	0	19.5	1.04	1.6		20		
	2/6/2012	0	20.3	0.48	1.0		20		
	2/20/2012	0	20.4	0.60	1.9		20		
	3/6/2012	0	20.7	0.22	8.9		19		
	3/26/2012	0	20.6	0.15	2.5		17		
	4/10/2012	0	20.3	0.57	2.1		17		
	4/23/2012	0	20.3	0.56	1.6		15		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	5/7/2012	0	20.2	0.57	2.9		14		
	5/22/2012	0	20.2	0.59	1.9		13		
	6/5/2012	0	20.2	0.49	0.2		12		
	6/19/2012	0	19.8	0.85	1.3		12		
	7/3/2012	0	19.3	1.06	0.8		10		
	7/18/2012	0	19.8	0.90	0.7		10		
	7/30/2012	0	19.3	1.26	1.0		12		
	8/12/2012	0	19.4	1.22	2.1		11		
	8/29/2012	0	19.8	1.02	3.6		11		
	9/11/2012	0	19.9	0.95	2.5		11		
	9/25/2012	0	19.8	0.92	1.5		10		
	10/16/2012	0	19.8	0.82	2.8		11		
	10/30/2012	0	19.7	1.10	3.8		11		
	11/12/2012	0	19.8	1.04	1.8		12		System shutdown upon departure.
	12/4/2012	0	19.8	0.95	0		11		
	12/17/2012	0	20.1	0.89	0.4		18		
	1/2/2013	0	20.2	0.65	0.6		23		
	2/6/2008	100	0	15.1	155				
	3/6/2008	100	10.5	7.4	96		31	82000	
	3/12/2008	100	16.1	2.8	155		12	11	
	3/19/2008	30	18.7	1.9	174		10	5340	
	4/21/2008	0	18.4	1.2	135			626	
	5/6/2008	0	18.4	1.1	81.7		0	552	
	5/22/2008	0	17.7	1.7	104		10	323	
	6/27/2008	0	16.3	1.1	107			331	
	7/22/2008	0	17.8	1.4	43		9	NM	
	7/23/2008						9		
	7/30/2008	3	18.9	1.4	273		9	1198	
	8/5/2008	5	18.9	1.6	289		9	1480	
	8/12/2008	3	19.1	1.5	162		9.5	1390	
	8/19/2008	0	19.4	1.3	265		10	1150	
	8/27/2008	0	18.4	1.6	297		9	1308	
	9/9/2008	0	20.1	1	1.5		9.5		
	9/16/2008	0	17.6	2	97		10		
	9/24/2008	0	19.7	1	163		10		
	9/30/2008	0	19.4	2	218		10		
	10/6/2008	0	19.4	1.38	59		15		
	10/14/2008	0	19.3	1.36	96		10		
	10/21/2008	0	19.4	1.3	93		10		
	11/4/2008	0	19.4	1.2	137		11		
	11/11/2008	0	19.1	1.48	54		10.5		
	11/19/2008	0	19	1.46	26		12		
	12/4/2008	0.07	14.5	2.8	37		11		
	12/10/2008	0.06	16.3	2.75	36		11		
	1/2/2009	0.1	17.7	2.25	64		20		
	1/20/2009						24		
	1/27/2009	0	19.3	1.46	27		25		
	2/4/2009	0.05	18.7	1.58	88		30		
	2/17/2009	0	16.2	2.65	49		20		
	2/27/2009	0	18.3	2.55	44		25		
	3/4/2009	0	18.8	1.58	39.2		26		
	3/11/2009	0	18.3	2.1	52		26		
	3/17/2009	0	17.4	2.15	104		26		
	3/24/2009	0.08	18.6	1.6	169		28		
	3/31/2009	0	20.5	0.06	36		13		
	4/8/2009	0.05	18.7	1.4	71		26		
	4/13/2009	0	18.7	1.56	82		24		
	4/22/2009	0	17.5	1.92	65		22		
	4/29/2009	0	18.6	1.56	65		23		
	5/12/2009	0	18.7	1.58	31		12		
	5/19/2009	0	20.3	0.42	12.7		12		
	6/3/2009	0	13.4	3.05	34		10		
	6/10/2009	0	19	1.5	62		10		
	6/16/2009	0	18.9	1.66	90		10		
	6/24/2009	0	18.7	1.78	81		10		
	6/30/2009	0	18.8	1.72	73		8		
	7/8/2009	0.07	16.3	2.75	118		7		
	7/20/2009	0.1	18.5	2.05	115		7.5		
	8/4/2009	0.1	18.3	2.25	146		8		
	8/18/2009	0.11	18	2.4	170		8		
	9/11/2009	0.09	19.3	1.78	178		10		
	9/15/2009	0.14	17.8	2.55	264		10		
	9/29/2009	0.09	18.2	2.3	144		10		
	10/15/2009	0.06	18.2	2.25	8		10		
	10/28/2009	0.09	18.6	1.72	120		11		
	11/11/2009	0.05	18.8	1.58	75.8		12		
	12/1/2009	0.15	14.3	4.18	155		10		
	12/7/2009	0	18.2	2.1	100		17		
	12/22/2009	0	18.4	1.86	86		21		
	1/5/2010	0	18.8	1.7	62		21		
	1/19/2010	0	18.9	1.68	54		22		
SVE #8	2/3/2010	0	19.1	1.5	57		23		
	2/16/2010	0	19	1.56	73		20		
	3/3/2010	0	19.1	1.53	61		23		
	3/16/2010	0	19.6	0.93	48		23		
	3/29/2010	0	19.6	0.85	51		19		
	4/13/2010	0	19.3	1.02	47		17		
	4/27/2010	0	19.6	0.87	59		27		
	5/12/2010	0	17.3	1.82	52		22		
	5/26/2010	0	17.8	1.62	47		20		
	6/8/2010	0	16.9	2.15	37		20		
	6/24/2010	0	16.8	2.2	34		23		
	7/7/2010	0	17.1	2.15	20		21		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	7/20/2010	0	18.2	1.54	18		20		
	8/3/2010	0	18.8	1.48	22		15		
	8/16/2010	0	17.2	1.66	18		14		
	8/31/2010	0	18.6	1.44	23		15		
	9/14/2010	0	18.7	1.46	25		15		
	9/27/2010	18	18	1.66	14		17		
	10/12/2010	0	18.2	1.64	8		18		
	10/25/2010	0	18	1.74	14		19		
	11/9/2010	0	18.8	1.4	7		21		
	11/30/2010	0	18.9	1.38	1.6		26		
	12/16/2010	0	19	1.08	2.6		28		
	12/28/2010	0	19.1	1.16	1.7		27		
	1/12/2011	0	18.5	0.94	3.2		21		
	1/25/2011	0	19.8	0.82	7.3		22		
	2/8/2011	0	18.7	0.79	9.2		21		Before system changes
	2/8/2011	0	18.7	0.83	9.1				After system changes
	2/21/2011	0	20	0.89	5.7		23		
	3/8/2011	0	20.1	0.82	6.2		23		
	3/24/2011	0	20.3	0.68	3		24		
	4/4/2011	0	20.1	0.73	2.4		22		
	4/26/2011	0	19.5	0.96	1.4		13		
	5/10/2011	0	20.1	0.72	0		15		
	5/23/2011	0	19.8	0.84	0.2		13		
	6/7/2011	0	20.1	0.82	0		13		
	6/23/2011	0	19.7	0.86	0.3		13		
	7/7/2011	0	19.6	1.04	0.2		11		
	7/28/2011	0	19.7	1.28	0.4		12		
	8/15/2011	0	19.4	1.32	0		0		
	1/10/2012	0	5.6	9.99	1.9		6		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	6.6	9.99	4.8		6		Collected 2 hrs after system start up
	1/10/2012	0	7.6	9.99	5.3		8		Collected after 1 hr of full operation
	1/24/2012	0	18.8	1.62	1.7		22		
	2/6/2012	0	19.1	1.42	2.2		22		
	2/20/2012	0	19.3	1.38	2.0		22		
	3/6/2012	0	19.3	1.20	7.1		20		
	3/26/2012	0	20.1	0.64	2.0		18		
	4/10/2012	0	20.1	0.64	1.2		16		
	4/23/2012	0	20.1	0.65	1.4		15		
	5/7/2012	0	20.1	0.71	2.4		13		
	5/22/2012	0	20	0.79	1.8		12		
	6/5/2012	0	17.6	1.34	0.1		10		
	6/19/2012	0	20.0	0.84	0.8		12		
	7/3/2012	0	19.6	1.00	0.5		12		
	7/18/2012	0	20.0	0.91	0.6		11		
	7/30/2012	0	19.4	1.29	0.6		11		
	8/12/2012	0	19.3	1.32	1.3		11 (upon arrival) / 10 (after adjustments)		
	8/29/2012	0	19.6	1.28	3.7		10		
	9/11/2012	0	19.6	1.28	2.2		10		
	9/25/2012	0	19.6	1.16	1.8		10		
	10/16/2012	0	19.6	0.92	3.1		10		
	10/30/2012	0	19.8	0.93	3.3		10		
	11/12/2012	0	19.9	0.88	3.1		11.5		System shutdown upon departure.
	12/4/2012	0	14.7	2.70	0		10		
	12/17/2012	0	19.8	1.02	1.1		18		
	1/2/2013	0	19.9	0.82	1.2		23		
	2/6/2008	100	8.2	6.3	101.3				
	2/28/2008	100	6.2	9.4	70		16		
	2/29/2008	100	5.8	9.7	48		18		
	3/6/2008	100	12.5	6.4	104		31	74900	
	3/12/2008	100	16.4	2.5	126		12	11%	
	3/19/2008	74	19.5	1.6	125		11	16800	
	3/26/2008	40	19.1	1.5	163		29	15800	
	4/1/2008	34	19.2	1			30	14700	
	4/8/2008	36	19.6	1.1	623		31	20100	
	4/15/2008						38		
	4/21/2008	17	19.7	0.8	706		39	8922	
	4/28/2008	9	19.8	1.2	571		37	4667	
	5/6/2008	9	19.5	0.9	480		35	6264	
	5/22/2008	8	19.6	1	375		32	3850	
	6/4/2008	8	19.3					3245	
	6/27/2008	5	17.4	0.9	377			1676	
	7/22/2008	14	19.4	1.3	491		10	NM	
	7/23/2008						10		
	7/30/2008	12	19.8	1.2	608		9	4528	
	8/5/2008	23	19.8	1.3	605		10	5310	
	8/12/2008	7	19.8	1.3	215		10	2598	
	8/19/2008	7	20	1.2	375		10	2125	
	8/27/2008	14	19.6	1.3	516		10	5610	
	9/9/2008	0	20.7	1	1.3		10		
	9/16/2008	0	18.1	2	93		10		
	9/24/2008	0	20.1	1	168		10		
	9/30/2008	0	20.1	0	237		10		
	10/6/2008	0	19.9	1.28	118		15		
	10/14/2008	0	20	1.3	109		10		
	10/21/2008	0	20	1.22	94		10		
	11/4/2008	0	20.4	0.91	173		12		
	11/11/2008	0	20.1	1.06	56		11.5		
	11/19/2008	0	20.1	0.97	27		12		
	12/4/2008	0.08	19.6	1.08	33		11		
	12/10/2008	0.1	20.2	0.71	35		10		
	1/2/2009	0.09	17.9	2.1	65		20		
	1/20/2009						23		
	1/27/2009	0	20.2	0.91	28		26		
	2/4/2009	0.06	19.9	0.97	96		30		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
SVE #9	2/17/2009	0.1	19.6	1.14	62		22		
	2/27/2009	0.06	19.7	1.21	31		27		
	3/4/2009	0.07	20	1	63.1		27		
	3/11/2009	0.06	20.2	0.94	79		28		
	3/17/2009	0.14	19.8	0.9	248		29		
	3/24/2009	0.1	19.9	0.88	197		31		
	3/31/2009	0	20.5	0.22	38		13		
	4/8/2009	0.07	19.9	0.72	143		28		
	4/13/2009	0.07	20.2	0.76	140		26		
	4/22/2009	0.12	19.9	0.8	150		24		
	4/29/2009	0.06	19.9	0.75	148		25		
	5/12/2009	0	20.2	0.73	80.1		12.5		
	5/19/2009	0	19.6	0.83	38		13		
	6/3/2009	0.12	18.4	1.42	177		11		
	6/10/2009	0.08	20	0.88	110		11		
	6/16/2009	0	20.7	0.11	28		11.5		
	6/24/2009	0.06	20	0.99	137		11		
	6/30/2009	0	18.8	1.72	73		8		
	7/8/2009	0.25	19.4	1.22	110		8		
	7/20/2009	0.15	20.1	0.97	175		8		
	8/4/2009	0.22	20	1.12	236		8		
	8/18/2009	0.22	20	1.24	2.44		8		
	9/11/2009	0.1	18.9	1.3	313		10		
	9/15/2009	0.25	19.7	1.46	392		10		
	9/29/2009	0.16	19.9	1.16	286		10		
	10/15/2009	0.14	19.9	1.1	176		11		
	10/28/2009	0.14	19.8	1.04	171		12		
	11/11/2009	0.09	20	0.86	141		12		
	12/1/2009	0.24	18.6	1.46	282		11		
	12/7/2009	0.08	20.1	0.97	164		16		
	12/22/2009	0.09	20.1	0.84	146		20		
	1/5/2010	0.07	20.2	0.78	132		23		
	1/19/2010	0.06	20.3	0.76	110		23		
	2/3/2010	0.07	20.2	0.75	160		24		
	2/16/2010	0.07	20.3	0.7	179		22		
	3/3/2010	0.08	20.2	0.72	172		24		
	3/16/2010	0	20.4	0.6	133		24		
	3/29/2010	0	20.3	0.53	100		20		
	4/13/2010	0.06	20.4	0.48	111		18		
	4/27/2010	0.08	20.5	0.51	102		29		
	5/12/2010	0.06	20	0.59	100		23		
	5/26/2010	0.06	20.3	0.59	132		21		
	6/8/2010	0	20	0.68	66		22		
	6/24/2010	0	19.8	0.78	74		24		
	7/7/2010	0	19.9	0.82	40		22		
	7/20/2010	0	19.8	0.78	52		22		
	8/3/2010	0	19.8	0.77	18		17		
	8/16/2010	0	19.6	0.8	100		15		
	8/31/2010	0	19.8	0.82	55		16		
	9/14/2010	0	19.7	0.82	51		16		
	9/27/2010	0	19.5	0.84	29		18		
	10/12/2010	0	19.7	0.9	16		19		
	10/25/2010	0	19.8	0.85	18		19		
	11/9/2010	0	20.1	0.82	7		21		
	11/30/2010	0	19.8	0.8	2		25		
	12/16/2010	0	19.9	0.74	2.2		28		
	12/28/2010	0	20.1	0.71	2.3		27		
	1/12/2011	0	19.8	0.66	6		22		
	1/25/2011	0	20.2	0.66	11.5		23		
	2/8/2011	0	18.7	0.79	9.2		21		Before system changes
	2/8/2011	0	19.2	0.19	19.6				After system changes
	2/21/2011	0	20.3	0.6	10.7		22		
	3/8/2011	0	20.4	0.52	21.6		23		
	3/24/2011	0	20.5	0.42	6.2		23		
	4/4/2011	0	20.5	0.4	5.8		23		
	4/26/2011	0	20.4	0.35	1.6		16		
	5/10/2011	0	20.6	0.28	0.1		19		
	5/23/2011	0	20.5	0.32	0.1		14		
	6/7/2011	0	20.5	0.35	0		14		
	6/23/2011	0	20.1	0.41	0		14		
	7/7/2011	0	20.2	0.49	0.6		13		
	7/28/2011	0	20	0.6	1.5		13		
	8/15/2011	0	20.1	0.68	0		0		
	1/10/2012	0	17.8	1.44	0.4		6		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	16.4	2.15	12.0		6		Collected 2 hrs after system start up
	1/10/2012	0	16.6	2.10	6.2		9		Collected after 1 hr of full operation
	1/24/2012	0	19.9	0.77	2.2		22		
	2/6/2012	0	19.9	0.77	1.6		22		
	2/20/2012	0	19.9	0.78	2.6		22		
	3/6/2012	0	20.0	0.73	22.1		21		
	3/26/2012	0	20.2	0.61	8.2		18		
	4/10/2012	0	20.4	0.56	3.3		17		
	4/23/2012	0	20.5	0.52	3.8		16		
	5/7/2012	0	20.5	0.49	5.3		14		
	5/22/2012	0	20.4	0.54	2.4		14		
	6/5/2012	0	19.7	0.71	8.9		10		
	6/19/2012	0	20.4	0.59	2.4		12		
	7/3/2012	0	20.2	0.62	1.0		12		
	7/18/2012	0	20.1	0.68	0.7		12		
	7/30/2012	0	20.0	0.73	1.3		12		
	8/12/2012	0	19.9	0.75	1.8		12 (upon arrival) / 11 (after adjustments)		
	8/29/2012	0	20.0	0.79	5.3		11		
	9/11/2012	0	20.0	0.81	3.3		11		
	9/25/2012	0	19.9	0.80	2.1		11		
	10/16/2012	0	19.8	0.81	12.9		11		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	10/30/2012	0	20.1	0.77	5.6		11		
	11/12/2012	0	20.1	0.76	3.6		12		System shutdown upon departure.
	12/4/2012	0	19.1	0.98	1.6		10		
	12/17/2012	0	20.3	0.67	1.1		18		
	1/2/2013	0	20.2	0.62	1.2		19		
	2/6/2008	100	14.4	2.2	109.4				
	2/27/2008	100	15	2.6	60		30		
	2/28/2008	100	16	2.6	97		29		
	2/29/2008	100	16.5	2	47		30		
	3/6/2008	96	17.2	2.2	130		31	36500	
	3/12/2008	80	17.3	2	186		12	5.8%	
	3/19/2008	70	19.7	1.7	132		11	14700	
	3/26/2008	21	20.2	1	186		28	6850	
	4/1/2008	26	19.7	1			29	10400	
	4/8/2008	30	20.1	1.2	588		30	15400	
	4/15/2008						38		
	4/21/2008	15	20	1.3	659		39	5783	
	4/28/2008	7	20.6	1.3	454		36	3707	
	5/6/2008	7	20.6	0.5	442		35	6238	
	5/22/2008	12	20.9	0.4	413		31	5025	
	6/4/2008	9	20.3					3240	
	6/27/2008	6	18	0.4	357			1989	
	7/22/2008	14	20.2	0.6	446		10	NM	
	7/23/2008						10		
	7/30/2008	11	19.8	0.7	561		9	4140	
	8/5/2008	19	19.7	0.8	536		10	4625	
	8/12/2008	10	19.8	0.9	240		10	3822	
	8/19/2008	10	20.2	0.9	445		10	2930	
	8/27/2008	11	19.9	0.9	489		10	4640	
	9/9/2008	0	20.9	0	2.5		10		
	9/16/2008	0	18.2	0	98		9		
	9/24/2008	0	20.3	1	187		10		
	9/30/2008	0	20.3	0	245		10		
	10/6/2008	0	20.1	0.94	154		15		
	10/14/2008	0.06	20.1	1	128		10		
	10/21/2008	0.06	20.1	0.99	101		10		
	11/4/2008	0	20.3	0.74	189		12		
	11/11/2008	0.06	20.2	0.9	64		11.5		
	11/19/2008	0	20.1	0.78	34		12		
	12/4/2008	0.1	19.8	0.85	45		11		
	12/10/2008	0.12	20.2	0.71	55		11		
	1/2/2009	0.09	17.8	2.1	65		20		
	1/20/2009						24		
	1/27/2008	0.08	20.4	0.83	38		26		
	2/4/2009	0.07	20.3	0.78	63		31		
	2/17/2009	0.09	20.5	0.49	81		21		
	2/27/2009	0.06	20.3	0.62	40		25		
	3/4/2009	0.07	20.6	0.35	83.8		25		
	3/11/2009	0.06	20.7	0.36	84		28		
	3/17/2009	0.1	20.5	0.29	175		24		
	3/24/2009	0.07	20.4	0.34	178		29		
	3/31/2009	0	20.4	0.16	51		12		
	4/8/2009	0.07	20.3	0.33	133		26		
	4/13/2009	0.06	20.5	0.34	131		24		
	4/22/2009	0.06	20.4	0.34	108		22		
	4/29/2009	0.07	20.2	0.32	157		23		
	5/12/2009	0	20.4	0.32	104.2		11.5		
	5/19/2009	0	20.6	0.34	64		12		
	6/3/2009	0.08	20.6	0.21	155		11		
	6/10/2009	0.09	29.3	0.41	125		11		
	6/16/2009	0	29.4	0.42	109		11		
	6/24/2009	0.07	20.4	0.5	158		11		
	6/30/2009	0	20.4	0.38	116		8		
	7/8/2009	0.15	20.6	0.34	212		7.5		
	7/20/2009	0.11	20.8	0.36	158		8		
	8/4/2009	0.19	20.5	0.51	230		8		
	8/18/2009	0.18	20.3	0.64	2.4		8		
	9/11/2009	0.3	19.5	0.73	314		10		
	9/15/2009	0.21	20	0.95	355		10		
	9/29/2009	0.14	20.4	0.6	272		10		
	10/15/2009	0.15	20.4	0.56	171		11		
	10/28/2009	0.15	20.2	0.57	157		12		
	11/11/2009	0.12	20.5	0.5	177		12		
	12/1/2009	0.27	20.1	0.55	267		10		
	12/7/2009	0.12	20.5	0.56	181		17		
	12/22/2009	0.11	20.5	0.44	164		20		
	1/5/2010	0.1	20.6	0.37	155		21		
	1/19/2010	0.07	20.7	0.34	154		22		
SVE #10	2/3/2010	0.09	20.6	0.3	161		22		
	2/16/2010	0.08	20.7	0.29	222		20		
	3/3/2010	0.07	20.7	0.31	196		23		
	3/16/2010	0.06	20.7	0.23	139		23		
	3/29/2010	0.06	20.6	0.2	132		20		
	4/13/2010	0.09	20.5	0.29	119		17		
	4/27/2010	0.07	20.6	0.18	132		28		
	5/12/2010	0.09	20.5	0.22	164		23		
	5/26/2010	0.07	20.7	0.23	149		20		
	6/8/2010	0.06	20.4	0.32	80		21		
	6/24/2010	0	20.4	0.35	105		23		
	7/7/2010	0	20.3	0.48	78		22		
	7/20/2010	0	20.2	0.52	72		21		
	8/3/2010	0	20.2	0.58	98		16		
	8/16/2010	0	19.9	0.67	128		15		
	8/31/2010	0	20.1	0.7	92		15		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	9/14/2010	0	20.1	0.69	103		16		
	9/27/2010	0.05	20	0.62	66		18		
	10/12/2010	0	20.4	0.97	41		18		
	10/25/2010	0	20.5	0.55	29		19		
	11/9/2010	0	20.5	0.43	10		20		
	11/30/2010	0	20.3	0.33	3.7		23		
	12/16/2010	0	20.3	0.27	6.7		26		
	12/28/2010	0	20.3	0.24	5.3		25		
	1/12/2011	0	20.1	0.03	12.5		22		
	1/25/2011	0	20.5	0.18	27		22		
	2/8/2011	0	19.1	0.2	29		23		Before system changes
	2/8/2011	0	19.2	0.18	24.8				After system changes
	2/21/2011	0	20.6	0.09	34.3		22		
	3/8/2011	0	20.6	0.1	45.7		21		
	3/24/2011	0	20.7	0.08	40.5		22		
	4/4/2011	0	20.7	0.07	14.5		21		
	4/26/2011	0	20.7	0.11	2.7		16		
	5/10/2011	0	20.7	0.17	0		18		
	5/23/2011	0	20.5	0.12	2		14		
	6/7/2011	0	20.5	0.16	1.4		14		
	6/23/2011	0	20.2	0.24	3.2		14		
	7/7/2011	0	20.3	0.31	7		10		
	7/28/2011	0	20.4	0.33	16.7		11		
	8/15/2011	0	20.3	0.51	3.2		0		
	1/10/2012	0	19.0	0.80	8.7		5		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	18.5	1.02	22.4		6		Collected 2 hrs after system start up
	1/10/2012	0	18.4	1.20	10.3		7		Collected after 1 hr of full operation
	1/24/2012	0	20.1	0.60	4.3		20		
	2/6/2012	0	20.3	0.47	3.9		21		
	2/20/2012	0	20.4	0.42	4.1		21		
	3/6/2012	0	20.4	0.45	31.1		19		
	3/26/2012	0	20.5	0.32	14.7		17		
	4/10/2012	0	20.5	0.32	20.3		17		
	4/23/2012	0	20.6	0.28	27		15		
	5/7/2012	0	20.6	0.25	17.1		13		
	5/22/2012	0	20.4	0.30	9.2		13		
	6/5/2012	0	20.3	0.28	12.4		8		
	6/19/2012	0	20.5	0.39	8.0		10		
	7/3/2012	0	20.3	0.40	4.0		11		
	7/18/2012	0	20.2	0.51	3.1		11		
	7/30/2012	0	20.2	0.56	8.3		11		
	8/12/2012	0	20.1	0.63	6.2		12 (upon arrival) / 8 (after adjustments)		
	8/29/2012	0	20.2	0.70	7.8		10		
	9/11/2012	0	20.2	0.73	8.7		10		
	9/25/2012	0	20.1	0.69	3.7		10		
	10/16/2012	0	20.0	0.61	11.0		10		
	10/30/2012	0	20.3	0.57	18		10		
	11/12/2012	0	20.4	0.53	7.0		11		System shutdown upon departure.
	12/4/2012	0	19.8	0.64	2.9		9		
	12/17/2012	0	20.5	0.49	3.6		13 (upon arrival) / 14 (after adjustments)		
	1/2/2013	0	20.4	0.44	3.3		19		
	2/6/2008	100	0	15.6	135.4				
	3/12/2008	100	15.8	5.1	161		11	>15%	
	3/19/2008	100	18.2	2.2	121		10	>70000	
	3/26/2008	68	19	1.8	148		27	57600	
	4/1/2008	56	19	1.4			29	42300	
	4/8/2008	47	19.4	1.4	1607		30	40100	
	4/15/2008						39		
	4/21/2008	20	19.5	1.1	1045		39	11800	
	4/28/2008	15	19.1	1.4	1325		36	10200	
	5/6/2008	10	18.8	1	709		34	7224	
	5/22/2008	5	18.6	1.8	634		31	4250	
	6/4/2008	10	18.6					3901	
	6/27/2008	11	16.5	1.2	856			3990	
	7/22/2008	10	15.6	3.2	592		9	NM	
	7/23/2008						9		
	7/30/2008	17	12.9	4.7	1454		9	6320	
	8/5/2008	31	11.8	5,5	1405		9	6500+ flame out, low O2	
	8/12/2008	19	15	3.9	496		9.5	9015	
	8/19/2008	25	15.1	4	145		10	7050	
	8/27/2008	10	9.2	7.3	728		9.5	NA	
	9/9/2008	0	20.7	1	1.2		9.5		
	9/16/2008	0	17.1	2	95		9.5		
	9/24/2008	0	17.6	1	175		9.5		
	9/30/2008	0	19.4	0	245		9.5		
	10/6/2008	0.8	14.3	4.25	83.5		15		
	10/14/2008	0	14.6	4.2	118		10		
	10/21/2008	0	14.7	4.1	111		10		
	11/4/2008	0	16.3	2.75	177		11.5		
	11/11/2008	0	15	3.95	70		11.5		
	11/19/2008	0	14.7	4.02	39		12.5		
	12/4/2008	0.21	4.1	7.7	51		11		
	12/10/2008	0.22	5.1	7.6	48		10		
	1/2/2009	0.18	6.2	9.4	55		20		
	1/20/2009						24		
	1/27/2009	0.06	17	2.95	50		26		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
SVE RW1	2/4/2009	0.05	13.1	5	95		30		
	2/17/2009	0.08	11.7	5.4	80		19		
	2/27/2009	0.05	14.1	4.98	55		23		
	3/4/2009	0.06	16.6	3.05	71		23		
	3/11/2009	0.05	17.1	2.9	76		25		
	3/17/2009	0.07	15.9	3.3	134		24		
	3/24/2009	0.06	17.6	2.4	140		27		
	3/31/2009	0.01	19.6	0.86	35		11		
	4/8/2009	0.05	17.2	2.4	83		24		
	4/13/2009	0.00	17.8	2.3	88		23		
	4/22/2009	0.06	14.7	3.35	185		21		
	4/29/2009	0.00	17.7	2.2	94		23		
	5/12/2009	0.00	17	2.65	65		11		
	5/19/2009	0.00	11.1	5.9	58		13		
	6/3/2009	0.53	1.6	9.6	80		12		
	6/10/2009	0.10	14.8	3.8	142		11		
	6/16/2009	0.06	14.9	3.8	149		11.5		
	6/24/2009	0.06	14.2	4.5	173		11		
	6/30/2009	0.07	15.2	3.15	120		8		
	7/8/2009	0.25	2.8	9.99	226		8		
	7/20/2009	0.22	5.6	12.7	198		8		
	8/4/2009	0.25	14	5.1	305		8		
	8/18/2009	0.24	12.3	6.2	3.15		7		
	9/11/2009	0.47	1.7	9.99	346		10		
	9/15/2009	0.34	10.4	7.4	494		10		
	9/29/2009	0.17	11.4	6.5	346		10		
	10/15/2009	0.10	108	7.3	159		11		
	10/28/2009	0.14	10.1	7	174		12		
	11/11/2009	0.09	11.6	630	133		12		
	12/1/2009	0.29	6.5	9.18	190		11		
	12/7/2009	0.07	11.1	6.7	151		17		
	12/22/2009	0.12	8.3	8.5	212		20		
	1/5/2010	0.10	8.7	8.3	178		21		
	1/19/2010	0.06	8	9	137		22		
	2/3/2010	0.07	7.2	9.5	135		24		
	2/16/2010	0.07	8.5	8.5	165		20		
	3/3/2010	0.08	7.6	9.2	158		23		
	3/16/2010	0.00	11.1	4.1	104		23		
	3/29/2010	0.05	13.1	3.45	102		21		
	4/13/2010	0.07	13.8	3.25	70		18		
	4/27/2010	0.00	12.1	3.9	68		24		
	5/12/2010	0.06	16.8	2.1	100		22		
	5/26/2010	0.00	6.6	5.6	53		19		
	6/8/2010	0.00	18	1.68	60		23		
	6/24/2010	0.00	16.6	2.3	41		24		
	7/7/2010	0	17.2	2.15	38		23		
	7/20/2010	0	17.4	2	35		19		
	8/3/2010	0	17.7	1.96	33		15		
	8/16/2010	0	11.7	4	58		14		
	8/31/2010	0	16.4	2.2	49		14		
	9/14/2010	0	17	2.15	44		15		
	9/27/2010	0	15.6	2.4	31		18		
	10/12/2010	0	15.9	2.58	19.9		19		
	10/25/2010	0	14.5	3.05	19		20		
	11/9/2010	0	16.2	2.4	8		22		
	11/30/2010	0	13.5	3.3	4		23		
	12/16/2010	0	14.7	2.95	5.2		27		
	12/28/2010	0	16.2	2.55	2.2		26		
	1/12/2011	0.08	2.7	6	10.4		20		
	1/25/2011	0	17.4	1.96	14.6		23		
	2/8/2011	0	16.2	2.05	19.1		22		
	2/21/2011	0	17.7	2.35	21.2		22		
	3/8/2011	0	17.8	2.3	23.1		20		
	3/24/2011	0	18.3	1.68	23.4		22		
	4/4/2011	0	18.2	1.68	12.5		21		
	4/26/2011	0	18	1.52	1.9		16		
	5/10/2011	0	19.1	1.16	0		18		
	5/23/2011	0	18.9	1.26	1		14		
	6/7/2011	0	19.1	1.4	0.4		12		
	6/23/2011	0	18.6	1.6	1		12		
	7/7/2011	0	18.6	1.72	2.9		10		
	7/28/2011	0	18.6	1.9	8		11		
	8/15/2011	0	18	2.42	1.1		0		
	1/10/2012	0	1.2	9.99	9.2		5		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	1.5	9.99	24.0		7		Collected 2 hrs after system start up
	1/10/2012	0	1.6	9.99	11.1		7		Collected after 1 hr of full operation
	1/24/2012	0	16.3	3.00	5.1		22		
	2/6/2012	0	16.6	2.85	5.0		20		
	2/20/2012	0	17.4	2.55	5.0		20		
	3/6/2012	0	17.7	1.86	23.4		19		
	3/26/2012	0	19.3	0.97	11.0		17		
	4/10/2012	0	19.5	0.95	16.7		16		
	4/23/2012	0	19.5	0.99	17.6		15		
	5/7/2012	0	19.4	1.04	13.7		13		
	5/22/2012	0	19.2	1.12	6.8		13		
	6/5/2012	0	11.7	2.90	11.8		10		
	6/19/2012	0	19.3	1.20	7.3		11		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	7/3/2012	0	18.5	1.40	4.3		11		
	7/18/2012	0	18.8	1.42	4.2		11		
	7/30/2012	0	18.7	1.53	6.3		11		
	8/12/2012	0	18.4	1.66	7.0		11 (upon arrival) / 9 (after adjustments)		
	8/29/2012	0	18.6	1.74	9.8		10		
	9/11/2012	0	18.5	1.72	9.2		10		
	9/25/2012	0	18.5	1.60	4.9		10		
	10/16/2012	0	18.4	1.46	13.2		10		
	10/30/2012	0	18.8	1.46	0		10		
	11/12/2012	0	18.8	1.44	7.9		11		System shutdown upon departure.
	12/4/2012	0.16	7.8	5.40	6.2		8		
	12/17/2012	0	18.0	1.98	5.2		18		
	1/2/2013	0	17.9	1.76	4.7		18		
	2/6/2008	100	0	18.9	149				
	3/12/2008	100	14.8	4.6	200		12	>15%	
	3/19/2008	100	18.8	2.2	98		11	>70000	
	3/26/2008	100	18.6	1.8			28	100400	
	4/1/2008	68	19.1	1.1			30	69600	
	4/8/2008	72	19.6	0.9	1383		31	92700	
	4/15/2008						39		
	4/21/2008	39	19.2	1	1453		40	27500	
	4/28/2008	29	19.2	1.2	1714		37	21800	
	5/6/2008	20	18.5	1	927		35	16800	
	5/22/2008	16	18.2	1.9	964		32	9600	
	6/4/2008	20	18.6					9970	
	6/27/2008	19	16.9	1.1	1350			6800	
	7/22/2008	21	15.6	2.9	982		10	NM	
	7/23/2008						10		
	7/30/2008	19	16.9	2.4	1485		10	8560	
	8/5/2008	29	16.3	2.9	1375		10	10100	
	8/12/2008	17	18.2	2	490		10	7965	
	8/19/2008	22	18.3	2.1	95		10	6860	
	8/27/2008	10	9.2	7.3	728		9.5	4860	
	9/9/2008	0	20.9	0	1		10		
	9/16/2008	0	12.6	4	89		9.5		
	9/24/2008	0	18.5	3	263		10		
	9/30/2008	0	17.9	2	400		10		
	10/6/2008	0	19.5	1.42	173.8		15		
	10/14/2008	0	17.2	2.7	178		10		
	10/21/2008	0	17.3	2.6	98		10		
	11/4/2008	0	16.8	2.75	187		12		
	11/11/2008	0	15.9	3.3	78		12		
	11/19/2008	0	14.7	4.02	39		12		
	12/4/2008	0.2	4.2	8.6	41		11.5		
	12/10/2008	0.16	6.7	7.8	51		10		
	1/2/2009	0.11	17.4	2.35	72		20		
	1/20/2009						24		
	1/27/2009	0.05	16.1	3.1	46		26		
	2/4/2009	0.05	16.4	3	80		30		
	2/17/2009	0.11	8.2	6.6	74		23		
	2/27/2009	0.05	15.9	5.69	46		27		
	3/4/2009	0.07	16.1	3.2	72.2		27		
	3/11/2009	0.06	17.3	1.68	88		30		
	3/17/2009	0.14	10.6	5.5	275		29		
	3/24/2009	0.06	17.5	2.45	139		31		
	3/31/2009	0	20.6	0.06	25		14		
	4/8/2009	0.08	15.6	3.1	180		29		
	4/13/2009	0.00	16.6	2.75	135		27		
	4/22/2009	0.08	12.2	4.85	205		25		
	4/29/2009	0.07	15	3.45	158		27		
	5/12/2009	0.00	14.4	4.08	120		13		
	5/19/2009	0.00	15.5	3.55	59		13		
	6/3/2009	0.32	2	9.99	10.5		9		
	6/10/2009	0.07	14.5	4.15	144		9		
	6/16/2009	0.05	14.5	4.4	150		8.5		
	6/24/2009	0.05	14.3	4.65	157		9		
	6/30/2009	0.00	14.4	4.3	100		5.5		
	7/8/2009	0.35	1.2	9.99	181		5		
	7/20/2009	0.22	16.3	3.1	188		5		
	8/4/2009	0.15	12.8	6	194		6		
	8/18/2009	0.22	12.1	6.6	2.53		6		
	9/11/2009	0.37	1.8	9.99	300		10		
	9/15/2009	0.19	12.9	6.5	352		8		
	9/29/2009	0.10	13.8	5.2	214		8		
	10/15/2009	0.11	15.4	4.3	154		8		
	10/28/2009	0.09	14.3	4.65	153		10		
	11/11/2009	0.07	15.9	3.5	120		9		
	12/1/2009	0.90	5.2	?	153		8		
	12/7/2009	0.08	14	5.1	160		14		
	12/22/2009	0.08	14.7	4.45	156		17		
	1/5/2010	0.08	14.8	4.3	149		20		
	1/19/2010	0.05	15.3	3.95	147		21		
	2/3/2010	0.06	15.6	3.85	131		20		
	2/16/2010	0.00	15.1	4.15	155		18		
SVE RW3	3/3/2010	0.05	14.9	4.21	146		20		
	3/16/2010	0.00	16.7	2.2	124		21		
	3/29/2010	0.00	16.2	2.35	71		17		
	4/13/2010	0.00	14.9	2.85	57		15		
	4/27/2010	0.00	16.7	2.15	65		23		
	5/12/2010	0.00	12.5	3.7	64		21		
	5/26/2010	0.00	6.6	5.6	53		19		
	6/8/2010	0.00	13.7	3.4	36		20		
	6/24/2010	0.00	13.5	3.6	34		17		
	7/7/2010	0	14.2	3.4	23		20		

Table 4
SVE Point Field Data
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Sample Location	Date	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	PID (ppm)	Methane (%)	Vacuum (inches of water)	FID	Comment
	7/20/2010	0	16	2.65	21		20		
	8/3/2010	0	16.6	2.44	20		14		
	8/16/2010	0	5.3	5.8	34		13		
	8/31/2010	0	17.1	2.05	22		13		
	9/14/2010	0	17.3	1.96	29		14		
	9/27/2010	0	15.7	2.5	20		17		
	10/12/2010	0	16.2	2.45	12		17		
	10/25/2010	0	15.3	2.65	13		18		
	11/9/2010	0	16.1	2.65	5.2		19		
	11/30/2010	0	15	2.65	2.7		23		
	12/16/2010	0	17.1	1.82	2.7		25		
	12/28/2010	0	17.1	1.84	4.3		25		
	1/12/2011	0	10.5	4.25	5.6		19		
	1/25/2011	0	19	1.04	8.7		20		
	2/8/2011	0	17.6	1.14	13.3		20		
	2/21/2011	0	18.7	1.52	11.9		20		
	3/8/2011	0	18.7	1.52	14.3		19		
	2/24/2011	0	19.1	1.24	15.2		21		
	4/4/2011	0	18.7	1.46	6.2		20		
	4/26/2011	0	10.8	6	1.6		14		
	5/10/2011	0	19.2	1.1	0		17		
	5/23/2011	0	15.8	2.75	0.5		13		
	6/7/2011	0	19.3	1.18	0		12		
	6/23/2011	0	18.9	1.3	1		12		
	7/7/2011	0	18.9	1.4	1.6		10		
	7/28/2011	0	19.2	1.32	5.5		8		
	8/15/2011	0	19.3	1.22	0.3		0		
	1/10/2012	0.10	1.1	9.99	10.6		2		Approximately 50% dilution. Restarted system at 11:30. Collected readings after 30 min of start up.
	1/10/2012	0	1.3	9.99	24.6		2		Collected 2 hrs after system start up
	1/10/2012	0	1.3	9.99	17.0		4		Collected after 1 hr of full operation
	1/24/2012	0	19.0	1.28	4.9	.	18		
	2/6/2012	0	19.1	1.14	5.0		19		
	2/20/2012	0	19.4	1.02	4.9		19		
	3/6/2012	0	19.4	0.89	22.2		18		
	3/26/2012	0	20.2	0.45	8.6		15		
	4/10/2012	0	20.3	0.41	13.2		15		
	4/23/2012	0	20.3	0.44	13.5		13		
	5/7/2012	0	20.2	0.53	9.2		12		
	5/22/2012	0	20.2	0.52	6.1		10		
	6/5/2012	0	11.8	3.35	9.3		7		
	6/19/2012	0	20.2	0.61	7.2		9		
	7/3/2012	0	20.0	0.65	2.9		9		
	7/18/2012	0	20.1	0.68	3.9		9		
	7/30/2012	0	19.9	0.78	4.7		9		
	8/12/2012	0	20.0	0.68	6.1		9 (upon arrival) / 7 (after adjustments)		
	8/29/2012	0	20.0	0.76	6.8		8		
	9/11/2012	0	19.9	0.78	7.2		8		
	9/25/2012	0	19.8	0.76	5.0		8		
	10/16/2012	0	19.6	0.70	6.9		8		
	10/30/2012	0	19.8	0.71	0.2		8		
	11/12/2012	0	19.9	0.70	7.0		8.5		System shutdown upon departure.
	12/4/2012	0.15	4.2	6.30	6.5		5 (upon arrival) / 6 (after adjustments)		
	12/17/2012	0	19.8	0.77	4.6		12 (upon arrival) / 13 (after adjustments)		
	1/2/2013	0	19.8	0.66	4.3		15		

nm = Not measured

Table 5
SVE Total Emissions Field Readings
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Source	Date	Time	Operational Timer	LEL	Oxygen	Carbon	PID	Methane	FID	Vac	Pressure	Airflow
				%	%	Dioxide %	(ppm)	%		(PSI/inches H_20)	(inches)	(SCFM)
SVE Pretreatment	01/17/08	na		10	18.9	0.30	26.3				20	na
SVE Pretreatment	01/17/08	1550	8.4	15	19.2	0.30	615				19	
SVE Pretreatment	01/18/08	1600	30.6	8	19	0.30	220			40	18	175
SVE Pretreatment	01/19/08	1035	49.6	12	19.5	0.30	348	7.0		40	18	175
SVE Pretreatment	01/19/08	1335	52.3	6	19.5	0.30	175	3.2		40	18	175
SVE Pretreatment	01/20/08	955	72.6	5	20.3	0.30	139	2.6		40	18	175
SVE Pretreatment	01/20/08	1230	75.1	7	19.7	0.30	140	3.2		40	18	175
SVE Pretreatment	01/23/08	1230	147.5	9	20.5	0.30	164	2.0		40	18	175
SVE Pretreatment	01/24/08	800	167.2	22	19.5	0.40	380	14.5		35	22.5	102
SVE Pretreatment	01/30/08	1230	206.5									
SVE Pretreatment	01/31/08	700	223.1	10	19.6	0.30	1150			35	22	191
SVE Pretreatment	02/06/08	1015	370.3	12	20.7	0.20	52			40	40	65
SVE Pretreatment (re-start)	02/27/08	1100										
SVE Pretreatment	02/27/08	1500	480.3	100	17	2.10	90			30	25	
SVE Pretreatment	02/28/08	1630	494.4	100	14.6	3.50	80			32	30	50
SVE Pretreatment	02/29/08	1000	511.9	100	15.2	3.50	87			30	27	50
SVE Pretreatment	03/06/08	830	654.4	100	14.7	4.40	55		75000	34		144
SVE Pretreatment	03/12/08	1430	540.1	100	16	3.40	132		11%			380
SVE Pretreatment	03/19/08	1100	695.1	92	19.2	1.70	172		22600			380
SVE Pretreatment	03/26/08	930	861.9	74	19.1	1.40	171		37200		13	358
SVE Pretreatment	04/01/08	1100	1006.8	48	19.2	1.10			25500			384
SVE Pretreatment	04/08/08	1100	1126	45	19.5	1.30	1254		32700			384
SVE Pretreatment	04/15/08	900	1290	31	19.5	1.30	1239		20400			384
SVE Pretreatment	04/21/08	1100	1437.8	24	19.5	0.10	1174		13400			350
SVE Pretreatment	04/28/08	1200	1603.5	19	19.7	1.10	1161		11100	11	11	360
SVE Pretreatment	05/06/08	1050	1749.3	17	19.5	0.80	979		12600			384
SVE Pretreatment	05/14/08	1100	1984.7									349
SVE Pretreatment	05/22/08	1000	2054.3	17	19.4	1.10	962		7700	32		384
SVE Pretreatment	06/04/08	1000	2281.1	15	19.3				6875			384
SVE Pretreatment	06/27/08	1000	2659.4	11	17.3	0.90	960		4801			384
SVE Pretreatment	07/22/08	930	3055.5	14	17.9	1.90	715		NM			371
SVE Pretreatment	07/30/08	1000	3216.7	7	18.3	1.60	635		2355			415
SVE Pretreatment	08/05/08	1000	3315.7	12	18	0.20	630		3075			415
SVE Pretreatment	08/12/08	930	3483.1	8	18.8	1.70	279		2604			415
SVE Pretreatment	08/19/08	1000	3650.5	7	18.8	1.80	525		2089			415
SVE Pretreatment	08/27/08	945	3672.8	7	17.4	2.30	571		2830			415
SVE Pretreatment	09/09/08	1130	3934.9	0	18.6	0.00	104					415
SVE Pretreatment	09/16/08	1130	3987.9	0	18.3	1.00	752					458
SVE Pretreatment	09/24/08	1130	4178.2	0	19.3	2.00	495					415
SVE Pretreatment	09/30/08	1230	4323.1	0	19.3	1.00	462					445
SVE Pretreatment	10/06/08	1230	4466.51	0	18.8	1.72	89			9		415
SVE Pretreatment	10/14/08	1145	4655.7	0	18.9	1.80	240			9		454
SVE Pretreatment	10/21/08	1145	4800.8	0.07	19	1.72	72					471
SVE Pretreatment	11/04/08	830	5061.2	0	19.2	1.48	105					489
SVE Pretreatment	11/11/08	1200	5232.9	0.05	19	1.62	106					415
SVE Pretreatment	11/19/08	1115	5424.2	0.05	19.3	0.94	30			11		415
SVE Pretreatment	12/04/08	1100	5426.3	0.18	17.6	2.00	254			17		415
SVE Pretreatment	12/10/08	1130	5441.8	0.13	17.6	2.00	206			10		
SVE Pretreatment	12/26/08	1030	5468							25		349
SVE Pretreatment	01/02/09	1015	5471.8	15	16	1.42	211					349
SVE Pretreatment	01/09/09	1015										
SVE Pretreatment	01/20/09	1225	5652.6	0.11	19.1	1.66	165			27		445
SVE Pretreatment	01/27/09	1120	5819.5	0.08	19.2	1.50	143			26		401
SVE Pretreatment	02/04/09	1030	6010.7	0.07	18.3	1.94	230					371
SVE Pretreatment	02/11/09		6155.4									
SVE Pretreatment	02/17/09	1030	6155.9	0.12	17.1	2.45	222			25		384
SVE Pretreatment	02/27/09	1130	6396	0.1	17.1	2.46	160			28		384
SVE Pretreatment	03/04/09	1230	6517	0.07	19.3	1.32	255					384
SVE Pretreatment	03/11/09	1215	6684.1	0.06	19.2	1.42	353			10/30		392
SVE Pretreatment	03/17/09	1030	6759.5	0.14	17.7	2.10	438			12/29		370
SVE Pretreatment	03/24/09	1130	6927	0.09	19.1	1.40	407			9/32		392
SVE Pretreatment	03/31/09	1040	7094.4	0.03	19.1	1.29	130			15/15		415
SVE Pretreatment	04/08/09	840	7284.6	0.08	19.1	1.22	355			11/29		384
SVE Pretreatment	04/13/09	1100	7406.4	0.06	19.3	1.22	330			12/27		384
SVE Pretreatment	04/22/09	1045	7576.3	0.1	18	1.72	350			12/25		384
SVE Pretreatment	04/29/09	845	7761.7	0.06	19.1	1.22	305			12/27		384
SVE Pretreatment	05/12/09	1030	8075.2	0	19.6	1.06	196			16/15		
SVE Pretreatment	01/10/12	1030	25737.4	0	12.5	5.10	8.5			15		
SVE Pretreatment	01/10/12	130	25739.2	0	12.8	4.50	19.4			14		
SVE Effluent	05/19/09	800	8241.1	0	19.2	1.38	190			14/15		414
SVE Effluent	06/03/09	800	8264.9	0.11	17.2	2.05	285			13/13		
SVE Effluent	06/10/09	1120	8434.5	0.08	18.9	1.48	250			13/13		
SVE Effluent	06/16/09	1145	8602.8	0.07	18.9	1.56	252			13/12		
SVE Effluent	06/24/09	1045	8765	0.07	18.9	1.66	248			13/13		
SVE Effluent	06/30/09	930	8902.9	0.05	19.4	1.28	201			13/8		350
SVE Effluent	07/08/09	1239	8952.7	0.16	18.7	1.52	269			13/8		
SVE Effluent	07/20/09	1110	9237.3	0.12	19.4	1.40	247			13/8		350
SVE Effluent	08/04/09	1100	9597.2	0.14	19.2	1.54	223			13/8		
SVE Effluent	08/18/09	1200	9812.4	0.14	19	1.76	273			13/8		350
SVE Effluent	09/11/09	1100	n/c	0.25	17.1	2.75	375			13/10		
SVE Effluent	09/15/09	1130	10291.6	0.19	18.4	2.35	392			13/10		
SVE Effluent	09/29/09	1130	10624.4	0.1	18.7	1.98	222			13/11		442
SVE Effluent (AS System off)	09/30/09	1305		6	17.9	1.80		1.0	1580			
SVE Effluent (AS System on)	09/30/09	1446	10651	5	17.9	1.80		1.3	1720	11		469
SVE Effluent	10/15/09	1020	11007.2	0.1	18.9	1.82	165			13.5/11		
SVE Effluent	10/28/09	1100	11319.9	0.1	18.8	1.66	172			13.5/12		
SVE Effluent	11/11/09	800	11653.9	0.08	19.1	1.54	155			13/13		
SVE Effluent	12/01/09	1100	11657.8	0.17	17.8	2.15	270			13/11		
SVE Effluent	12/07/09	1100	11800.2	0.08	19.2	1.54	181			12.5/18		

Table 5
SVE Total Emissions Field Readings
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Source	Date	Time	Operational Timer	LEL	Oxygen	Carbon	PID	Methane	FID	Vac	Pressure	Airflow
				%	%	Dioxide %	(ppm)	%		(PSI/inches H_20)	(inches)	(SCFM)
SVE Effluent	12/22/09	1100	12160.2	0.07	19.2	1.52	184			12/20		
SVE Effluent	01/05/10		12495.5	0.07	19.2	1.42	141			13/24		
SVE Effluent	01/19/10	1100	12832.1	0	19	1.48	145			13/24		
SVE Effluent	02/03/10	1200	13193.2	0.06	18.9	1.48	240			13/26		
SVE Effluent	02/16/10	1130	13504.5	0.06	19.2	1.36	237			12/22		
SVE Effluent	03/03/10	830	13861.9	0.06	19	1.42	244			12/25		
SVE Effluent	03/16/10	1130	14175.3	0	19.6	0.93	124			12/24		
SVE Effluent	03/29/10	1100	14487.1	0	19.6	0.85	85			11/22		
SVE Effluent	04/13/10	1145	14847.7	0	19.5	0.85	74			12/18		
SVE Effluent	04/27/10	1130	15182.4	0.07	19.8	0.68	206			10/30		
SVE Effluent	05/12/10	1045	15541.1	0.05	19.3	0.85	108			12/24		
SVE Effluent	05/26/10	1100	15846.3	0	19	1.12	92			13/29		
SVE Effluent	06/08/10	930	16146.6	0	19.3	0.97	59			12/24		
SVE Effluent	06/24/10	1030	16524.3	0	19.2	1.04	41			12/24		
SVE Effluent	07/07/10	1200	16819.2	0	19.3	1.06	40			12/24		
SVE Effluent	07/20/10	1110	17109.6	0	19.2	1.10	27.2			12/23		
SVE Effluent	08/03/10	1045	17430.1	0	19.1	1.20	105			12/22		
SVE Effluent	08/16/10	1130	17647.9	0	17.8	1.66	56			12/16		
SVE Effluent	08/31/10	1130	17988.2	0	19	1.30	40			13/16		
SVE Effluent	09/14/10	1200	18320.4	0	19.1	1.28	84			12/17		
SVE Effluent	09/27/10	1130	18631.9	0	19.1	1.14	63			11/19		
SVE Effluent	10/12/10	1130	18992	0	19.3	1.14	17.3			11/20		
SVE Effluent	10/25/10	1100	19303.6	0	19.4	1.08	50			11/20		
SVE Effluent	11/09/10	1200	19665.4	0	19.8	0.93	18			11/22		
SVE Effluent	11/30/10	1130	20169	0	19.4	0.87	13.8			11/26		
SVE Effluent	12/16/10	1100	20552.5	0	19.4	0.83	10			11/29		
SVE Effluent	12/28/10	1130	20817.4	0	19.5	0.82	8.8			10/30		
SVE Effluent	01/12/11	1305	21038.3	0	18.2	1.22	17			13/25		
SVE Effluent	01/25/11	1100	21348.2	0	19.6	0.81	24.9			12/24		
SVE Effluent	02/08/11	1045	21684.5	0	18.4	0.76	34.2			11/23		
SVE Effluent	02/21/11	1200	21997.2	0	19.7	0.83	26.3			12/24		
SVE Effluent	03/08/11	1115	22356.4	0	20	0.82	32.9			12/24		
SVE Effluent	03/24/11	1100	22739.3	0	19.9	0.69	22.8			12/25		
SVE Effluent	04/04/11	1100	23003.3	0	19.9	0.68	15.6			11/25		
SVE Effluent	04/26/11	1115	23267.7	0	19.7	0.09	3.1			12.5/16		
SVE Effluent	05/10/11	1430	23605.4	0	20	0.62	1.7			12/70		
SVE Effluent	05/23/11	1030	23890.3	0	19.8	0.75	1.6			12/16		
SVE Effluent	06/07/11	1100	24240	0	20	0.70	0.1			13/15		
SVE Effluent	06/23/11	1100	24613.9	0	19.5	0.75	2.4			13/15		
SVE Effluent	07/07/11	1040	24905.3	0	19.6	0.92	3.3			13/13		
SVE Effluent	07/28/11	1030	25372.2	0	19.4	1.12	5.7			13/15		
SVE Effluent	08/15/11	1130	25732.4	0	19.5	1.22	1.5			0		
SVE Effluent	01/10/12	1030	25737.4	0	14.8	3.60	7.8			7		
SVE Effluent	01/10/12	130	25739.2	0	14.9	3.50	16.2			8		
SVE Effluent	01/10/12	315	25740.7	0	14.1	4.70	14.8			14/10		
SVE Effluent	01/24/12	800	26095.9	0	19.8	0.86	4.3			12/25		
SVE Effluent	02/06/12	1100	26384.9	0	19.8	0.85	3.4			12/24		
SVE Effluent	02/20/12	1100	26721.1	0	19.9	0.80	4.8			12/25		
SVE Effluent	03/06/12	1115	27080.4	0	20.0	0.70	39.8			12/24		
SVE Effluent	03/26/12	1100	27080.4	0	20.2	0.58	17.8			13/18		
SVE Effluent	04/10/12	1100	27917.1	0	20.1	0.69	18.5			12/20		
SVE Effluent	04/23/12	1100	28228.8	0	20.1	0.70	18.3			12.5/17		
SVE Effluent	05/07/12	1100	28563.5	0	20.0	0.71	15.3			12/16		
SVE Effluent	05/22/12	1100	28923.2	0	19.9	0.74	16.1			13/16		
SVE Effluent	06/05/12	1130	28962.7	0	18.4	1.14	7.2			14/13		
SVE Effluent	06/19/12	1200	29291	0	20.0	0.80	12			12/13		
SVE Effluent	07/03/12	1040	29608.8	0	19.7	0.96	11.1			13/14		
SVE Effluent	07/18/12	800	29942.9	0	19.6	0.98	10.6			14/13		
SVE Effluent	07/30/12	1000	30224.2	0	19.5	1.08	10.3			13/13		
SVE Effluent	08/12/12	145	30524.6	0	19.5	1.04	14.3			13/13		
SVE Effluent	08/29/12	1200	30923.1	0	19.6	1.18	20.3			13/12		
SVE Effluent	09/11/12	1130	31227.5	0	19.6	1.18	17.2			13/12		
SVE Effluent	09/25/12	330	31566	0	19.6	1.06	16.1			13/13		
SVE Effluent	10/16/12	830	32064.5	0	19.5	1.00	20.5			13/12		
SVE Effluent	10/30/12	840	32400.7	0	19.8	0.97	16.4			13/12		
SVE Effluent	11/12/12	1130	32716.5	0	19.8	0.91	15.5			13/14		
SVE Effluent	12/04/12	1140	32718.2	0	17.4	1.80	14.6			13/12		
SVE Effluent	12/17/12	1145	33025.6	0	20.0	0.89	16.5			12/21		
SVE Effluent	01/02/13	1150	33409.5	0	19.9	0.81	16.8			11/26		
SVE Posttreatment	01/17/08	na	na	0	18.8	0.40	9.3					
SVE Posttreatment	01/17/08	1550	na	0	18.5	1.10	64					
SVE Posttreatment	01/18/08	1600	na	0	18.5	1.00	41.8					
SVE Posttreatment	01/19/08	1035	na	0	18.9	0.90	58	0.9				
SVE Posttreatment	01/19/08	1335	na	0	18.7	0.90	26.3	0.7				
SVE Posttreatment	01/20/08	955	na	0	19	0.80	6.9	0.7				
SVE Posttreatment	01/20/08	1230	na	0	18.8	0.90	107	2.3				
SVE Posttreatment	01/23/08	1230	na	0	20.9	0.70	70	0.9				
SVE Posttreatment	01/24/08	800	na	0	18.5	1.20	113					
SVE Posttreatment	01/31/08	700	na	0	18	1.50	15.5					
SVE Posttreatment	02/06/08	1015	na	3	19.4	1.00	1.6					
SVE Posttreatment (re-start)	02/27/08	1500	na	0	11.2	7.20	6					na
SVE Posttreatment	02/28/08	1630	na	0	11.6		16					na
SVE Posttreatment	02/29/08	1000	na	0	14.3	4.20	7.5					na
SVE Posttreatment	03/06/08	830	na	0	9.3	8.60	2		2			na
SVE Posttreatment	03/12/08	1430	na	0	10.8	7.80	15		11			na
SVE Posttreatment	03/19/08	1100	na	0	15.9	5.30	23					na
SVE Posttreatment	03/26/08	930	na	0	12	7.20	56		165			na
SVE Posttreatment	04/01/08	1100	na	0	16.3	6.80			200			na
SVE Posttreatment	04/08/08	1100	na	0	12.8	4.20	161		363			na
SVE Posttreatment	04/21/08	1100	na	0	16	3.00	19.5		10.5			na

Table 5
SVE Total Emissions Field Readings
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

Source	Date	Time	Operational Timer	LEL	Oxygen	Carbon	PID	Methane	FID	Vac	Pressure	Airflow
				%	%	Dioxide %	(ppm)	%		(PSI/inches H_20)	(inches)	(SCFM)
SVE Posttreatment	04/28/08	1200	na	0	14.4	4.50	121		310			na
SVE Posttreatment	05/06/08	1050	na	0	14.5	4.80	131		660			na
SVE Posttreatment	05/14/08	1100	na									na
SVE Posttreatment	05/22/08	1000	na	0	14.6	5.50	43		3			na
SVE Posttreatment	06/04/08	1000	na	0	13.8				112			na
SVE Posttreatment	06/27/08	1000	na	0	14.8	2.60	12.8		18			na
SVE Posttreatment	07/22/08	930	na	0	13	4.60	4.5		NM			na
SVE Posttreatment	07/30/08	1000	na	0	15.9	3.40	0		7			na
SVE Posttreatment	08/05/08	1000	na	2	15.8	3.40	0		20			na
SVE Posttreatment	08/12/08	930	na	0	16.4	3.30	2.6		16			na
SVE Posttreatment	08/19/08	1000	na	0	16.5	3.20	2.6		435			na
SVE Posttreatment	08/27/08	945	na	0	15.6	0.30	1		24			na
SVE Posttreatment	09/09/08	1130	na	0	18.2	1.00	0					na
SVE Posttreatment	09/16/08	1130	na	0	17.9	0.00	0					na
SVE Posttreatment	09/24/08	1130	na	0	17.8	4.00	0					na
SVE Posttreatment	09/30/08	1230	na	0	17.6	2.00	0					na
SVE Posttreatment	10/06/08	1230	na	0	16.6	3.05	0					na
SVE Posttreatment	10/14/08	1145	na	0	16.6	3.05	0					na
SVE Posttreatment	10/21/08	1145	na	0	16.7	2.95	0					na
SVE Posttreatment	11/04/08	830	na	0	18.5	1.85	0					na
SVE Posttreatment	11/11/08	1200	na	0	18.8	1.90	0					na
SVE Posttreatment	11/19/08	1115	na	0	19.1	1.42	0					na
SVE Posttreatment	12/04/08	1100	na	0.06	10.9	2.50	0					na
SVE Posttreatment	12/10/08	1130	na	0	17.1	2.32	0					na
SVE Posttreatment	12/26/08	1030	na									na
SVE Posttreatment	01/02/09	1015	na	0	16.2	3.85	0					na
SVE Posttreatment	01/09/09	1015	na									na
SVE Posttreatment	01/20/09	1225	na	0.11	19.2	1.50	165					na
SVE Posttreatment	01/27/09	1120	na	0	19.1	2.00	0					na
SVE Posttreatment	02/04/09	1030	na	0	17.9	2.30	0					na
SVE Posttreatment	02/17/09	1030	na	0	16.6	2.80	0					na
SVE Posttreatment	02/27/09	1130	na	0	16.5	2.82	0					na
SVE Posttreatment	03/04/09	1230	na	0	16.2	2.76	0					na
SVE Posttreatment	03/11/09	1215	na	0	16.9	2.68	0					na
SVE Posttreatment	03/17/09	1030	na	0	17.5	2.15	0					na
SVE Posttreatment	03/24/09	1130	na	0	16.9	2.17	0					na
SVE Posttreatment	03/31/09	1040	na	0	16.9	2.09	0					na
SVE Posttreatment	04/08/09	840	na	0	16.8	2.12	0					na
SVE Posttreatment	04/13/09	1100	na	0	18.9	1.48	0					na
SVE Posttreatment	04/22/09	1045	na	0	16.8	2.11	0					na
SVE Posttreatment	04/29/09	845	na	0	17.1	2.16	0					na
SVE Posttreatment	05/12/09	1030	na	0	16.4	2.18	0					na
SVE Posttreatment	05/19/09	800		0	16.2	2.11	0					
SVE Posttreatment	Catalytic Oxidizer was removed											

Note: Emissions discharged from the system to the atmosphere is listed as SVE Posttreat through 5/19/2009. Emissions from the system were not treated after 5/19/2009 and emissions to the atmosphere are listed as SVE Effluent after 5/19/2009.

Table 6
SVE Total Hydrocarbon and Vapor Concentrations
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin
(concentrations in mg/m3)

Location	Date	Lab	TPH as Gasoline	TPH as Diesel	Benzene	Ethyl benzene	Toluene	Xylene m & p	Xylene o-
SVE PRE	**1/17/2008**	**CAS**	**830**	**800 AT**	**4.4 ***	<0.26	**4.6**	<0.26	<0.26
SVE PRE	**1/19/2008**	**CAS**	**680**	**280 AT**	**3.2 ***	<0.23	**1.3**	<0.23	<0.23
SVE PRE	**1/20/2008**	**CAS**	**1300**	**370 AT**	**9.6 ***	<0.22	**3.3**	**0.56**	<0.22
SVE PRE	**1/23/2008**	**CAS**	**440**	**510 AT**	**1.5**	<0.36	**0.53**	<0.36	<0.36
SVE PRE	**1/31/2008**	**CAS**	**2400**	**490 AT**	**5.3 ***	<0.22	**2.1**	<0.22	<0.22
SVE PRE	**2/6/2008**	**CAS**	**3200 AT**	**650 AT**	**7.0 ***	<0.28	**6.7**	**2.2**	**0.51 ***
SVE PRE	**2/27/2008**	**CAS**	**33000**	**9900 AT, BT, h**	**130 ***	**6.7 ***	**100**	**18**	**7.2**
SVE PRE	**2/28/2008**	**CAS**	**47000**	**12000 AT, BT**	**240 ***	**13 ***	**190**	**35**	**15**
SVE PRE	**2/29/2008**	**CAS**	**42000**	**7900 AT, BT**	**230 ***	**14 ***	**190**	**40**	**16**
SVE PRE	**3/6/2008**	**CAS**	**31000**	**9400 AT, BT**	**220**	**9.6**	**170**	**39**	**13**
SVE PRE	**3/12/2008**	**CAS**	**51000**	**8700 AT**	**350**	**12 ***	**280**	**61**	**22**
SVE PRE	**3/19/2008**	**CAS**	**23000**	**9300 AT**	**210 ***	**17 ***	**230**	**71**	**23**
SVE PRE	**3/26/2008**	**CAS**	**24000**	**24000 AT ,BT**	**340**	**30 ***	**380**	**140**	**42**
SVE PRE	**4/21/2008**	**CAS**	**12000**	**10000 AT**	**150 ***	**19 ***	**280**	**96**	**28**
SVE PRE	**5/22/2008**	**CAS**	**8100**	**9300 AT**	**77 ***	**17**	**200**	**80**	**26**
SVE PRE	**6/27/2008**	**CAS**	**5500**	**5900 AT**	**53 ***	**18**	**190**	**94**	**30**
SVE PRE	**7/22/2008**	**CAS**	**5800**	**6300 AT**	**48 ***	**12 ***	**150**	**65**	**22**
SVE PRE	**8/27/2008**	**CAS**	**4000**	**3200 AT**	**24 ***	**5.8 ***	**73**	**37**	**15**
SVE PRE	**9/24/2008**	**CAS**	**750**	<5.0	**4.2 ***	<2.5	**12**	**7.3**	**2.6**
SVE PRE	**10/28/2008**	**CAS**	--	**1200 AT**	--	--	--	--	--
SVE PRE	**11/19/2008**	**CAS**	**1500**	**2100 AT**	**9.3 ***	**3.0 ***	**22 ***	**15**	**6.5**
SVE PRE	**1/20/2009**	**CAS**	**2100**	**870 AT**	**21 ***	**4.0 ***	**41**	**23**	**7.7**
SVE PRE	**2/17/2009**	**CAS**	**3400**	**1100 AT**	**19 ***	<1.8	**44 ***	**19 ***	**11**
SVE PRE	**3/17/2009**	**CAS**	**2700**	**950 AT**	**19 ***	**11 ***	**51 ***	**28 ***	**14**
SVE PRE	**4/22/2009**	**CAS**	**2000**	**810 AT**	**8.7**	**0.92**	**17**	**5.5**	**2.0**
SVE PRE	**5/19/2009**	**CAS**	**1100**	**770 AT**	**5.4**	**0.93**	**14**	**5.7**	**2.2**
SVE EFF	**6/30/2009**	**CAS**	**1400**	**630 ***	**4.7**	**0.47**	**9.5**	**3.1**	**1.2**
SVE EFF	**7/20/2009**	**CAS**	**2100**	**930 Y**	**7.4**	**0.77**	**14**	**5.1**	**2.1**
SVE EFF	**8/18/2009**	**CAS**	**1500**	**890 Y**	**5.8**	**0.62**	**11**	**4.3**	**1.8**
SVE EFF	**9/29/2009**	**CAS**	**2000**	**1100 AT**	**3.9**	**0.5**	**8.7**	**4.1**	**1.8**
SVE EFF	**12/8/2009**	**CAS**	**1600**		**5.7**				
SVE EFF	**1/19/2010**	**CAS**	**1000**		**3.2**				
SVE EFF	**2/16/2010**	**CAS**	**790**		**1.9**				
SVE EFF	**3/16/2010**	**CAS**	**650**		**1.9**				
SVE EFF	**4/13/2010**	**CAS**	**660**		**2.1**				
SVE EFF	**5/12/2010**	**CAS**	**590**		**2.3**				
SVE EFF	**6/8/2010**	**CAS**	**490**		**1.8**				
SVE EFF	**7/7/2010**	**CAS**	**410**		**1.2**				
SVE EFF	**8/3/2010**	**CAS**	**290**		**0.79**				
SVE EFF	**9/27/2010**	**CAS**	**51**		**0.16**				
SVE EFF	**10/25/2010**	**CAS**	**140**		**0.38**				
SVE EFF	**11/30/2010**	**CAS**	**58**		**0.094**				
SVE EFF	**12/28/2010**	**CAS**	<25		**0.036**				
SVE EFF	**1/26/2011**	**CAS**	**76**		**0.093**				
SVE EFF	**2/21/2011**	**CAS**	**99**		**0.18**				
SVE EFF	**3/24/2011**	**CAS**	**81**		**0.15**				
SVE EFF	**4/26/2011**	**CAS**	<24		**0.014**				
SVE EFF	**5/23/2011**	**CAS**	<25		<0.014				
SVE EFF	**6/23/2011**	**CAS**	**68**		**0.0083**				
SVE EFF	**7/28/2011**	**CAS**	**56**		**0.02**				
SVE EFF	**8/15/2011**	**CAS**	<32		**0.0064**				
System shut off 8/15/2011 and restarted 1/10/2012									
SVE EFF	**1/10/2012**	**CAS**	**130**		<0.028				
SVE EFF	**2/20/2012**	**CAS**	**120**		**0.07**				
SVE EFF	**3/26/2012**	**CAS**	**53**		**0.038**				
SVE EFF	**4/23/2012**	**CAS**	**58**		**0.034**				
SVE EFF	**5/22/2012**	**CAS**	**28**		**0.012**				
SVE EFF	**6/19/2012**	**CAS**	**58**		**0.028**				
SVE EFF	**7/30/2012**	**CAS**	**50**						
SVE EFF	**8/29/2012**	**CAS**	**91**		**0.044**				
SVE EFF	**9/25/2012**	**CAS**	**81**		**0.047**				
SVE EFF	**10/30/2012**	**CAS**	**74**		**0.031**				
SVE EFF	**11/12/2012**	**CAS**	**44**		**0.022**				
SVE EFF	**12/17/2012**	**CAS**	**81**		**0.035**				

SVE PRE = SVE system effluent prior to treatment with catalytic oxidizer

SVE EFF = SVE system effluent from same sampling port as SVE PRE, however, catalytic oxidizer was removed (direct SVE discharge)

Detections are presented in **bold**.

-- Not analyzed.

* Estimated value, QA/QC criteria not met.

h EPA recommended sample preservation, extraction or analysis holding time was exceeded.

AT Sample chromatogram is noted to be atypical of a petroleum product.

BT Indicates possible breakthrough - result for back section at least 10% of result from front section of tube.

Y The chromatogram resembles a petroleum product but does not match the calibration standard

Table 7
Total Hydrocarbon Mass Removal
Enbridge Energy, Limited Partnership - Line 14, MP 85 Crude Oil Release
Rusk County, Wisconsin

	SVE System			Biodegradation		
Date	Removal Rate (lbs/day)	Cumulative (lbs)	Cumulative (barrels)	Removal Rate (lbs/day)	Cumulative (lbs)	Cumulative (barrels)
2/27/2008	193	0	0	36	0	0
2/28/2008	265	243	1	--	--	--
2/29/2008	224	422	1	105	188	1
3/6/2008	523	2,760	9	328	2,135	7
3/12/2008	2,039	10,128	35	684	6,411	22
3/19/2008	1,103	20,900	72	237	8,037	28
3/26/2008	1,545	30,141	104	237	9,680	33
4/1/2008	--	--	--	240	11,134	38
4/8/2008	--	--	--	198	12,516	43
4/15/2008	--	--	--	198	13,882	48
4/21/2008	690	59,132	203	180	14,977	51
4/28/2008	--	--	--	159	16,095	55
5/6/2008	--	--	--	198	17,666	61
5/22/2008	601	79,228	272	212	21,044	72
6/4/2008				226	23,978	82
6/27/2008	394	97,125	334	508	35,660	123
7/22/2008	404	107,086	368	423	46,232	159
7/30/2008	--	--	--	367	49,174	169
8/5/2008	--	--	--	395	51,545	177
8/12/2008	--	--	--	320	53,780	185
8/19/2008	--	--	--	320	56,028	192
8/27/2008	269	119,365	410	534	60,291	207
9/9/2008	--	--	--	351	64,876	223
9/16/2008	--	--	--	437	67,938	223
9/24/2008	28	123,529	424	244	69,890	240
9/30/2008	--	--	--	262	71,470	246
10/6/2008	--	--	--	320	73,215	252
10/14/2008	--	--	--	334	75,820	260
10/21/2008	--	--	--	329	78,138	268
11/4/2008	--	--	--	305	82,535	284
11/11/2008	--	--	--	290	84,661	291
11/19/2008	134	128,076	440	244	86,787	298
12/4/2008	--	--	--	503	92,386	317
12/10/2008	--	--	--	396	95,094	327
1/2/2009	--	--	--	628	106,852	367
1/20/2009	119	135,956	467	294	115,197	396
1/27/2009	--	--	--	250	117,091	402
2/4/2009	--	--	--	354	119,500	411
2/17/2009	155	139,842	480	536	125,093	430
2/27/2009	--	--	--	536	130,711	449
3/7/2009	--	--	--	226	133,774	460
3/11/2009	--	--	--	245	134,713	463
3/17/2009	121	143,709	494	435	136,727	470
3/24/2009				259	139,171	478
3/31/2009				274	141,030	485
4/22/2009	103	147,428	507	320	148,263	509
5/19/2009	85	149,736	514	252	155,072	533
6/30/2009	44	151,575	521	93	158,971	546
7/20/2009	55	152,684	525	81	160,581	552
8/18/2009	70	154,726	532	117	163,967	563
9/29/2009	80	158,083	543	172	171,188	588
10/15/2009	121	160,018	550	243	175,075	602
11/11/2009	107	162,912	560	211	180,766	621
12/7/2009	18	163,384	561	42	181,870	625
1/19/2010	48	165,464	568	182	189,711	652
2/16/2010	33	166,397	572	182	194,820	669
3/16/2010	27	167,146	574	137	198,643	682
4/13/2010	24	167,828	577	114	201,836	693
5/12/2010	22	168,477	579	131	205,624	706
6/8/2010	17	168,946	580	131	209,174	719
7/7/2010	16	169,411	582	146	213,422	733
8/3/2010	13	169,756	583	163	217,811	748
9/27/2010	6	170,074	584	166	226,942	780
10/25/2010	3	170,170	585	157	231,339	795
11/30/2010	4	170,297	585	129	235,998	811
12/28/2010	1	170,336	585	115	239,229	822
1/26/2011	1	170,375	585	82	241,607	830
2/21/2011	3	170,458	586	97	244,134	839
3/24/2011	3	170,554	586	70	246,309	846
4/26/2011	1	170,590	586	48	247,896	852
5/23/2011	0	170,601	586	77	249,986	859
6/23/2011	1	170,646	586	95	252,922	869
7/28/2011	2	170,719	587	117	257,003	883
8/15/2011	1	170,739	587	108	258,969	890
System shut off 8/15/2011 and restarted on 01/010/12						
1/10/2012		170,739	587		258,969	890
2/20/2012	4	170,900	587	507	279,763	961
3/26/2012	3	170,995	587	32	280,881	965
4/23/2012	2	171,047	588	21	281,471	967
5/22/2012	1	171,085	588	43	282,709	971
6/19/2012	1	171,119	588	29	283,514	974
7/30/2012	1	171,173	588	79	286,739	985
8/29/2012	1	171,259	588	112	290,100	997
9/25/2012	1	171,323	589	109	293,048	1007
10/30/2012	2	171,437	589	93	296,311	1018
11/12/2012	1	171,468	589	80	297,345	1022
12/17/2012	1	171,505	589	89	300,462	1032

1/23/2013 6:00 PM
P:\Duluth\49 WI\55\4955029 MP85 Leak Response\WorkFiles\System Operation Data Tables\Emission and Removal rate Calculations_table_graphs.xlsx

VI. Laboratory Analytical Results

LABORATORY REPORT

January 24, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on January 12, 2012. For your reference, these analyses have been assigned our service request number P1200099.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3-R2; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-11-2; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA015272011-1; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering CAS Project No: P1200099
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

CASE NARRATIVE

The sample was received intact under chain of custody on January 12, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Benzene Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

The reporting limit is elevated for sample SVE Effluent. The chromatogram indicated the presence of non-target background components. The sample was diluted in order to prevent damage to the instrument.
The reporting limits are adjusted to reflect the dilution.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1200099
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

Date Received: 1/12/2012
Time Received: 09:55

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1200099-001	Air	1/10/2012	16:00	1SC00723	-0.08	5.52	X	X

Columbia Analytical Services

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. P1200099

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th Street
Minneapolis Minn

Project Name
mp-85 Site Exland Wi

Project Number
49/55-0029.00 2012 .001

CAS Contact:

Analysis Method

Project Manager
Jon Aspig

P.O. # / Billing Information

Phone
952-832-2772

Fax
952-832-2601

Email Address for Result Reporting
JAspig@Barr.com

Sampler (Print & Sign)
WARD MITCHELL

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPH GAS TO15 Benzene Only		Comments e.g. Actual Preservative or specific instructions
SVE EFFLUENT	(1) 0.00	1/10/12	4:00pm		—	—	—		X		

4 of 8

Report Tier Levels - please select
Tier I - (Results/Default if not specified) _____
Tier II (Results + QC) _____
Tier III (Data Validation Package) 10% Surcharge _____
Tier V (client specified) _____
EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Time:
	1/11/12	2:30pm	1/12/12	0955
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Time:

Cooler / Blank Temperature ____°C

Columbia Analytical Services™ 2655 Park Center Drive, Suite A, Simi Valley, CA 93065 | 805.526.7161 | www.caslab.com

Sample Acceptance Check Form

Client: Barr Engineering Work order: P1200099

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

Sample(s) received on: 1/12/12 Date opened: 1/12/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1200099-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1200099

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Dante Munoz-Castaneda
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 1/10/12
Date Received: 1/12/12
Date Analyzed: 1/12/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1200099-001	1.38	1.0	**130**	25	**38**	7.1	
Method Blank	P120112-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1200099

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 1/10/12
Analyst: Simon Cao Date Received: 1/12/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 1/13/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1200099-001	25	1.38	ND	0.028	ND	0.0086	
Method Blank	P120113-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1200099

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 1/10/12
Analyst: Simon Cao Date(s) Received: 1/12/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 1/13/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120113-MB	**114**	**97**	**103**	70-130	
SVE Effluent	P1200099-001	**109**	**91**	**97**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

March 6, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85-Site Exland Wi / 49/55-0029.00 2012.001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on February 22, 2012. For your reference, these analyses have been assigned our service request number P1200694.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3-R2; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-11-2; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA015272011-1; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Digitally signed by Sue Anderson
Date: 2012.03.06 16:39:43 -08'00'

For Kelly Horiuchi
Laboratory Director

Client: Barr Engineering CAS Project No: P1200694
Project: MP-85-Site Exland Wi / 49/55-0029.00 2012.001

CASE NARRATIVE

The sample was received intact under chain of custody on February 22, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Benzene Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1200694
Project ID: MP-85-Site Exland Wi / 49/55-0029.00 2012.001

Date Received: 2/22/2012
Time Received: 09:55

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1200694-001	Air	2/20/2012	11:30	1SC00426	0.34	5.63	X	X

Columbia Analytical Services

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Phone (805) 526-7161
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Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. P120694

Company Name & Address (Reporting Information)	Barr Engineering 4700 West 77th Street Minneapolis Minn
Project Manager	Jon Aspica
Phone	952-832-2777
Fax	952-832-2601
Email Address for Result Reporting	JAspica@Barr.com
Project Name	MP-85 - Site Exland WI
Project Number	49/55-0089.00 2012.0011
P.O. # / Billing Information	
Sampler (Print & Sign)	WARD Mitchell
CAS Contact:	

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: TPH GRO TO15 Benzene Only		Comments e.g. Actual Preservative or specific instructions
SVE EFFLUENT	10396	2/20/12	11:30		-	-	-	✓	✓		

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 2/20/12	Time:	Received by: (Signature)	Date: 2/23/12	Time: 0955	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Cooler / Blank Temperature ____ °C

4 of 8

COC AIR REV 3-11

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1200694

Project: MP-85-Site Exland Wi / 49/55-0029.00 2012.001

Sample(s) received on: 2/22/12 Date opened: 2/22/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1200694-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85-Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1200694

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Dante Munoz-Castaneda
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 2/20/12
Date Received: 2/22/12
Date Analyzed: 2/24/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1200694-001	1.35	1.0	**120**	7.3	**30**	1.8	
Method Blank	P120224-MB	1.00	1.0	ND	5.4	ND	1.3	

Parts Per Million results are based on a Molecular Weight of 100.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85-Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1200694

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 2/20/12
Analyst: Simon Cao Date Received: 2/22/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 3/1/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	**Data Qualifier**
SVE Effluent	P1200694-001	25	1.35	**0.070**	0.027	**0.022**	0.0085	
Method Blank	P120301-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85-Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1200694

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 2/20/12
Analyst: Simon Cao Date(s) Received: 2/22/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 3/1/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120301-MB	**83**	**102**	**103**	70-130	
SVE Effluent	P1200694-001	**84**	**93**	**96**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

April 11, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on March 28, 2012. For your reference, these analyses have been assigned our service request number P1201209.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-11-2; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA015272011-1; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Samantha Henningsen
2012.04.11 16:27:43 -07'00'

For
Kelly Horiuchi
Laboratory Director

Client: Barr Engineering CAS Project No: P1201209
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on March 28, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Benzene Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1201209
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 3/28/2012
Time Received: 10:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1201209-001	Air	3/26/2012	12:00	1SC00859	0.46	5.20	X	X

Columbia Analytical Services

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. P120129

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th Street
Minneapolis MN

Project Name: MP-85 Site Exland WI

Project Number: 49/55-0029.00 2012 001

Project Manager: Jon Aspia

P.O. # / Billing Information

Phone: 952-832-2777

Fax: 952-832-2601

Email Address for Result Reporting: JASPIA@Barr.Com

Sampler (Print & Sign): Ward Mitchell

CAS Contact:

Analysis Method

EPA TO15 (LL+TICs)

Comments e.g. Actual Preservative or specific instructions

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume
SUB EFFLUENT	1 to 19	3/26/12	12:00	1SC00855	—	—	—	—

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Ward Mitchell	3/27/12	3:00pm		3/28/12	1000
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C

COC AIR REV 3-11

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1201209

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 3/28/12 Date opened: 3/28/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1201209-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1201209

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Dante Munoz-Castaneda
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 3/26/12
Date Received: 3/28/12
Date Analyzed: 3/30/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1201209-001	1.31	1.0	**53**	24	**15**	6.7	
Method Blank	P120330-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1201209

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 3/26/12
Analyst: Elsa Moctezuma Date Received: 3/28/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 4/2/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1201209-001	100	1.31	**0.038**	0.0066	**0.012**	0.0021	
Method Blank	P120402-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1201209

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 3/26/12
Analyst: Elsa Moctezuma Date(s) Received: 3/28/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 4/2/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120402-MB	**97**	**114**	**84**	70-130	
SVE Effluent	P1201209-001	**99**	**94**	**77**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

May 9, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on April 25, 2012. For your reference, these analyses have been assigned our service request number P1201606.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-11-2; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA015272011-1; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1201606
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on April 25, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Volatile Organic Compound Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1201606
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 4/25/2012
Time Received: 09:55

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1201606-001	Air	4/23/2012	12:00	1SC00906	-0.21	5.29	X	X

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Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. PI201606

Company Name & Address (Reporting Information)
Barr Engineering Co
4700 West 77th St
Minneapolis MN

Project Name: mp-85 Site Eyland W.

Project Number: 49/55-0029.00 2012001

Project Manager: Jon Aspik

P.O. # / Billing Information

Phone: 952-832-2777

Fax: 952-832-2601

Email Address for Result Reporting: Jaspik@Barr.com

Sampler (Print & Sign)

CAS Contact:

Analysis Method

EPA TO15 TPH as Benzene only

Comments e.g. Actual Preservative or specific instructions

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume			
SVE Effluent	01-0116	4/23/12	12:40pm						Y		

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/23/12	5:00pm		4/24/12	0955
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1201606

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 4/25/12 Date opened: 4/25/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1201606-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

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RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1201606

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Dante Munoz-Castaneda
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 4/23/12
Date Received: 4/25/12
Date Analyzed: 4/26/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1201606-001	1.38	1.0	**58**	25	**17**	7.1	
Method Blank	P120426-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1201606

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 4/23/12
Analyst: Simon Cao Date Received: 4/25/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 4/26/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	**Data Qualifier**
SVE Effluent	P1201606-001	50	1.38	**0.034**	0.014	**0.011**	0.0043	
Method Blank	P120426-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1201606

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 4/23/12
Analyst: Simon Cao Date(s) Received: 4/25/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 4/26/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120426-MB	**92**	**99**	**103**	70-130	
SVE Effluent	P1201606-001	**86**	**94**	**99**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

June 8, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on May 24, 2012. For your reference, these analyses have been assigned our service request number P1202064.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-11-2; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA015272011-1; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

For Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1202064
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on May 24, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Volatile Organic Compound Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1202064
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 5/24/2012
Time Received: 09:55

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1202064-001	Air	5/22/2012	11:35	1SC00669	0.12	5.48	X	X

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Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. R1202064

CAS Contact:

Analysis Method

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th Street
Minneapolis Minn

Project Name: MP-85 Site Extend W.

Project Number: 49/55-0029.00 2012 001

Project Manager: John Aspia

P.O. # / Billing Information

Phone: 952-832-2777

Fax: 952-832-2601

Email Address for Result Reporting: Jaspia@barr.com

Sampler (Print & Sign): Ward Mitchell

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	EPA TO15 Full Scan only TP1+GAS		Comments e.g. Actual Preservative or specific instructions
SVE EFFLUENT	10.00	5/22	11:35						X		

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	5/23/12	3:30 pm		5/24/12	0945
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C

4 of 8

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1202064

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 5/24/12 Date opened: 5/24/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1202064-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1202064

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Wade Henton
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 5/22/12
Date Received: 5/24/12
Date Analyzed: 5/31/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1202064-001	1.36	1.0	**28**	24	**7.9**	6.9	
Method Blank	P120531-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1202064

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 5/22/12
Analyst: Simon Cao Date Received: 5/24/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 6/5/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	**Data Qualifier**
SVE Effluent	P1202064-001	100	1.36	**0.012**	0.0068	**0.0038**	0.0021	
Method Blank	P120605-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1202064

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 5/22/12
Analyst: Simon Cao Date(s) Received: 5/24/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 6/5/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120605-MB	**91**	**103**	**96**	70-130	
SVE Effluent	P1202064-001	**89**	**95**	**96**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

July 6, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on June 22, 2012. For your reference, these analyses have been assigned our service request number P1202542.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-11-2; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA015272011-1; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kelly M Horiuchi

Digitally signed by Kelly Horiuchi
Date: 2012.07.06 14:42:06 -07'00'

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1202542
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on June 22, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Volatile Organic Compound Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1202542
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 6/22/2012
Time Received: 10:10

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1202542-001	Air	6/19/2012	13:00	1SC00266	-0.04	4.97	X	X

Columbia Analytical Services

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. P1202542

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th St
Minneapolis Minn

Project Name: MP-85 Site Exland Wi

Project Number: 49/55-0029.00 2012.001

Project Manager: Jon Asping

P.O. # / Billing Information

Phone: 952-832-2777

Fax: 952-832-2601

Email Address for Result Reporting: JASPING@BARR.COM

Sampler (Print & Sign): WARD MITCHELL

CAS Contact:

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPH as Gasoline and for Benzene		**Comments** e.g. Actual Preservative or specific instructions
SVE EFFLUENT	1-020	6/19/12	6:30 PM						X		Tim or Pam

4 of 8

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				6/19/12	1640
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

COC AIR REV 3-11

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1202542

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 6/22/12 Date opened: 6/22/12 by: MZAMORA

Note: This form is used forall samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1202542-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

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RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1202542

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Wade Henton
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 6/19/12
Date Received: 6/22/12
Date Analyzed: 6/23/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1202542-001	1.34	1.0	**58**	24	**16**	6.8	
Method Blank	P120623-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1202542

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 6/19/12
Analyst: Lusine Hakobyan Date Received: 6/22/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 6/25/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1202542-001	50	1.34	**0.028**	0.013	**0.0088**	0.0042	
Method Blank	P120625-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1202542

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 6/19/12
Analyst: Lusine Hakobyan Date(s) Received: 6/22/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 6/25/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120625-MB	**94**	**99**	**110**	70-130	
SVE Effluent	P1202542-001	**93**	**93**	**103**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

August 15, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on August 1, 2012. For your reference, this analysis has been assigned our service request number P1203123.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kelly M Horiuchi

Digitally signed by Kelly Horiuchi
Date: 2012.08.15 09:28:05 -07'00'

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1203123
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on August 1, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

The analysis for Benzene was cancelled due to an analyst error that compromised the sample which occurred after completing the TPH-Gas analysis.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1203123
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 8/1/2012
Time Received: 10:15

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	2nd Pi (psig)	2nd Pf (psig)	TO-3 Modified - TPHG Can
SVE EFFLUENT	P1203123-001	Air	7/30/2012	12:15	1SC00200	-0.52	5.16	-0.01	6.54	X

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Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No: P1203123

Company Name & Address (Reporting Information)
Barr Engineering
4700 WEST 77th St
Minneapolis Minn

Project Name: mp 85 Site Exland Wi

Project Number: 49/55-0029.00 2012 001

Project Manager: Jon Aspie

P.O. # / Billing Information

Phone: 952-832-2777

Fax: 952-832-2601

Email Address for Result Reporting: JAspie@Barr.com

Sampler (Print & Sign)

CAS Contact:

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPHG's TO15 Benzene Only		**Comments** e.g. Actual Preservative or specific instructions
SVE EFFLUENT		7/30/12	12:15						X		

4 of 6

Report Tier Levels - please select
Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	7/30/12	1600		8/1/12	1015
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

COC AIR REV 3-11

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1203123

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 8/1/12 Date opened: 8/1/12 by: RMARTENIES

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1203123-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1203123

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Wade Henton
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 7/30/12
Date Received: 8/1/12
Date Analyzed: 8/1/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE EFFLUENT	P1203123-001	1.40	1.0	**50**	25	**14**	7.2	
Method Blank	P120801-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

LABORATORY REPORT

September 14, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on August 31, 2012. For your reference, these analyses have been assigned our service request number P1203588.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kelly Horiuchi

Digitally signed by Kelly Horiuchi
Date: 2012.09.17 15:47:19 -07'00'

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1203588
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

CASE NARRATIVE

The sample was received intact under chain of custody on August 31, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Volatile Organic Compound Analysis

The sample was also analyzed for Benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1203588
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

Date Received: 8/31/2012
Time Received: 10:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1203588-001	Air	8/29/2012	12:48	1SC00574	-0.79	5.22	X	X

Air - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services
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Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

SSC

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. P1203585

CAS Contact:

Analysis Method

TPH GAS TO15 Benzene Only

Comments
e.g. Actual Preservative or specific instructions

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th St
Minneapolis Minn

Project Name: MP-85 Site Expand W.

Project Number: 4/4/55-0029.00 2012.001

Project Manager: Jon Aspie

P.O. # / Billing Information

Phone: 952-832-2772

Fax: 952-832-2601

Email Address for Result Reporting: JASPIE@BARR.COM

Sampler (Print & Sign): WARD MITCHELL

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume			
SVE EFFLUENT	D-034	8/29/12	12:45	18C 00 571	—	-14.30		1.0L	X		

Report Tier Levels - please select
Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) ____
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____
EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	8/31/12	2:00pm		8/31/12	1000
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1203588

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012.001

Sample(s) received on: 8/31/12 Date opened: 8/31/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1203588-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1203588

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Jennifer Young
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 8/29/12
Date Received: 8/31/12
Date Analyzed: 9/6/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1203588-001	1.43	1.0	**91**	26	**26**	7.3	
Method Blank	P120906-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1203588

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 8/29/12
Analyst: Lusine Hakobyan Date Received: 8/31/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 9/5/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1203588-001	50	1.43	**0.044**	0.014	**0.014**	0.0045	
Method Blank	P120905-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012.001** CAS Project ID: P1203588

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 8/29/12
Analyst: Lusine Hakobyan Date(s) Received: 8/31/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 9/5/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P120905-MB	**104**	**98**	**101**	70-130	
SVE Effluent	P1203588-001	**105**	**80**	**89**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

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LABORATORY REPORT

October 11, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on October 1, 2012. For your reference, these analyses have been assigned our service request number P1204025.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kelly M Horiuchi

Digitally signed by Kelly Horiuchi
Date: 2012.10.11 12:17:36 -07'00'

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1204025
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on October 1, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Benzene Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1204025
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 10/1/2012
Time Received: 10:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1204025-001	Air	9/25/2012	15:30	1SC00752	0.83	6.48	X	X

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Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

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SSC

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. R1204025

Company Name & Address (Reporting Information)	Barr Engineering 4700 West 77th St Minneapolis Minn
Project Manager	Jon Aspie
Phone	952-832-2777
Fax	952-832-2601
Email Address for Result Reporting	jaspie@barr.com
Project Name	MP-85 Site Exland WI
Project Number	461/55-0029.00 2012 001
P.O. # / Billing Information	
Sampler (Print & Sign)	WARD MITCHELL Ward L Mitchell
CAS Contact:	

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPH GAS TO-15 BENZENE only		Comments e.g. Actual Preservative or specific instructions
SVE EFFLUENT	10.97	9/25/12	330						Y		

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) ____
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Ward L Mitchell	9/27/12	1:10 pm		10/1/12	1000
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

COC AIR REV 3-11

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1204025

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 10/1/12 Date opened: 10/1/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1204025-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

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RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1204025

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Jennifer Young
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 9/25/12
Date Received: 10/1/12
Date Analyzed: 10/3/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1204025-001	1.36	1.0	**81**	24	**23**	6.9	
Method Blank	P121003-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1204025

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 9/25/12
Analyst: Simon Cao Date Received: 10/1/12
Sampling Media: 1.0 L Summa Canister(s) Date Analyzed: 10/3/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	**Data Qualifier**
SVE Effluent	P1204025-001	25	1.36	**0.047**	0.027	**0.015**	0.0085	
Method Blank	P121003-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1204025

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 9/25/12
Analyst: Simon Cao Date(s) Received: 10/1/12
Sampling Media: 1.0 L Summa Canister(s) Date(s) Analyzed: 10/3/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P121003-MB	**92**	**103**	**102**	70-130	
SVE Effluent	P1204025-001	**93**	**95**	**97**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

November 13, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on November 2, 2012. For your reference, these analyses have been assigned our service request number P1204526.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Digitally signed by Kelly Horiuchi
Date: 2012.11.13 14:58:47 -08'00'

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1204526
Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

CASE NARRATIVE

The sample was received intact under chain of custody on November 2, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Benzene Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1204526
Project ID: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Date Received: 11/2/2012
Time Received: 10:10

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1204526-001	Air	10/30/2012	10:00	1SC00272	0.29	5.29	X	X

Columbia Analytical Services

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

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Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. R1204526

Company Name & Address (Reporting Information)	Barr Engineering 4700 West 77th Street Minneapolis, MN
Project Name	MP-85 Site Ferland WI
Project Number	49155-0029.00 2012 001
Project Manager	Jon Aspie
P.O. # / Billing Information	
Phone	952-832-2777
Fax	952-832-2601
Email Address for Result Reporting	Jaspie@Barr.com
Sampler (Print & Sign)	WARD MITCHELL
CAS Contact:	

Analysis Method

TO15 BENZENE ONLY
TPH GAS

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume			**Comments** e.g. Actual Preservative or specific instructions
SVE EFFLUENT	1	10/30/12	10:00am						X		

4 of 8

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____
EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 10/31/12	Time:	Received by: (Signature)	Date: 11/1/12	Time: 1010	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Cooler / Blank Temperature ___°C

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1204526

Project: MP-85 Site Exland Wi / 49/55-0029.00 2012 001

Sample(s) received on: 11/2/12 Date opened: 11/2/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1204526-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1204526

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Jennifer Young
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 10/30/12
Date Received: 11/2/12
Date Analyzed: 11/6/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1204526-001	1.33	1.0	**74**	24	**21**	6.8	
Method Blank	P121106-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1204526

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 10/30/12
Analyst: Elsa Moctezuma Date Received: 11/2/12
Sample Type: 1.0 L Summa Canister(s) Date Analyzed: 11/7/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	**Data Qualifier**
SVE Effluent	P1204526-001	45	1.33	**0.031**	0.015	**0.0099**	0.0046	
Method Blank	P121107-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55-0029.00 2012 001** CAS Project ID: P1204526

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3 Date(s) Collected: 10/30/12
Analyst: Elsa Moctezuma Date(s) Received: 11/2/12
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 11/7/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P121107-MB	**97**	**98**	**103**	70-130	
SVE Effluent	P1204526-001	**97**	**87**	**96**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

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LABORATORY REPORT

November 29, 2012

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: MP-85 Site Exland Wi / 49/55/0029.00.2012.001

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on November 14, 2012. For your reference, these analyses have been assigned our service request number P1204702.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Digitally signed by Kelly Horiuchi
Date: 2012.11.29 15:50:22 -08'00'

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1204702
Project: MP-85 Site Exland Wi / 49/55/0029.00.2012.001

CASE NARRATIVE

The sample was received intact under chain of custody on November 14, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID).

Volatile Organic Compound Analysis

The sample was also analyzed for Benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

DETAIL SUMMARY REPORT

Client: Barr Engineering
Service Request: P1204702
Project ID: MP-85 Site Exland Wi / 49/55/0029.00.2012.001

Date Received: 11/14/2012
Time Received: 10:10

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1204702-001	Air	11/12/2012	12:30	1SC01069	-0.03	5.86	X	X

Columbia Analytical Services

Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. P1204702

CAS Contact:

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th St
Minneapolis Minn

Project Name: mp-85 Site Release W.

Project Number: 49/55 /0029 .00 .2012.001

Project Manager: Jon Gispie

P.O. # / Billing Information

Phone: 952 832 2772

Fax: 952-832-2601

Email Address for Result Reporting: ~~Jgispie~~ Jgispie@Barr.com.

Sampler (Print & Sign): Ward Mitchell

Analysis Method

TPH GRO Benzene Only

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPH GRO Benzene Only		Comments e.g. Actual Preservative or specific instructions
SVE_EFFLUENT	1 to 22								X		

4 of 8

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	11/12/12	12:30		11/14/12	1010
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

COC AIR REV 3-11

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1204702

Project: MP-85 Site Exland Wi / 49/55/0029.00.2012.001

Sample(s) received on: 11/14/12 Date opened: 11/14/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1204702-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55/0029.00.2012.001** CAS Project ID: P1204702

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Jennifer Young
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 11/12/12
Date Received: 11/14/12
Date Analyzed: 11/21/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1204702-001	1.40	1.0	**44**	25	**13**	7.2	
Method Blank	P121121-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55/0029.00.2012.001** CAS Project ID: P1204702

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 11/12/12
Analyst: Chris Cornett Date Received: 11/14/12
Sample Type: 1.0 L Summa Canister(s) Date Analyzed: 11/16/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	**Data Qualifier**
SVE Effluent	P1204702-001	50	1.40	**0.022**	0.014	**0.0069**	0.0044	
Method Blank	P121116-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **MP-85 Site Exland Wi / 49/55/0029.00.2012.001** CAS Project ID: P1204702

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 11/12/12
Analyst: Chris Cornett Date(s) Received: 11/14/12
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 11/16/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P121116-MB	**115**	**97**	**97**	70-130	
SVE Effluent	P1204702-001	**114**	**98**	**103**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY REPORT

January 8, 2013

Hans Wronka
Barr Engineering
4700 West 77th Street
Minneapolis, MN 55435

RE: Exland Wi Enbridge MP-85 Site

Dear Hans:

Enclosed are the results of the sample submitted to our laboratory on December 20, 2012. For your reference, these analyses have been assigned our service request number P1205240.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA200007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L11-203; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-12-3; Minnesota Department of Health, NELAP Certificate No. 362188; Washington State Department of Ecology, ELAP Lab ID: C946, State of Utah Department of Health, NELAP Certificate No. CA01527Z012-Z; Los Angeles Department of Building and Safety, Approval No: TA00001. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 12:46 pm, Jan 08, 2013

Kelly Horiuchi
Laboratory Director

Client: Barr Engineering Service Request No: P1205240
Project: Exland Wi Enbridge MP-85 Site

CASE NARRATIVE

The sample was received intact under chain of custody on December 20, 2012 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Total Petroleum Hydrocarbons as Gasoline Analysis

The sample was analyzed for total petroleum hydrocarbons (TPH) as gasoline per modified EPA Method TO-3 using a gas chromatograph equipped with a flame ionization detector (FID). This method is not included on the laboratory's NELAP scope of accreditation.

Benzene Analysis

The sample was also analyzed for benzene in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. Any analytes flagged with an X are not included on the laboratory's NELAP or DoD-ELAP scope of accreditation.

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DETAIL SUMMARY REPORT

Client: Barr Engineering
Project ID: Exland Wi Enbridge MP-85 Site
Service Request: P1205240

Date Received: 12/20/2012
Time Received: 10:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - TPHG Can	TO-15 - VOC Cans
SVE Effluent	P1205240-001	Air	12/17/2012	12:30	1SC00592	-0.13	5.28	X	X

Columbia Analytical Services

Air - Chain of Custody Record & Analytical Service Request

Page _____ of _____

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

CAS Project No. R1205240

Company Name & Address (Reporting Information)
Barr Engineering
4700 West 77th St
Minneapolis MN

Project Name: Exland WI Enbridge MP-85 Site

Project Number:

CAS Contact:

Analysis Method

Project Manager: Jon Gaspich

P.O. # / Billing Information

Phone: 952-832-2772

Fax: 952-832-2601

Email Address for Result Reporting: Jgaspich@Barr.com

Sampler (Print & Sign): WARD MITCHELL Ward D Mitchell

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code #- FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TPH DRO TO15 BENZENE ONLY		Comments e.g. Actual Preservative or specific instructions
SVE EFFLUENT	1-0.11	12/17/12	12:30						X		

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Ward D Mitchell	12/19/12	2100pm		12/20/12	1000
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

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Sample Acceptance Check Form

Client: Barr Engineering Work order: P1205240

Project: Exland Wi Enbridge MP-85 Site

Sample(s) received on: 12/20/12 Date opened: 12/20/12 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1205240-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **Exland Wi Enbridge MP-85 Site** CAS Project ID: P1205240

Total Petroleum Hydrocarbons (TPH) as Gasoline

Test Code: EPA TO-3 Modified
Instrument ID: HP 5890 II/GC19/FID
Analyst: Wade Henton
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 12/17/12
Date Received: 12/20/12
Date Analyzed: 12/27/12

Client Sample ID	CAS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	**Result mg/m³**	MRL mg/m³	**Result ppmV**	MRL ppmV	Data Qualifier
SVE Effluent	P1205240-001	1.37	1.0	**81**	25	**23**	7.0	
Method Blank	P121227-MB	1.00	1.0	ND	18	ND	5.1	

Parts Per Million results are based on a Molecular Weight of 86.18.
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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RESULTS OF ANALYSIS

Client: **Barr Engineering**
Client Project ID: **Exland Wi Enbridge MP-85 Site** CAS Project ID: P1205240

Benzene

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 12/17/12
Analyst: Wida Ang Date Received: 12/20/12
Sample Type: 1.0 L Summa Canister(s) Date Analyzed: 12/28/12
Test Notes:

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Canister Dilution Factor	Result mg/m³	MRL mg/m³	Result ppmV	MRL ppmV	Data Qualifier
SVE Effluent	P1205240-001	25	1.37	**0.035**	0.027	**0.011**	0.0086	
Method Blank	P121228-MB	1,000	1.00	ND	0.00050	ND	0.00016	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Barr Engineering**
Client Project ID: **Exland Wi Enbridge MP-85 Site** CAS Project ID: P1205240

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 12/17/12
Analyst: Wida Ang Date(s) Received: 12/20/12
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 12/28/12
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P121228-MB	**103**	**99**	**98**	70-130	
SVE Effluent	P1205240-001	**96**	**83**	**86**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

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

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

May 04, 2012

REVISION

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

Work Order Number: 1201403
RE: 49550029

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

Enclosed are the results of analyses for samples received by the laboratory on 03/28/12. If you have any questions concerning this report, please feel free to contact me.

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

WI Certification #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC

Bach Pham
Client Manager I
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:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1201403
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/04/12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-16	1201403-01	Water	03/26/12 14:10	03/28/12 10:05
MW-15	1201403-02	Water	03/26/12 13:43	03/28/12 10:05
MW-14	1201403-03	Water	03/26/12 15:02	03/28/12 10:05
MW-29	1201403-04	Water	03/26/12 12:40	03/28/12 10:05
MW-27	1201403-05	Water	03/26/12 12:57	03/28/12 10:05
MW-21	1201403-06	Water	03/26/12 13:15	03/28/12 10:05
MW-12	1201403-07	Water	03/26/12 14:40	03/28/12 10:05
MW-2	1201403-08	Water	03/26/12 16:04	03/28/12 10:05
MW-6	1201403-09	Water	03/26/12 15:19	03/28/12 10:05
MW-5	1201403-10	Water	03/26/12 15:41	03/28/12 10:05
MW-34	1201403-11	Water	03/27/12 08:55	03/28/12 10:05
MW-33	1201403-12	Water	03/27/12 09:52	03/28/12 10:05
M-1	1201403-13	Water	03/27/12 00:00	03/28/12 10:05
MW-7	1201403-14	Water	03/27/12 10:15	03/28/12 10:05
Rinse Blank	1201403-15	Water	03/27/12 10:00	03/28/12 10:05
Trip Blank	1201403-16	Water	03/26/12 00:00	03/28/12 10:05

Shipping Container Information

Default Cooler Temperature (°C): 1.7

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:

This report was revised on May 4, 2012 to change the sample name for 1201403-14 from M-7 to MW-7. This report supercedes the report dated April 6, 2012.

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:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1201403
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/04/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-16 (1201403-01) Water Sampled: 03/26/12 14:10 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*96.9*			*80-150 %*		"	"	"	"	
MW-15 (1201403-02) Water Sampled: 03/26/12 13:43 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*91.4*			*80-150 %*		"	"	"	"	
MW-14 (1201403-03) Water Sampled: 03/26/12 15:02 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*91.4*			*80-150 %*		"	"	"	"	
MW-29 (1201403-04) Water Sampled: 03/26/12 12:40 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*92.4*			*80-150 %*		"	"	"	"	
MW-27 (1201403-05) Water Sampled: 03/26/12 12:57 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1201403
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/04/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-27 (1201403-05) Water Sampled: 03/26/12 12:57 Received: 03/28/12 10:05										
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	*93.0*			*80-150 %*		"	"	"	"	
MW-21 (1201403-06) Water Sampled: 03/26/12 13:15 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*91.9*			*80-150 %*		"	"	"	"	
MW-12 (1201403-07) Water Sampled: 03/26/12 14:40 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**23**	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**16**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**13**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**6.1**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**26**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*94.4*			*80-150 %*		"	"	"	"	
MW-2 (1201403-08) Water Sampled: 03/26/12 16:04 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**14**	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/29/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**23**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**41**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**49**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**40**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*97.7*			*80-150 %*		"	"	"	"	
MW-6 (1201403-09) Water Sampled: 03/26/12 15:19 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*91.6*			*80-150 %*		"	"	"	"	
MW-5 (1201403-10) Water Sampled: 03/26/12 15:41 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**5.3**	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/29/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**57**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**230**	1.0	0.11	ug/L	1	"	"	"	"	

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4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1201403
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/04/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (1201403-10) Water Sampled: 03/26/12 15:41 Received: 03/28/12 10:05										
Ethylbenzene	**170**	1.0	0.095	ug/L	1	B2C2811	03/28/12	03/29/12	WI(95) GRO	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**10**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*98.8*			*80-150 %*		"	"	"	"	
MW-34 (1201403-11) Water Sampled: 03/27/12 08:55 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**2.7**	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/29/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**6.0**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**57**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**26**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**4.0**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*94.8*			*80-150 %*		"	"	"	"	
MW-33 (1201403-12) Water Sampled: 03/27/12 09:52 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**10**	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/29/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**24**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**100**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**53**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**16**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*101*			*80-150 %*		"	"	"	"	
M-1 (1201403-13) Water Sampled: 03/27/12 00:00 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**1.9**	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/29/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**4.6**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**44**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**21**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**3.4**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*95.7*			*80-150 %*		"	"	"	"	
MW-7 (1201403-14) Water Sampled: 03/27/12 10:15 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	**120**	5.0	0.80	ug/L	5	B2C2811	03/28/12	03/29/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**62**	5.0	0.85	ug/L	5	"	"	"	"	
Benzene	**47**	5.0	0.55	ug/L	5	"	"	"	"	
Ethylbenzene	**44**	5.0	0.48	ug/L	5	"	"	"	"	
Toluene	**5.3**	5.0	0.80	ug/L	5	"	"	"	"	
Xylenes (total)	**110**	15	0.95	ug/L	5	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*108*			*80-150 %*		"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1201403
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/04/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Rinse Blank (1201403-15) Water Sampled: 03/27/12 10:00 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*91.1*			*80-150 %*		"	"	"	"	
Trip Blank (1201403-16) Water Sampled: 03/26/12 00:00 Received: 03/28/12 10:05										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2C2811	03/28/12	03/28/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*92.3*			*80-150 %*		"	"	"	"	

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Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 05/04/12

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 B2C2811 - EPA 5030 Water (Purge and Trap)											
Blank (B2C2811-BLK1)					Prepared & Analyzed: 03/28/12						
1,2,4-Trimethylbenzene	< 1.0	1.0	0.16	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.17	ug/L							
Benzene	< 1.0	1.0	0.11	ug/L							
Ethylbenzene	< 1.0	1.0	0.095	ug/L							
Toluene	< 1.0	1.0	0.16	ug/L							
Xylenes (total)	< 3.0	3.0	0.19	ug/L							
Surrogate: 4-Fluorochlorobenzene	*23.1*			*ug/L*	*25.0*		*92.3*	*80-150*			
LCS (B2C2811-BS1)					Prepared & Analyzed: 03/28/12						
1,2,4-Trimethylbenzene	117	1.0	0.16	ug/L	100		117	80-120			
1,3,5-Trimethylbenzene	111	1.0	0.17	ug/L	100		111	80-120			
Benzene	98.4	1.0	0.11	ug/L	100		98.4	80-120			
Ethylbenzene	104	1.0	0.095	ug/L	100		104	80-120			
Toluene	101	1.0	0.16	ug/L	100		101	80-120			
Xylenes (total)	316	3.0	0.19	ug/L	300		105	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.0*			*ug/L*	*25.0*		*100*	*80-150*			
LCS Dup (B2C2811-BSD1)					Prepared: 03/28/12		Analyzed: 03/29/12				
1,2,4-Trimethylbenzene	106	1.0	0.16	ug/L	100		106	80-120	10.3	20	
1,3,5-Trimethylbenzene	97.6	1.0	0.17	ug/L	100		97.6	80-120	12.8	20	
Benzene	94.8	1.0	0.11	ug/L	100		94.8	80-120	3.70	20	
Ethylbenzene	94.9	1.0	0.095	ug/L	100		94.9	80-120	8.99	20	
Toluene	95.2	1.0	0.16	ug/L	100		95.2	80-120	5.55	20	
Xylenes (total)	295	3.0	0.19	ug/L	300		98.4	80-120	6.84	20	
Surrogate: 4-Fluorochlorobenzene	*25.2*			*ug/L*	*25.0*		*101*	*80-150*			
Matrix Spike (B2C2811-MS1)		**Source: 1201403-01**			Prepared: 03/28/12		Analyzed: 03/29/12				
1,2,4-Trimethylbenzene	115	1.0	0.16	ug/L	100	<1.0	115	80-120			
1,3,5-Trimethylbenzene	106	1.0	0.17	ug/L	100	<1.0	106	80-120			
Benzene	98.7	1.0	0.11	ug/L	100	<1.0	98.7	80-120			
Ethylbenzene	100	1.0	0.095	ug/L	100	<1.0	99.9	80-120			
Toluene	99.8	1.0	0.16	ug/L	100	<1.0	99.8	80-120			
Xylenes (total)	310	3.0	0.19	ug/L	300	<3.0	103	80-120			
Surrogate: 4-Fluorochlorobenzene	*24.2*			*ug/L*	*25.0*		*96.6*	*80-150*			

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4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #:	1201403
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported:	05/04/12

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

1201403

Project Number: 49/55-0029.00 2012 001

Project Name: Enbridge Energy MP85

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

COC Number: № 32205

COC 1 of 2

Project Manager: J. Cspia

Project QC Contact: Hwronka

Sampled by: W. Mitchell

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	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.)	Total Number Of Containers
01	1. MW-16				3/26/12	2:10	X		X			X													
02	2. MW-15				3/26/12	1:43	X		X			X													
03	3. MW-14				3/26/12	3:02	X		X			X													
04	4. MW-29				3/26/12	12:40	X		X			X													
05	5. MW-27				3/26/12	12:57	X		X			X													
06	6. MW-21				3/26/12	1:15	X		X			X													
07	7. MW-12				3/26/12	2:40	X		X			X													
08	8. MW-2				3/26/12	4:04	X		X			X													
09	9. MW-6				3/26/12	3:19	X		X			X													
10	10. MW-5				3/26/12	3:41	X		X			X													

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

1.7°C

Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
W. Mitchell	Y	3/27/12	3:00pm			
Relinquished By:	On Ice? Y N	Date	Time	Received by: Kelley Roeber	3/28/12	10:05

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:\FLGN\STOFORMS\Chain Of Custody Form 2009 RLE Rev. 09/07/09

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

Legend Technical Services, Inc.

BARR

Chain of Custody

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

1201403

COC 2 of 2

Project Number: 49/55-0029.00 2012 001

Project Name: Enbridge Energy MP85

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

COC Number: № 32147

Project Manager: J Aspia

Project QC Contact: Hwronka

Sampled by: W. Mitchell

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	Water: VOCs (HCl) #1 (NP mtbe)	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.)	Total Number Of Containers
11	1. mw-34				3/27/12	8:55am	X		X			X													
12	2. mw-33				3/27/12	9:52am	X		X			X													
13	3. m-1				3/27/12	—	X		X			X													
14	4. mw-7				3/27/12	10:15	X		X			X													
15	5. Rasa Blank				3/27/12	10:00am	X		X			X													
16	6. Trip Blank				3/26/12																				
	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

1.7°C

Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
[signature]	Y	3/27/12	3:10pm			
Relinquished By:	On Ice? Y N	Date	Time	Received by: [signature] Kelly Brehm	3/28/12	10:05

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:\FLGS\TFORMS\Chain Of Custody Form 2009 FILL3 Rev. 09/01/09

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July 30, 2012

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

Work Order Number: 1203313
RE: 49550029

Enclosed are the results of analyses for samples received by the laboratory on 07/19/12. If you have any questions concerning this report, please feel free to contact me.

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

WI Certification #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC

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

Tyler Jones
Chemist I
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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 07/30/12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-16	1203313-01	Water	07/17/12 12:40	07/19/12 10:10
MW-15	1203313-02	Water	07/17/12 12:20	07/19/12 10:10
MW-14	1203313-03	Water	07/17/12 13:23	07/19/12 10:10
MW-29	1203313-04	Water	07/17/12 11:25	07/19/12 10:10
MW-27	1203313-05	Water	07/17/12 11:44	07/19/12 10:10
MW-21	1203313-06	Water	07/17/12 12:02	07/19/12 10:10
MW-12	1203313-07	Water	07/17/12 13:01	07/19/12 10:10
MW-2	1203313-08	Water	07/17/12 14:34	07/19/12 10:10
MW-6	1203313-09	Water	07/17/12 13:48	07/19/12 10:10
MW-5	1203313-10	Water	07/17/12 14:17	07/19/12 10:10
MW-34	1203313-11	Water	07/17/12 15:02	07/19/12 10:10
MW-33	1203313-12	Water	07/17/12 15:30	07/19/12 10:10
MW-11	1203313-13	Water	07/17/12 16:00	07/19/12 10:10
M-1	1203313-14	Water	07/17/12 00:00	07/19/12 10:10
Rinse Blank	1203313-15	Water	07/17/12 00:00	07/19/12 10:10
Trip Blank	1203313-16	Water	07/17/12 00:00	07/19/12 10:10

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:

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 07/30/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-16 (1203313-01) Water Sampled: 07/17/12 12:40 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*95.2*			*80-150 %*		"	"	"	"	
MW-15 (1203313-02) Water Sampled: 07/17/12 12:20 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*94.1*			*80-150 %*		"	"	"	"	
MW-14 (1203313-03) Water Sampled: 07/17/12 13:23 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*94.5*			*80-150 %*		"	"	"	"	
MW-29 (1203313-04) Water Sampled: 07/17/12 11:25 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*93.5*			*80-150 %*		"	"	"	"	
MW-27 (1203313-05) Water Sampled: 07/17/12 11:44 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/21/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 07/30/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-27 (1203313-05) Water Sampled: 07/17/12 11:44 Received: 07/19/12 10:10										
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	B2G2014	07/20/12	07/21/12	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	*97.9*			*80-150 %*		"	"	"	"	
MW-21 (1203313-06) Water Sampled: 07/17/12 12:02 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*93.0*			*80-150 %*		"	"	"	"	
MW-12 (1203313-07) Water Sampled: 07/17/12 13:01 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**32**	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**20**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**14**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**8.8**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**30**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*103*			*80-150 %*		"	"	"	"	
MW-2 (1203313-08) Water Sampled: 07/17/12 14:34 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**42**	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**57**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**27**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**110**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**80**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*105*			*80-150 %*		"	"	"	"	
MW-6 (1203313-09) Water Sampled: 07/17/12 13:48 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*97.0*			*80-150 %*		"	"	"	"	
MW-5 (1203313-10) Water Sampled: 07/17/12 14:17 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**19**	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**49**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**160**	1.0	0.11	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 07/30/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (1203313-10) Water Sampled: 07/17/12 14:17 Received: 07/19/12 10:10										
Ethylbenzene	**170**	1.0	0.095	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
Toluene	**1.6**	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**57**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*127*			*80-150 %*		"	"	"	"	
MW-34 (1203313-11) Water Sampled: 07/17/12 15:02 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**1.7**	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**6.0**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**50**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**33**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**7.0**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*96.9*			*80-150 %*		"	"	"	"	
MW-33 (1203313-12) Water Sampled: 07/17/12 15:30 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**6.9**	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**16**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**50**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**47**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**16**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*109*			*80-150 %*		"	"	"	"	
MW-11 (1203313-13) Water Sampled: 07/17/12 16:00 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**300**	5.0	0.80	ug/L	5	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**90**	5.0	0.85	ug/L	5	"	"	"	"	
Benzene	**140**	5.0	0.55	ug/L	5	"	"	"	"	
Ethylbenzene	**220**	5.0	0.48	ug/L	5	"	"	"	"	
Toluene	**17**	5.0	0.80	ug/L	5	"	"	"	"	
Xylenes (total)	**1200**	15	0.95	ug/L	5	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*115*			*80-150 %*		"	"	"	"	
M-1 (1203313-14) Water Sampled: 07/17/12 00:00 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	**1.2**	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**6.9**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**49**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**33**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**4.6**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*97.3*			*80-150 %*		"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 07/30/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Rinse Blank (1203313-15) Water Sampled: 07/17/12 00:00 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*96.3*			*80-150 %*		"	"	"	"	
Trip Blank (1203313-16) Water Sampled: 07/17/12 00:00 Received: 07/19/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2G2014	07/20/12	07/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*92.2*			*80-150 %*		"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 07/30/12

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 B2G2014 - EPA 5030 Water (Purge and Trap)											
Blank (B2G2014-BLK1)					Prepared & Analyzed: 07/20/12						
1,2,4-Trimethylbenzene	< 1.0	1.0	0.16	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.17	ug/L							
Benzene	< 1.0	1.0	0.11	ug/L							
Ethylbenzene	< 1.0	1.0	0.095	ug/L							
Toluene	< 1.0	1.0	0.16	ug/L							
Xylenes (total)	< 3.0	3.0	0.19	ug/L							
Surrogate: 4-Fluorochlorobenzene	*23.4*			*ug/L*	*25.0*		*93.4*	*80-150*			
LCS (B2G2014-BS1)					Prepared & Analyzed: 07/20/12						
1,2,4-Trimethylbenzene	100	1.0	0.16	ug/L	100		100	80-120			
1,3,5-Trimethylbenzene	95.3	1.0	0.17	ug/L	100		95.3	80-120			
Benzene	96.4	1.0	0.11	ug/L	100		96.4	80-120			
Ethylbenzene	97.4	1.0	0.095	ug/L	100		97.4	80-120			
Toluene	98.5	1.0	0.16	ug/L	100		98.5	80-120			
Xylenes (total)	291	3.0	0.19	ug/L	300		97.0	80-120			
Surrogate: 4-Fluorochlorobenzene	*24.4*			*ug/L*	*25.0*		*97.6*	*80-150*			
LCS Dup (B2G2014-BSD1)					Prepared: 07/20/12 Analyzed: 07/21/12						
1,2,4-Trimethylbenzene	92.4	1.0	0.16	ug/L	100		92.4	80-120	7.86	20	
1,3,5-Trimethylbenzene	89.4	1.0	0.17	ug/L	100		89.4	80-120	6.36	20	
Benzene	105	1.0	0.11	ug/L	100		105	80-120	8.98	20	
Ethylbenzene	95.1	1.0	0.095	ug/L	100		95.1	80-120	2.36	20	
Toluene	110	1.0	0.16	ug/L	100		110	80-120	10.6	20	
Xylenes (total)	286	3.0	0.19	ug/L	300		95.3	80-120	1.79	20	
Surrogate: 4-Fluorochlorobenzene	*26.5*			*ug/L*	*25.0*		*106*	*80-150*			
Matrix Spike (B2G2014-MS1)		**Source: 1203313-01**			Prepared & Analyzed: 07/20/12						
1,2,4-Trimethylbenzene	101	1.0	0.16	ug/L	100	<1.0	101	80-120			
1,3,5-Trimethylbenzene	96.3	1.0	0.17	ug/L	100	<1.0	96.3	80-120			
Benzene	97.4	1.0	0.11	ug/L	100	<1.0	97.3	80-120			
Ethylbenzene	98.2	1.0	0.095	ug/L	100	<1.0	97.9	80-120			
Toluene	97.6	1.0	0.16	ug/L	100	<1.0	97.6	80-120			
Xylenes (total)	296	3.0	0.19	ug/L	300	<3.0	98.4	80-120			
Surrogate: 4-Fluorochlorobenzene	*24.8*			*ug/L*	*25.0*		*99.2*	*80-150*			

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Barr Engineering Co.	Project:	49550029		
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #:	1203313
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported:	07/30/12

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

1203313

COC 1 of 2

Project Number: 49/55-0027 00 2012 001

Project Name: Enbridge MP85

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

COC Number: № 32168

Project Manager: J. Grpne

Project QC Contact:

Sampled by: W. Mitchell

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	Water: VOCs (HCl) #1 plus methane	Water: SVOCs (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 (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.)	Total Number Of Containers
01	1. MW-16				7/17	12:40	X		X			X													
02	2. MW-15				7/17	12:20																			
03	3. MW-14				7/17	1:23																			
04	4. MW-25				7/17	11:25																			
05	5. MW-27				7/17	11:44																			
06	6. MW-21				7/17	12:02																			
07	7. MW-12				7/17	1:01																			
08	8. MW-2				7/17	2:34																			
09	9. MW-6				7/17	1:48																			
10	10. MW-5				7/17	2:17																			

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

Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
W. Mitchell	Y N	7/18/12	2:15			
Relinquished By:	On Ice? Y N	Date	Time	Received by: Kelley Foelber	7/19/12	10:10

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other: WB Mitchell

Air Bill Number:

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

HR:BARR/FORMS/Chain Of Custody Form 2009 RLG Rev. 09/01/09

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

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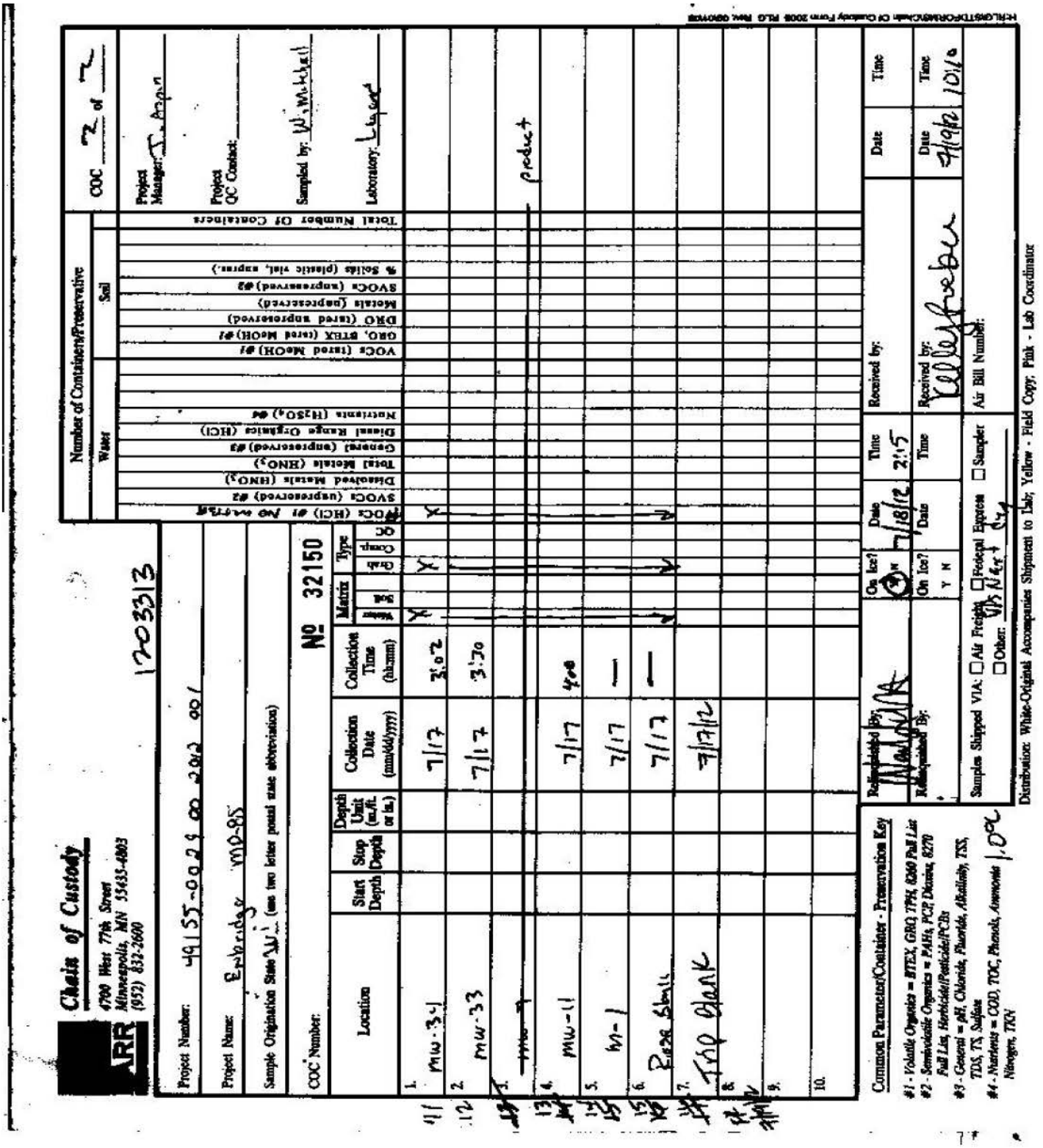

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October 09, 2012

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

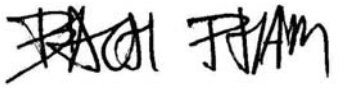
Work Order Number: 1204568
RE: 49550029

Enclosed are the results of analyses for samples received by the laboratory on 09/28/12. If you have any questions concerning this report, please feel free to contact me.

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

WI Certification #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC



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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1204568
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 10/09/12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-16	1204568-01	Water	09/26/12 09:55	09/28/12 10:10
MW-15	1204568-02	Water	09/26/12 09:24	09/28/12 10:10
MW-14	1204568-03	Water	09/26/12 11:08	09/28/12 10:10
MW-21	1204568-04	Water	09/26/12 08:52	09/28/12 10:10
MW-6	1204568-05	Water	09/26/12 10:25	09/28/12 10:10
MW-12	1204568-06	Water	09/26/12 10:50	09/28/12 10:10
MW-2	1204568-07	Water	09/26/12 14:52	09/28/12 10:10
MW-5	1204568-08	Water	09/26/12 14:10	09/28/12 10:10
MW-34	1204568-09	Water	09/26/12 11:52	09/28/12 10:10
MW-33	1204568-10	Water	09/26/12 13:31	09/28/12 10:10
M-1	1204568-11	Water	09/26/12 00:00	09/28/12 10:10
Rinse Blank	1204568-12	Water	09/26/12 00:00	09/28/12 10:10
MW-11	1204568-13	Water	09/26/12 16:00	09/28/12 10:10
Trip Blank	1204568-14	Water	09/26/12 00:00	09/28/12 10:10

Shipping Container Information

Default Cooler Temperature (°C): 1.2

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:

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1204568
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 10/09/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-16 (1204568-01) Water Sampled: 09/26/12 09:55 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*111*			*80-150 %*		"	"	"	"	
MW-15 (1204568-02) Water Sampled: 09/26/12 09:24 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*108*			*80-150 %*		"	"	"	"	
MW-14 (1204568-03) Water Sampled: 09/26/12 11:08 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*112*			*80-150 %*		"	"	"	"	
MW-21 (1204568-04) Water Sampled: 09/26/12 08:52 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*107*			*80-150 %*		"	"	"	"	
MW-6 (1204568-05) Water Sampled: 09/26/12 10:25 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**1.7**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1204568
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 10/09/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (1204568-05) Water Sampled: 09/26/12 10:25 Received: 09/28/12 10:10										
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	*105*			*80-150 %*		"	"	"	"	
MW-12 (1204568-06) Water Sampled: 09/26/12 10:50 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**63**	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**37**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**17**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**13**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**53**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*109*			*80-150 %*		"	"	"	"	
MW-2 (1204568-07) Water Sampled: 09/26/12 14:52 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**28**	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**56**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**39**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**85**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**52**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*107*			*80-150 %*		"	"	"	"	
MW-5 (1204568-08) Water Sampled: 09/26/12 14:10 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**4.7**	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**38**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**110**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**110**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**20**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*111*			*80-150 %*		"	"	"	"	
MW-34 (1204568-09) Water Sampled: 09/26/12 11:52 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**1.8**	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**7.8**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**33**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**28**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*110*			*80-150 %*		"	"	"	"	
MW-33 (1204568-10) Water Sampled: 09/26/12 13:31 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**7.7**	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**20**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**46**	1.0	0.11	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1204568
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 10/09/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-33 (1204568-10) Water Sampled: 09/26/12 13:31 Received: 09/28/12 10:10										
Ethylbenzene	**49**	1.0	0.095	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**11**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*106*			*80-150 %*		"	"	"	"	
M-1 (1204568-11) Water Sampled: 09/26/12 00:00 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**7.5**	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**20**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**45**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**52**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**11**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*110*			*80-150 %*		"	"	"	"	
Rinse Blank (1204568-12) Water Sampled: 09/26/12 00:00 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*112*			*80-150 %*		"	"	"	"	
MW-11 (1204568-13) Water Sampled: 09/26/12 16:00 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	**250**	2.0	0.32	ug/L	2	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**97**	2.0	0.34	ug/L	2	"	"	"	"	
Benzene	**110**	2.0	0.22	ug/L	2	"	"	"	"	
Ethylbenzene	**170**	2.0	0.19	ug/L	2	"	"	"	"	
Toluene	**2.1**	2.0	0.32	ug/L	2	"	"	"	"	
Xylenes (total)	**700**	6.0	0.38	ug/L	2	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*107*			*80-150 %*		"	"	"	"	
Trip Blank (1204568-14) Water Sampled: 09/26/12 00:00 Received: 09/28/12 10:10										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2J0206	10/02/12	10/02/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*104*			*80-150 %*		"	"	"	"	

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Fax: 651-642-1239

Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1204568
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 10/09/12

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 B2J0206 - EPA 5030 Water (Purge and Trap)											
Blank (B2J0206-BLK1)					Prepared & Analyzed: 10/02/12						
1,2,4-Trimethylbenzene	< 1.0	1.0	0.16	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.17	ug/L							
Benzene	< 1.0	1.0	0.11	ug/L							
Ethylbenzene	< 1.0	1.0	0.095	ug/L							
Toluene	< 1.0	1.0	0.16	ug/L							
Xylenes (total)	< 3.0	3.0	0.19	ug/L							
Surrogate: 4-Fluorochlorobenzene	*26.5*			*ug/L*	*25.0*		*106*	*80-150*			
LCS (B2J0206-BS1)					Prepared & Analyzed: 10/02/12						
1,2,4-Trimethylbenzene	95.1	1.0	0.16	ug/L	100		95.1	80-120			
1,3,5-Trimethylbenzene	96.0	1.0	0.17	ug/L	100		96.0	80-120			
Benzene	94.6	1.0	0.11	ug/L	100		94.6	80-120			
Ethylbenzene	91.9	1.0	0.095	ug/L	100		91.9	80-120			
Toluene	95.6	1.0	0.16	ug/L	100		95.6	80-120			
Xylenes (total)	282	3.0	0.19	ug/L	300		94.0	80-120			
Surrogate: 4-Fluorochlorobenzene	*25.6*			*ug/L*	*25.0*		*103*	*80-150*			
LCS Dup (B2J0206-BSD1)					Prepared: 10/02/12		Analyzed: 10/03/12				
1,2,4-Trimethylbenzene	94.1	1.0	0.16	ug/L	100		94.1	80-120	1.10	20	
1,3,5-Trimethylbenzene	91.5	1.0	0.17	ug/L	100		91.5	80-120	4.74	20	
Benzene	89.9	1.0	0.11	ug/L	100		89.9	80-120	5.05	20	
Ethylbenzene	93.2	1.0	0.095	ug/L	100		93.2	80-120	1.37	20	
Toluene	94.9	1.0	0.16	ug/L	100		94.9	80-120	0.688	20	
Xylenes (total)	282	3.0	0.19	ug/L	300		94.0	80-120	0.0348	20	
Surrogate: 4-Fluorochlorobenzene	*28.6*			*ug/L*	*25.0*		*115*	*80-150*			
Matrix Spike (B2J0206-MS1)		**Source: 1204568-01**			Prepared: 10/02/12		Analyzed: 10/03/12				
1,2,4-Trimethylbenzene	96.7	1.0	0.16	ug/L	100	<1.0	96.7	80-120			
1,3,5-Trimethylbenzene	93.9	1.0	0.17	ug/L	100	<1.0	93.9	80-120			
Benzene	91.8	1.0	0.11	ug/L	100	<1.0	91.4	80-120			
Ethylbenzene	95.9	1.0	0.095	ug/L	100	<1.0	95.6	80-120			
Toluene	96.7	1.0	0.16	ug/L	100	<1.0	96.7	80-120			
Xylenes (total)	292	3.0	0.19	ug/L	300	<3.0	97.5	80-120			
Surrogate: 4-Fluorochlorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*80-150*			

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001 MP85	Work Order #: 1204568
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 10/09/12

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

1204568

Project Number: 49/85 0029.00 2012 001

Project Name: MP-85 Extend W

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

COC Number: № 32200

COC 1 of 2

Project Manager: J. Aspin

Project QC Contact:

Sampled by: M Nichols

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 no air	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 ziel, unpres.)	Total Number Of Containers
01	1. MW-16				09/26/2012	9:55	X		X			X													
02	2. MW-15				09/26/2012	9:24	X		X			X													
03	3. MW-14				09/26/2012	11:08	X		X			X													
04	4. MW-21				09/26/2012	8:52	X		X			X													
05	5. MW-6				09/26/2012	10:25	X		X			X													
06	6. MW-12				09/26/2012	10:50	X		X			X													
07	7. MW-2				09/26/2012	2:52	X		X			X													
08	8. MW-5				09/26/2012	2:10	X		X			X													
09	9. MW-34				09/26/2012	11:52	X		X			X													
10	10. MW-33				09/26/2012	1:31	X		X			X													

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

1.2C

	On Ice?	Date	Time		Date	Time
Relinquished By:	(Y) N	9/27/12	11am	Received by:		
Relinquished By:	Y N	Date	Time	Received by:	9/28/12	10:10

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other: UPS

Air Bill Number:

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

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Chain of Custody

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

1204568

Project Number: 23/55 0029 00 2012 001

Project Name: MP-85 Ekhart WI

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

COC Number: № 32199

COC 2 of 2

Project Manager: J Aspie

Project QC Contact:

Sampled by: M Mitchell

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: #1 As Above	#2 SVOCs (unpreserved)	#3 Dissolved Metals (HNO_3)	#3 Total Metals (HNO_3)	#3 General (unpreserved)	#3 Diesel Range Organics (HCl)	#4 Nutrients (H_2SO_4)	Soil: #1 VOCs (tared MeOH)	#1 GRO, BTEX (tared MeOH)	DRO (tared unpreserved)	Metals (unpreserved)	#2 SVOCs (unpreserved)	% Solids (plastic vial, unpres.)	Total Number Of Containers	
11	1. MW-1				9/26/12	PM	X		X			X														
12	2. Rinse Blank				9/26/12	PM	X		X			X														
	3. ~~MW-4~~ -						X		X			X														LO SAMPLE Collected.
13	4. MW-11				09/26/2012	4:00	X		X			X														
14	5. Trip Blank				9/26/12																					
	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

1-2

Relinquished By:	On Ice? Y N	Date	Time	Received by:	Date	Time
J Mitchell	Y	9/27/12	1:40 pm			
Relinquished By:	On Ice? Y N	Date	Time	Received by:	Date	Time
				Kelly Becker	9/28/12	10:10

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other: UPS

Air Bill Number:

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

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December 28, 2012

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

Work Order Number: 1205929
RE: 49550029

Enclosed are the results of analyses for samples received by the laboratory on 12/20/12. If you have any questions concerning this report, please feel free to contact me.

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

WI Certification #998022410

Prepared by,
LEGEND TECHNICAL SERVICES, INC

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

Tyler Jones
Chemist I
tjones@legend-group.com

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1205929
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 12/28/12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-21	1205929-01	Water	12/17/12 13:20	12/20/12 10:40
MW-33	1205929-02	Water	12/18/12 09:54	12/20/12 10:40
Duplicate	1205929-03	Water	12/18/12 00:00	12/20/12 10:40
MW-34	1205929-04	Water	12/18/12 09:08	12/20/12 10:40
MW-2	1205929-05	Water	12/17/12 16:30	12/20/12 10:40
MW-3	1205929-06	Water	12/18/12 10:35	12/20/12 10:40
MW-5	1205929-07	Water	12/17/12 16:03	12/20/12 10:40
MW-6	1205929-08	Water	12/17/12 14:38	12/20/12 10:40
MW-11	1205929-09	Water	12/18/12 12:00	12/20/12 10:40
MW-12	1205929-10	Water	12/17/12 15:09	12/20/12 10:40
MW-14	1205929-11	Water	12/17/12 15:31	12/20/12 10:40
MW-15	1205929-12	Water	12/17/12 13:52	12/20/12 10:40
MW-16	1205929-13	Water	12/17/12 14:13	12/20/12 10:40
Trip Blank	1205929-14	Water	12/17/12 00:00	12/20/12 10:40

Shipping Container Information

Default Cooler Temperature (°C): 5.7

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:

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1205929
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 12/28/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-21 (1205929-01) Water Sampled: 12/17/12 13:20 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*97.0*			*80-150 %*		"	"	"	"	
MW-33 (1205929-02) Water Sampled: 12/18/12 09:54 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**8.1**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**16**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**38**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**43**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**11**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*98.9*			*80-150 %*		"	"	"	"	
Duplicate (1205929-03) Water Sampled: 12/18/12 00:00 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**8.7**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**16**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**39**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**43**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**12**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*101*			*80-150 %*		"	"	"	"	
MW-34 (1205929-04) Water Sampled: 12/18/12 09:08 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**1.1**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**5.0**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**21**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**19**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*95.6*			*80-150 %*		"	"	"	"	
MW-2 (1205929-05) Water Sampled: 12/17/12 16:30 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**17**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**25**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**32**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**57**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1205929
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 12/28/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (1205929-05) Water Sampled: 12/17/12 16:30 Received: 12/20/12 10:40										
Xylenes (total)	**36**	3.0	0.19	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	*97.2*			*80-150 %*		"	"	"	"	
MW-3 (1205929-06) Water Sampled: 12/18/12 10:35 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*99.9*			*80-150 %*		"	"	"	"	
MW-5 (1205929-07) Water Sampled: 12/17/12 16:03 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**1.9**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**42**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**110**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**120**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**8.6**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*101*			*80-150 %*		"	"	"	"	
MW-6 (1205929-08) Water Sampled: 12/17/12 14:38 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*96.9*			*80-150 %*		"	"	"	"	
MW-11 (1205929-09) Water Sampled: 12/18/12 12:00 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**140**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**57**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**70**	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	**120**	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	**1.1**	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**490**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*96.9*			*80-150 %*		"	"	"	"	
MW-12 (1205929-10) Water Sampled: 12/17/12 15:09 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	**39**	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	**28**	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	**11**	1.0	0.11	ug/L	1	"	"	"	"	

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88 Empire Drive
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Fax: 651-642-1239

Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1205929
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 12/28/12

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

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (1205929-10) Water Sampled: 12/17/12 15:09 Received: 12/20/12 10:40										
Ethylbenzene	**8.9**	1.0	0.095	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	**35**	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*98.9*			*80-150 %*		"	"	"	"	
MW-14 (1205929-11) Water Sampled: 12/17/12 15:31 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*97.7*			*80-150 %*		"	"	"	"	
MW-15 (1205929-12) Water Sampled: 12/17/12 13:52 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*97.6*			*80-150 %*		"	"	"	"	
MW-16 (1205929-13) Water Sampled: 12/17/12 14:13 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*98.8*			*80-150 %*		"	"	"	"	
Trip Blank (1205929-14) Water Sampled: 12/17/12 00:00 Received: 12/20/12 10:40										
1,2,4-Trimethylbenzene	<1.0	1.0	0.16	ug/L	1	B2L2010	12/20/12	12/20/12	WI(95) GRO	
1,3,5-Trimethylbenzene	<1.0	1.0	0.17	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.11	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.095	ug/L	1	"	"	"	"	
Toluene	<1.0	1.0	0.16	ug/L	1	"	"	"	"	
Xylenes (total)	<3.0	3.0	0.19	ug/L	1	"	"	"	"	
Surrogate: 4-Fluorochlorobenzene	*99.9*			*80-150 %*		"	"	"	"	

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Barr Engineering Co.	Project:	49550029	
4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #: 1205929
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported: 12/28/12

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 B2L2010 - EPA 5030 Water (Purge and Trap)											
Blank (B2L2010-BLK1)					Prepared & Analyzed: 12/20/12						
1,2,4-Trimethylbenzene	< 1.0	1.0	0.16	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.17	ug/L							
Benzene	< 1.0	1.0	0.11	ug/L							
Ethylbenzene	< 1.0	1.0	0.095	ug/L							
Toluene	< 1.0	1.0	0.16	ug/L							
Xylenes (total)	< 3.0	3.0	0.19	ug/L							
Surrogate: 4-Fluorochlorobenzene	*25.7*			*ug/L*	*25.0*		*103*	*80-150*			
LCS (B2L2010-BS1)					Prepared & Analyzed: 12/20/12						
1,2,4-Trimethylbenzene	95.3	1.0	0.16	ug/L	100		95.3	80-120			
1,3,5-Trimethylbenzene	95.9	1.0	0.17	ug/L	100		95.9	80-120			
Benzene	92.2	1.0	0.11	ug/L	100		92.2	80-120			
Ethylbenzene	91.8	1.0	0.095	ug/L	100		91.8	80-120			
Toluene	94.2	1.0	0.16	ug/L	100		94.2	80-120			
Xylenes (total)	280	3.0	0.19	ug/L	300		93.2	80-120			
Surrogate: 4-Fluorochlorobenzene	*23.8*			*ug/L*	*25.0*		*95.1*	*80-150*			
LCS Dup (B2L2010-BSD1)					Prepared: 12/20/12		Analyzed: 12/21/12				
1,2,4-Trimethylbenzene	96.1	1.0	0.16	ug/L	100		96.1	80-120	0.867	20	
1,3,5-Trimethylbenzene	94.3	1.0	0.17	ug/L	100		94.3	80-120	1.72	20	
Benzene	94.0	1.0	0.11	ug/L	100		94.0	80-120	1.88	20	
Ethylbenzene	95.1	1.0	0.095	ug/L	100		95.1	80-120	3.51	20	
Toluene	97.6	1.0	0.16	ug/L	100		97.6	80-120	3.57	20	
Xylenes (total)	287	3.0	0.19	ug/L	300		95.6	80-120	2.56	20	
Surrogate: 4-Fluorochlorobenzene	*25.3*			*ug/L*	*25.0*		*101*	*80-150*			
Matrix Spike (B2L2010-MS1)		**Source: 1205929-01**			Prepared: 12/20/12		Analyzed: 12/21/12				
1,2,4-Trimethylbenzene	96.0	1.0	0.16	ug/L	100	<1.0	96.0	80-120			
1,3,5-Trimethylbenzene	94.9	1.0	0.17	ug/L	100	<1.0	94.9	80-120			
Benzene	97.2	1.0	0.11	ug/L	100	<1.0	97.2	80-120			
Ethylbenzene	95.1	1.0	0.095	ug/L	100	<1.0	94.8	80-120			
Toluene	98.0	1.0	0.16	ug/L	100	<1.0	98.0	80-120			
Xylenes (total)	288	3.0	0.19	ug/L	300	<3.0	96.0	80-120			
Surrogate: 4-Fluorochlorobenzene	*24.4*			*ug/L*	*25.0*		*97.6*	*80-150*			

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4700 W 77th St	Project Number:	49550029.00 2012 001	Work Order #:	1205929
Minneapolis, MN 55435	Project Manager:	Ms. Andrea Nord	Date Reported:	12/28/12

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

1205929

Project Number: 49/55-0029.00 2012 001

Project Name: Enbridge Energy Mile post 85 Erbert WI

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

COC Number: № 32203

Number of Containers/Preservative

Water: VOCs (HCl) #1 Ab mmge; 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

COC 1 of 2

Project Manager: Scott Copus

Project QC Contact:

Sampled by: W. Mitchell

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
01	1. MW-21				12/17/12	1:10					
02	2. MW-33				12/18/12	9:34					
03	3. duplicate				12/18/12	—					
04	4. MW-34				12/18/12	9:08					
	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 5?2

Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
[signature]	(Y) N	12/19/12	2:00pm			
Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
	(Y) N			[signature]	12/20/12	1040

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other: UPS

Air Bill Number:

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

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Chain of Custody

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

1205929

COC 2 of 2

Project Number: 49155-0029.00 2012 001

Project Name: Enbridge Energy Marysota 85 Extend W.

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

COC Number: № 32197

Project Manager: Dave

Project QC Contact:

Sampled by: Mitchell

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 / Add 2nd set	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
05	1. MW-2				12/17/12	4:30																			
06	2. MW-3				12/18/12	10:35																			
07	3. MW-5				12/17/12	4:03																			
08	4. MW-6				12/17/12	2:38																			
09	5. MW-11				12/18/12	12:00																			
10	6. MW-12				12/17/12	3:09																			
11	7. MW-14				12/17/12	3:31																			
12	8. MW-15				12/17/12	1:52																			
13	9. MW-16				12/17/12	2:13																			
14	10. Trip Blank / MW-18	12/20/12																							No Sample

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
	Y / N	12/19/12	2:10pm			
Relinquished By:	On Ice?	Date	Time	Received by:	Date	Time
	Y / N				12/20/12	10:40

Samples Shipped VIA: ☐ Air Freight ☐ Federal Express ☐ Sampler ☐ Other: UPS

Air Bill Number:

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

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